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# **In-Home Care For Frail Childless Adults:** Getting By With a Little Help From Their Friends?

Richard W. Johnson

April 2006

## **The Retirement Project**

Discussion Paper 06-01

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#### The Retirement Project

A crosscutting team of Urban Institute experts in Social Security, Medicare, Medicaid, tax and budget policy, and micro-simulation modeling ponder the aging of American society.

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#### Abstract

Adult children are crucial sources of care for frail older Americans, but childless adults face limited informal care options. This report examines how the absence of children affects the receipt, amount, and source of care. Controlling for health status, financial resources, and demographic characteristics, the analysis indicates that unmarried frail older adults without children are about 31 percent less likely to receive unpaid help from family and friends than those with two or more adult children. Expanded access to formal home care options may be necessary to ensure that frail childless adults receive the community-based help they need.

#### Introduction

Adult children are a crucial source of care for frail older Americans, especially for widowed and divorced people who cannot turn to spouses for help. Informal care options are limited for frail unmarried adults without children, however. Some may turn to friends, charitable organizations, or other family members for help. Others may purchase home care from paid providers. But some frail childless adults may receive inadequate care in the community or be pushed into nursing homes. Although most people with long-term care needs have children who can provide help, declining fertility rates will increase the number of frail childless Americans in coming decades. This report examines the receipt, amount, and source of care for frail older adults without children.

#### Unpaid and Paid Help

Most frail older adults live in the community, not in nursing homes, and rely on help from family and friends. In 2002, about 8.7 million Americans age 65 and older living at home reported disabilities, representing 27 percent of the older community-dwelling population (Johnson and Wiener 2006). About 6 percent, or 2 million, were severely disabled. By comparison, only about 1.5 million older people lived in nursing homes in 2002 (Spillman and Black 2006). About 3 in 5 frail older adults living at home received unpaid help from family or friends with personal care assistance or household chores and errands (Johnson and Wiener 2006). Adult children, childrenin-law, and grandchildren accounted for 63 percent of the caregivers of disabled adults age 50 and older in a 2003 national survey (National Alliance for Caregiving and AARP 2004). Only 17 percent of caregivers were caring for their friends. Paid providers sometimes supplement, or even replace, in-home care from family and friends (Li 2005), but limited public financing has curbed the growth of paid care. The use of paid home care services increased rapidly in the 1980s and early 1990s (Liu, Manton, and Aragon 2000). It then declined after the 1997 Balanced Budget Act tightened Medicare financing of home health care. In 1999, only 34 percent of older community-dwelling care recipients obtained care from paid providers, down from 43 percent in 1994 (Spillman and Black 2005). Medicare coverage of in-home care is restricted to skilled nursing care provided on a part-time or intermittent basis to homebound adults, and to personal care assistance provided by home health aides for those who are also receiving skilled care. It does not include homemaker services or personal care for people who do not receive skilled nursing care. Medicaid covers a variety of nonmedical and social services and supports designed to enable persons with disabilities to remain in the community. These services have grown rapidly in recent years, with expenditures nearly doubling from 1998 to 2003 (Government Accountability Office 2005). However, people must satisfy strict income and asset tests to qualify for Medicaid coverage.

Home care services are expensive for those with too much income or wealth to qualify for Medicaid. Home health aides charged \$19 per hour on average in 2004 (Metlife 2005). Most private long-term care insurance policies now cover home care, but only about 1 in 10 older Americans had long-term care insurance in 2002 (Johnson and Uccello 2005).

#### Home Care for Childless Adults

Relatively little is known about care arrangements for frail older adults without children, partly because most caregiving studies have focused on help from children, ignoring childless adults.

One previous study, based on 1993 data, found that frail older adults with children were more likely to receive informal help and less likely to receive paid help than those without children (Norgard and Rodgers 1997). The authors did not, however, find that the presence of a child significantly affected the likelihood that frail older adults received any care. Aykan (2003), who also examined 1993 data, concluded that childless adults are no more likely to receive skilled home health care than those with children. Other research has found that the number of children increased the chances that frail older adults with children received help from their offspring (Wolf and Soldo 1990). A closer look at care outcomes for childless adults is warranted. The existing studies used data that are now more than 10 years old. Further, these studies did not examine who provides care to childless adults, the amount of care obtained by care recipients, or care provided to unmarried childless adults, who are likely most vulnerable because they cannot turn to spouses or children for help.

Indirect evidence of the importance of informal care from children can be found in nursing home entry studies. Childless women (but not men) appear more likely to enter nursing homes than those with children (Aykan 2003), nursing home admission rates decline with the number of children (Freedman 1996), and frail older adults who do not receive informal care from their children are more likely to enter nursing homes in later years than those who receive informal care (Lo Sasso and Johnson 2002).

#### Fertility Trends

Fertility rates among American women have fallen sharply over the past 40 years, increasing the share of older adults in coming decades without children to care for them. In the late 1950s, the total fertility rate in the U.S. peaked at 3.8 births per woman. By the early 1980s, the rate had

fallen by more than one-half, to 1.8 births per woman (National Center for Health Statistics 2005b). The total fertility rate fluctuated during the 1990s between 2.0 and 2.1, close to the rate required to maintain the size of the population.

The share of women without children has also increased over the past few decades. Among women age 40 to 44, the vast majority of whom have completed their childbearing, the share without children nearly doubled between 1975 and 1998, increasing from 8.8 percent to 16.6 percent (National Center for Health Statistics 2005a). Rates of childlessness are highest among college-educated women, who earn more on average than women with less education and can better afford to purchase paid home care services when they become frail. However, the largest increase in childlessness between 1980 and 1998 occurred among women without college degrees (Bachu 1999). In 2004, 15.3 percent of women age 40 to 44 who did not complete high school were childless (Dye 2005). In addition, 21 percent of women who attended college.

Women who reached prime childbearing age during the Depression and World War II also exhibit high rates of childlessness. For example, 21.9 percent of women born between 1906 and 1910 and 19.3 percent of women born between 1911 and 1915 never had children (National Center for Health Statistics 2005a). Survivors in these cohorts are now in their 90s, at high risk of needing long-term care services. Examining the paid and unpaid help they have received can offer insights about likely long-term care experiences for the many childless men and women who are now in their 40s and 50s.

#### Methods

The analysis was based on an economic model in which altruistic family members bargain over care arrangements so as to maximize the combined well-being of the frail care recipient and the network of potential and actual caregivers (Becker 1991; Pezzin and Schone 1999). Family members, who value their own welfare and that of the care recipient, were assumed to choose arrangements that minimize costs and maximize benefits. Costs include financial outlays for paid services and time spent providing help, including transportation time, which leaves less time for leisure and paid employment (Johnson and Lo Sasso 2000). Benefits include the comfort and dignity of the care recipient.

The model predicts that frail older adults without children are likely to receive less unpaid help but more paid help than those with children. Compared with adult children who provide care, nonchild caregivers may be less devoted to the well-being of the care recipient, and thus less willing to devote as much time to caregiving. Many nonchild caregivers may also face other family demands, such as the needs of their own frail parents. Shortages of informal care are likely to increase the purchase of paid services.

The model also predicts important roles for health status and financial resources in determining care. Need generally rises with the severity of the disability, which in turn likely increases the amount of care received. Wealthy people can generally better afford home care than those with fewer resources. However, people with very limited income and assets may qualify for Medicaid-financed home care.

#### Data

The data came from the Health and Retirement Study (HRS), a nationally representative survey of older Americans conducted by the University of Michigan for the National Institute on Aging. The survey follows over time several cohorts of older adults and their spouses. In 1998, HRS interviewed a sample of adults age 51 and older, and reinterviewed them in 2000, 2002, and 2004. The survey collected information on health and disability, financial resources, the number of surviving children, and help with activities of daily living (ADLs) and instrumental activities of daily living (IADLs). ADLs consisted of eating, dressing, bathing, getting in and out of bed, walking across a room, and using the toilet. IADLs consisted of shopping for groceries, meal preparation, money management, taking medication, and using the telephone. The survey asked respondents whether they received any help, who provided the help, how many hours per week and weeks per month each provider helped, and whether the helper was paid.

The analytic sample was restricted to frail adults age 65 and older living in the community, not in nursing homes. Frailty was defined as having difficulty with a least one ADL or IADL lasting at last three months. The analysis pooled data from 2000, 2002, and 2004, but used only information from the final year in which the respondent met the inclusion criteria. Because each HRS respondent appeared in the sample only once, the analysis avoided the econometric complications that would result from having multiple observations on a given respondent. Data prior to 2000 were not used because the survey did not ask respondents about the amount of help they received from their spouses in those years. After the exclusion of a few cases with missing data, the final sample consisted of 5,132 observations. Because many respondents reporting disabilities in 2000 and 2002 died before the end of the observation period,

only 52 percent of the cases were from 2004.

The analysis examined the variation in the share of frail respondents receiving help, the mean monthly hours of care received, and the network of unpaid caregivers and helpers, by the number of adult children. Because childless adults may rely on formal home care to offset the lack of child caregivers, the tabulations included unpaid help, paid help, and any help. The analysis examined how outcomes vary by gender, marital status, and severe disability, defined by the presence of three or more ADL limitations. Tabulations also described the size and composition of unpaid caregiver networks, showing the share of care recipients obtaining help from spouses (including former spouses), children, children-in law, grandchildren, other family members, friends, and community organizations.

#### Model specification

To examine how help varies with the availability of adult children holding constant other respondent characteristics, the analysis estimated probit models of the probability of receiving help in the last month and ordinary least squares regressions of the natural logarithm of help hours obtained by care recipients in the last month. Separate models were estimated for unpaid help, paid help, and any help. The models were estimated on the full sample, the subset of unmarried frail older adults (who cannot turn to spouses to offset the lack of care from children if they are childless), and the subset of severally disabled adults.

Regressors included measures of disability, physical and emotional health, age, gender, marital status, race, education, financial resources, and the number of adult children. The impact of children was measured by indicator variables for no children and one child; the omitted category consisted of adults with two or more children. Variables indicating the number of ADL limitations and the number of IADL limitations captured the impact of disability. Physical health measures included indicators for heart problems, a history of cancer, lung problems, diabetes, and stroke, as diagnosed by a physician, and cognitive impairment.

Respondents were classified as being cognitively impaired if they scored poorly on a cognitive test consisting of four memory and two executive functioning tasks. The survey instrument asked respondents to recall a list of words (10 points); recall the same list about five minutes later (10 points); name the day of the week and the date (4 points); name the object that people usually use to cut paper, the prickly plant that grows in the desert, and the president and vice president of the United States (4 points); subtract 7 from 100 five times (5 points); and count backwards from 20 to 10 (2 points). Following Herzog and Wallace (1997), we assigned 2 points (out of 10) to those who refused the entire immediate recall task, 0 points to those who refused the entire delayed recall test, and 1 point to those who refused to subtract seven from 100. We assigned 0 points for nonresponse to a single item in a task. The maximum score, indicating the highest cognitive functioning, is 35. We classified respondents as being cognitively impaired if they scored 10 or lower, a threshold that appeared to generate the same prevalence of cognitive impairment in our sample as in the general older population (Brookmeyer, Gray, and Kawas 1998). We classified people whose responses were provided by proxy as cognitively impaired if the proxies described them as having poor memory.

The indicator for poor mental health was based on a subset of the Center for Epidemiological Studies Depression Scale (CES-D), consisting of eight depressive symptoms. The survey asked respondents to indicate whether each of the following eight statements was true much of the time during the past week: they felt depressed, felt everything they did was an effort, felt their sleep was restless, felt lonely, felt sad, could not get going, were happy, and enjoyed life. We assigned a value of one to each positive response (or negative response for the last two statements) and summed the values. The analysis classified respondents with scores of four or higher as being depressed, which generates prevalence rates at older ages consistent with other national studies (Berkman et al. 1986). The model also included an indicator for medically diagnosed psychological problems.

Financial resources that entered the model included household income and net worth. Net worth included the net value of housing and other real estate, vehicles, businesses, and financial assets. The model included indicators identifying respondents with low net worth (defined as less than \$2,000) and low income (defined as less than the federal poverty level), because people with limited income and assets are likely to qualify for Medicaid and receive free home care services. The models also controlled for the level of net worth above \$2,000 and the income-to-poverty-level ratio for people with incomes above the poverty level. All financial amounts were expressed in constant 2004 dollars, adjusted by the change in the consumer price index.

An important caveat to the analysis is that the sample consisted only of frail older adults living in the community. As a result, the model may understate children's impact on care, because childless frail older adults with inadequate care may be pushed into nursing homes and drop out of the sample (Aykan 2003; LoSasso and Johnson 2002).

#### Results

Overall, 61 percent of frail older adults living in the community received help with basic personal activities or with household chores or errands during the month preceding the survey (see table 1). Among the most severely disabled older adults—those with three or more ADL limitations—about 9 in 10 received help. Unpaid help from family, friends, and organizations was much more common than help from paid sources. Overall, about 57 percent received unpaid help and 14 percent received paid help. Paid home care services were somewhat more common among women and unmarried adults, and much more common among those with severe disabilities. For example, nearly 43 percent of community-dwelling unmarried women with three or more ADL limitations received paid home care services.

The likelihood that frail older adults in the community received unpaid help increased with the number of adult children. Only about 49 percent of those with no adult children received unpaid help, compared with 55 percent of those with one child, 59 percent of those with two children, and 58 percent of those with three or more children. Differences in the receipt of help by the number of children were even more dramatic among unmarried adults and those with severe disabilities. For example, among unmarried older adults with three or more ADL limitations, those with two adult children were about 21 percentage points more likely to receive unpaid help than those with no adult children.

Childless frail older adults were somewhat more likely to receive paid home care services than those with children, partially offsetting their low receipt of unpaid help. For example, about 18 percent of frail older adults without any adult children received help from paid sources, compared with only 13 percent of those with three or more adult children. Considering help from paid and unpaid sources together, we did not find any significant differences overall by the number of adult children in the receipt of any help with basic personal activities or household chores or errands. However, within certain subgroups, including unmarried frail adults and those with severe disabilities, childless older adults were less likely to receive help from any source than those with multiple adult children.

#### Mean Hours of Help Received

Frail older care recipients averaged 179 hours of help per month, or about 42 hours per week (see table 2). Unpaid care recipients averaged 157 monthly hours of help from unpaid sources, and paid care recipients averaged 142 monthly hours of help from paid sources. Severely disabled care recipients obtained much more help, averaging nearly 300 hours per month, or nearly 70 hours per week.

Among frail older care recipients, those with adult children received more hours of help than those without any children. The mean amount of care received by frail older care recipients totaled 139 hours per month among childless adults, compared with 201 hours among those with one child, 191 hours among those with two children, and 175 hours among those with three or more children. Interestingly, the shortfall in hours of help among childless care recipients arose primarily from differences in paid help hours, not from differences in unpaid help.

#### Sources of Unpaid Help

Most frail older Americans received help from their children or spouses (see table 3). About 51 percent of community-dwelling frail older recipients of unpaid help obtained assistance from their children, and 43 percent received help from their spouses. Nearly twice as many people received help from daughters as from sons. Help from children was even more prevalent among unmarried people with long-term care needs, who could not turn to spouses for help. Nearly 4 in 5 unmarried frail older women receiving unpaid help obtained assistance from their adult children.

Relatively few older care recipients obtained help from friends or other relatives. Only about 8 percent of unpaid care recipients obtained help from their children-in-law, 8 percent received help from their grandchildren, and 8 percent received help from other relatives. Fewer than 1 in 6 received unpaid help from friends, and about 1 in 10 received unpaid help from community organizations.

Frail older adults without adult children turned to other family members, friends, and community groups for help. About one-third of childless frail older care recipients obtained help from spouses, and 44 percent received help from other relatives. About 1 in 5 obtained help from friends, and 1 in 6 obtained help from community groups. Among childless unmarried older female care recipients, nearly two-thirds obtained help from other family members, one-third obtained help from friends, and one-quarter obtained help from community groups. By comparison, about 9 out of 10 unmarried female care recipients with three or more adult children received help from one or more of their children.

#### Size of Caregiver Networks

Networks of active caregivers for frail older adults living in the community were relatively small. Nearly two-thirds of care recipients obtained help from a solitary caregiver in a given month, and fewer than 1 in 7 received help from three or more caregivers (see table 4). Larger networks tended to care for severely disabled unmarried adults, who generally need the most help. For example, more than one-quarter of unmarried female care recipients with three or more ADL limitations obtained help from three or more caregivers in a single month.

Childless frail older care recipients generally obtained help from fewer caregivers than those with children. For example, care recipients without any children averaged 1.4 caregivers, those with one adult child averaged 1.5 caregivers, and those with three or more children averaged 1.7 caregivers. About 77 percent of care recipients with no children obtained help from only one caregiver in a single month, compared with only 64 percent of those with three or more offspring.

#### Multivariate Estimates of Help

Probit models of the probability that community-dwelling frail older adults received help with basic personal activities or with household chores or errands showed that childless adults were significantly less likely than others to receive unpaid help from family, friends, or community groups (see table 5). Controlling for disability, health status, financial resources, and demographic characteristics, the model indicated that childless frail older adults living in the community were about 10 percentage points less likely to receive unpaid help from family and friends than those with two or more adult children. With about 57 percent of frail older adults receiving unpaid help, this estimate implied that childless adults were about 17 percent less likely to receive help than those with two or more children. Differences were even more striking among unmarried adults, who could not turn to spouses for help. Unmarried frail older adults without any adult children were about 18 percentage points less likely (or about 31 percent less likely in relative terms) to receive unpaid help than unmarried frail older adults with two or more adult children.

Help from paid sources partly offset the shortfall in unpaid help. Childless adults were about 3 percentage points more likely to receive paid help than those with two or more adult children, although the effect was only marginally significant. When we restricted the sample to unmarried frail older adults, the estimated difference rose to 4 percentage points.

Childless frail older adults living in the community were about 5 percentage points less likely (or about 8 percent in relative terms) to receive help from any source (paid or unpaid) than adults with two or more adult children. For unmarried adults, the lack of children led to an even greater shortfall in care, reducing the probability of receiving any help by about 10 percentage points, or about 17 percent.

The probability that frail older adults living in the community received help increased with physical limitations and certain health problems. Each additional ADL limitation increased the probability of receiving help in the sample by about 5 percentage points, and each additional IADL limitation increased the probability by 25 percentage points. Diabetes was associated with significantly higher chances of receiving unpaid help and help from any source, but it did not significantly affect the likelihood of receiving paid help. Depression and medically diagnosed psychological problems significantly increased the probability of receiving paid help. Stroke victims were more likely than other people to receive care, as were those with lung problems. People with arthritis were less likely to receive care than other people with the same number of ADL and IADL limitations.

Frail older adults with very few assets and those with many assets were more likely than people of moderate means to receive help from paid sources. Many people with virtually no assets often qualify for Medicaid (which covers these services), and wealthy individuals can generally afford to purchase services on their own. The probability of receiving unpaid help decreased with net worth, although the effect was insignificant for unmarried people. Income did not significantly influence the receipt of help.

Demographic factors also affected the likelihood that frail older adults received help with basic personal activities or household chores or errands. Unmarried people were more likely to receive paid help than married people, but much less likely to receive unpaid help. Controlling for other factors, unmarried frail older adults living in the community were about 8 percentage points less likely than married adults to receive help from paid or unpaid sources. African Americans were more likely to receive unpaid help and less likely to receive paid help than whites, whereas Hispanics were less likely to receive unpaid help and more likely to receive paid help. Women were more likely to receive help than men, especially among unmarried adults. The likelihood of receiving help increased with age, generally at a decreasing rate. Respondents who answered by proxy were significantly more likely to receive unpaid help from family and friends than those who answered the survey themselves, perhaps because proxy respondents had especially serious health care needs that the model did not fully take into account or because they were especially likely to have family members willing to help.

#### Multivariate Estimates of Hours of Help

Controlling for other factors, frail older care recipients without any adult children did not obtain significantly fewer help hours than those with children (see table 6). However, unmarried childless care recipients obtained fewer hours of paid help than those with children, perhaps because most users of formal home care combine it with unpaid care (Li 2005).

Health status, financial resources, and demographics affected the amount of help obtained by care recipients. Care from all sources increased with ADL limitations, IADL limitations, and age. People with diabetes and cognitive impairments received especially high levels of unpaid help and total help. Unpaid help hours were also relatively high among married adults, Hispanics, and African Americans, although differences between African Americans and whites were only marginally significant. Hours of paid help was higher among those living in poverty than those with more income.

#### Multivariate Estimates for Severely Disabled Older Adults

Among the most severely disabled older adults living in the community—those with three or more ADL limitations—childless adults were 10 percentage points less likely, or 12 percent in relative terms, to receive unpaid help than those with two or more children (see table 7). Unmarried childless adults were 17 percentage points (or 22 percent) less likely to receive unpaid help than those with two or more children. However, differences in any help (paid or unpaid) were much smaller, amounting to only 2 percentage points for unmarried adults. There were no significant differences in the hours of help obtained by care recipients with and without children.

#### Conclusions

The absence of adult children substantially reduced the likelihood of receiving in-home care, especially for frail older adults who were not married and could not turn to spouses for help. Controlling for health status, financial resources, and demographic characteristics, unmarried frail older adults without children were about 31 percent less likely to receive unpaid help from family and friends than those with two or more adult children. Although childless frail older adults were more likely to receive paid help than those with children, the advantage was not enough to overcome the shortfall in unpaid help. Among unmarried frail older adults, those without children were about 17 percent less likely to receive paid or unpaid care than those with two or more adult children. These estimates may understate the true care disadvantage faced by childless adults because they refer only to those living in the community, ignoring the impact of childlessness on nursing home entry.

Although paid services could theoretically fill the care gap created by the absence of children, the findings highlight current limitations in formal home care use. Medicare financing of homemaker services is restricted to homebound adults who are also receiving skilled nursing care at home. Medicaid coverage is limited to those with little income and virtually no assets. Because few older Americans have private long-term care insurance, most people ineligible for publicly financed services who choose to purchase home care face steep out-of-pocket costs. Even among affluent older Americans with incomes exceeding 400 percent of the federal poverty level, only 36 percent of these with severe disabilities received in-home formal care in 2002 (Johnson and Wiener 2006).

Historically low fertility rates among women in the baby boom generation born between 1946 and 1964 will increase the future share of frail older Americans who lack child caregivers. In our sample of frail older Americans, only about 1 in 12 adults had no children. By comparison, about 1 in 6 women born between 1951 and 1955 never had children (National Center for Health Statistics 2005a). In 2035, survivors from this birth cohort will be in their 80s, at high risk of needing long-term care. Without expanded access to formal home care services, many of these childless adults may be unable to find the care they need in the community.

#### References

- Aykan, Hakan. 2003. "Effect of Childlessness on Nursing Home and Home Health Care Use." *Journal of Aging and Social Policy* 15(1): 33–53.
- Bachu, A. 1999. "Is Childlessness among American Women on the Rise?" Population Division Working Paper No. 37. Washington, DC: U.S. Census Bureau.
- Becker, Gary. S. 1991. *A Treatise on the Family: Enlarged Edition*. Cambridge, MA: Harvard University Press.
- Berkman, Lisa E., Cathy S. Berkman, Stanley Kasl, Daniel H. Freeman, Lisa Leo, Adrian M. Ostfeld, Joan Cornoni-Huntley, and Jacob A. Brody. 1986. "Depressive Symptoms in Relation to Physical Health and Functioning in the Elderly." *American Journal of Epidemiology* 124: 372–388.
- Brookmeyer, Ron, Sarah Gray, and Claudia Kawas. 1998. "Projections of Alzheimer's Disease in the United States and Public Health Impact of Delaying Disease Onset." *American Journal of Public Health* 88(9): 1334–42.
- Dye, J. L. (2005). "Fertility of American women: June 2004." Current Population Reports, series P20-555. Washington, D.C.: U.S. Census Bureau. http://www.census.gov/prod/2005pubs/p20-555.pdf.
- Freedman, Vicki A. 1996. "Family Structure and the Risk of Nursing Home Admission." Journal of Gerontology: Social Sciences 51B(2): S61–S69.
- Government Accountability Office. 2005. "Long-Term Care Financing: Growing Demand and Cost of Services Are Straining Federal and State Budgets." GAO-05-564T. Washington, DC: U.S. Government Accountability Office.
- Herzog, A. Regula, and Robert B. Wallace. 1997. "Measures of Cognitive Functioning in the AHEAD Survey." *Journal of Gerontology: Psychological and Social Sciences* 52B (Special Issue): 37–48.
- Johnson, Richard W., and Anthony T. Lo Sasso. 2000. "Parental Care at Midlife: Balancing Work and Family Responsibilities near Retirement." The Retirement Project Brief Series No. 9. Washington, DC: The Urban Institute.
- Johnson, Richard W., and Cori E. Uccello. 2005. "Is Private Long-Term Care Insurance the Answer?" Issue in Brief No. 29. Chestnut Hill, MA: Center for Retirement Research at Boston College.
- Johnson, Richard W., and Joshua M. Wiener. 2006. A Profile of Frail Older Americans and *Their Caregivers*. Washington, DC: The Urban Institute.
- Li, Lydia W. 2005. "Longitudinal Changes in the Amount of Informal Care among Publicly Paid Home Care Recipients." *The Gerontologist* 45(4): 465–73.

- Liu, Korbin, Kenneth G. Manton, and Cynthia Aragon. 2000. "Changes in Home Care Use by Disabled Elderly Persons: 1982–1994." *Journal of Gerontology: Social Sciences* 55B(4): S245–S253.
- LoSasso, Anthony T., and Richard W. Johnson. 2002. "Does Informal Care from Adult Children Reduce Nursing Home Admissions for the Elderly?" *Inquiry* 39(3): 279–97.
- Metlife. 2005. *The Metlife Market Survey of Nursing Home and Home Health Care Costs*. Westport, CT: Metlife Mature Market Institute.
- National Alliance for Caregiving and AARP. 2004. *Caregiving in the U.S.* <u>http://www.caregiving.org/data/04finalreport.pdf</u>
- National Center for Health Statistics. 2005a. *Vital Statistics of the United States 1999*. Volume 1, Natality. Hyattsville, MD: U.S. Department of Health and Human Services. <u>http://www.cdc.gov/nchs/datawh/statab/unpubd/natality/natab99.htm</u>

 . 2005b. Vital Statistics of the United States 2000. Volume 1, Natality. Hyattsville, MD: U.S. Department of Health and Human Services. http://www.cdc.gov/nchs/datawh/statab/unpubd/natality/natab2000.htm

- Norgard, Theresa M., and Willard L. Rodgers. 1997. "Patterns of In-Home Care Among Elderly Black and White Americans." *Journals of Gerontology* 52B(Special Issue): 93–101.
- Pezzin, Liliana E., and Barbara Steinberg Schone. 1999. "Intergenerational Household Formation, Female Labor Supply, and Informal Caregiving: A Bargaining Approach." *Journal of Human Resources* 34(3): 475–503.
- Spillman, Brenda C., and Kristin J. Black. 2005. "Staying the Course: Trends in Family Caregiving." AARP Public Policy Institute Report 2005-17. Washington, DC: AARP.
- ———. 2006. "The Size and Characteristics of the Residential Care Population: Evidence from Three National Surveys." Washington, DC: Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services.
- Wolf, Douglas A., and Beth J. Soldo. 1990. "Family Structure and Caregiving Portfolios." Paper presented at the Annual Meeting of the Gerontological Society of America, Boston, MA.

		А	.11			Unma	rried	
	Ν	Unpaid (%)	Paid (%)	Any (%)	Ν	Unpaid (%)	Paid (%)	Any (%)
All	5,132	57.2	14.2	61.0	2728	54.5	19.0	60.6
By no. of children	0,102	0,12	1	0110	2720	0 110	1,10	0010
None	436	49.1	17.5	57.5	322	42.5	21.6	53.2
One	659	55.3*	17.0	61.4	408	52.7**	19.8	60.9*
Two	1,170	58.8**	14.5	61.8	625	58.9**	21.3	64.1**
Three or more	2,867	58.3**	12.8**	61.1	1373	56.0**	17.0*	60.6**
Women	3,081	56.7	16.7	61.3	2107	56.1	19.6	62.2
By no. of children								
None	276	48.1	20.5	56.6	231	44.5	22.1	54.4
One	438	55.7*	18.9	63.2	324	53.0*	19.6	61.6
Two	716	59.0**	17.6	63.0	490	59.9**	22.6	65.3**
Three or more	1,651	57.5**	15.0**	61.0	1062	57.9**	17.6	62.7**
Men	2,051	58.0	10.3	60.4	621	49.2	16.9	55.0
By no. of children								
None	160	50.8	12.6	58.8	91	37.9	20.3	50.4
One	221	54.5	13.1	57.7	84	51.4	20.5	58.3
Two	454	58.4	9.3	59.8	135	55.2**	16.7	59.3
Three or more	1,216	59.6	9.8	61.4	311	49.6*	14.8	53.5
Adults with three or more								
ADL limitations	1,169	83.3	36.9	90.3	669	76.8	42.2	87.7
By no. of children								
None	105	66.8	42.2	83.6	86	60.9	45.9	80.2
One	149	78.8*	39.9	88.7	90	72.8	41.8	86.5
Two	253	86.9**	36.0	92.9**	148	81.7**	44.1	91.0**
Three or more	662	85.6**	35.7	90.8*	345	79.9**	40.6	88.4*

 Table 1. Share of Frail Older Adults Receiving Help, by Number of Adult Children, Gender, Marital Status, Disability, and Type of Help

Source: Author's estimates from the 2000-2004 Health and Retirement Study (HRS).

*Notes:* The sample consists of adults age 65 and older with at least one limitation with an activity of daily living (ADL) or an instrumental activity of daily living who live in the community. ADLs consist of getting in and out of bed, bathing, dressing, eating, walking across the room, and using the toilet. Asterisks indicate that the probability of receiving help differs significantly from that for frail older adults with no adult children (\*  $.10 \le p < .05$ ; \*\*  $p \le .05$ ).

	Unpa	id help	Paie	d help	Any help		
	Ν	Mean	Ν	Mean	Ν	Mean	
All	2,702	157	713	142	2,935	179	
By no. of children	,				y		
None	192	131	78	93	231	139	
One	336	177**	112	156**	380	201**	
Two	630	158	172	173**	675	191**	
Three or more	1,544	155	351	134**	1,649	175**	
Women	1,614	155	505	143	1,782	181	
By no. of children							
None	1,125	141	58	104	152	154	
One	229	168	80	154	261	192	
Two	390	146	131	174**	423	188	
Three or more	870	158	236	131	946	179	
Men	1,088	160	208	142	1,153	176	
By no. of children							
None	67	113	20	66	79	112	
One	107	199**	32	165*	119	223**	
Two	240	180**	41	169**	252	198*	
Three or more	674	152	115	141**	703	169*:	
Unmarried adults	1,388	143	520	141	1,577	173	
By no. of children							
None	126	133	70	90	163	141	
One	201	170	81	141*	237	190*	
Two	338	136	140	176**	376	186*	
Three or more	723	141	229	136**	801	167	
Adults with three or more							
ADL limitations	923	252	417	171	1,021	298	
By no. of children							
None	65	236	42	115	82	238	
One	116	239	64	188*	133	294	
Two	209	253	93	227**	227	322**	
Three or more	533	257	218	155	579	298*	

 Table 2. Mean Monthly Hours of Help Obtained by Frail Older Care Recipients, by Number of Adult Children, Gender, Marital Status, Disability, and Type of Help

Source: Author's estimates from the 2000–2004 Health and Retirement Study (HRS).

*Notes:* The sample consists of adults age 65 and older with at least one limitation with an activity of daily living (ADL) or an instrumental activity of daily living who live in the community and receive help. ADLs consist of getting in and out of bed, bathing, dressing, eating, walking across the room, and using the toilet. Asterisks indicate that the mean value of hours of help differs significantly from the mean value among those with no adult children (\*  $.10 \le p < .05$ ; \*\*  $p \le .05$ ).

						Sour	ce of Unpaid	Help (%)				
	Ν	Spouse	Child	Daughter	Son	Child- in-Law	Daughter- in-Law	Son-in- Law	Grand- child	Other Relative	Friend	Organi- zation
All	2,978	42.6	51.2	37.6	19.6	8.2	5.6	2.8	8.4	7.8	15.5	10.2
By no. of children												
None	214	33.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.0	21.3	16.2
One	375	33.6	56.4**	40.2**	16.9**	14.0**	9.0**	5.0**	12.5**	7.8**	21.0	10.8
Two	690	40.4	53.6**	37.1**	21.6**	9.5**	7.0**	2.9**	10.0**	5.5**	17.7	10.1**
Three or more	1,699	46.8**	55.6**	41.9**	22.0**	7.5**	5.0**	2.6**	7.5**	3.7**	12.6**	9.3**
Women	1,765	26.6	63.9	47.8	23.1	10.3	7.3	3.2	11.1	9.8	18.1	11.5
By no. of children												
None	134	19.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.5	27.6	20.2
One	250	23.5	65.1**	48.0**	17.9**	16.1**	9.5**	6.5**	15.2**	9.4**	19.0*	11.6
Two	426	26.5	65.8**	45.8**	25.3**	11.8**	9.1**	3.0**	12.9**	6.9**	22.5	10.8
Three or more	955	28.4*	71.3**	55.1**	26.7**	9.6**	6.9**	3.0**	9.9**	4.9**	14.3**	10.6
Men	1,213	66.8	31.9	22.0	14.2	5.0	3.0	2.0	4.4	4.8	11.6	8.2
By no. of children	,											
None	80	53.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.3	11.7	10.0
One	125	54.7	38.2**	24.1**	14.8**	9.7**	7.7**	2.0**	6.7**	4.3**	25.2**	9.1
Two	264	64.1	32.7**	22.3**	15.1**	5.7**	3.4**	2.7**	5.0**	3.1**	9.3	8.9
Three or more	744	71.6**	34.3**	24.0**	15.6**	4.6**	2.5**	2.1**	4.2**	2.0**	10.2	7.5
Unmarried women	1,216	0.6	78.6	58.3	29.1	13.3	9.0	4.5	14.5	12.6	21.8	12.9
By no. of children	,											
None	106	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64.7	33.4	24.2
One	179	0.2	78.9**	58.5**	21.5**	19.4**	10.3**	9.1**	20.6**	12.5**	23.7	9.5
Two	298	0.0	81.4**	57.9**	30.8**	15.9**	12.1**	4.2**	16.9**	8.5**	28.9	14.1
Three or more	633	1.0	90.2**	67.8**	35.4**	12.4**	8.5**	4.1**	12.9**	5.7**	15.6**	11.3

Table 3. Source of Unpaid Help Obtained by Frail Older Care Recipients, by Number of Adult Children. Gender, Marital Status, Disability, and Type of Help

Source: Author's estimates from the 2000-2004 Health and Retirement Study (HRS).

*Notes:* The sample consists of adults age 65 and older with at least one limitation with an activity of daily living (ADL) or an instrumental activity of daily living who live in the community and receive unpaid help. ADLs consist of getting in and out of bed, bathing, dressing, eating, walking across the room, and using the toilet. Spouses include ex-spouses. Asterisks indicate that the probability of receiving help from the given source differs significantly from that for frail older adults with no adult children (\*  $.10 \le p < .05$ ; \*\*  $p \le .05$ ).

		Mean number		ion of care re er of caregiv	
	Ν	of caregivers	1	2	3+
All	2,978	1.58	65.2	21.3	13.5
By no. of children	2,770	1.00	00.2	21.5	10.0
None	214	1.36	77.1	13.1	9.8
One	375	1.52**	63.6**	24.8**	11.6
Two	690	1.51**	65.8**	24.0	11.5
Three or more	1,699	1.65**	63.7**	21.0**	15.3**
Women	1,765	1.69	58.3	25.4	16.3
By no. of children					
None	134	1.45	71.8	16.8	11.4
One	250	1.56	60.4**	27.4**	12.2
Two	426	1.65**	57.3**	27.6**	15.1
Three or more	955	1.78**	56.3**	25.1**	18.6**
Men	1,213	1.40	75.7	15.0	9.3
By no. of children	,				
None	80	1.22	85.2	7.4	7.4
One	125	1.44**	70.5**	19.4**	10.1
Two	264	1.28	80.2	14.3*	5.5
Three or more	744	1.47**	73.6**	15.6**	10.8
Unmarried women	1,216	1.80	51.9	29.5	18.6
By no. of children					
None	106	1.55	65.9	19.5	14.6
One	179	1.66	55.6	28.9*	15.5
Two	298	1.77*	50.3**	31.7**	18.0
Three or more	633	1.90**	49.4**	30.2**	20.4
Adults with three or more					
ADL limitations	979	1.85	54.6	23.7	21.7
By no. of children					
None	71	1.53	68.3	15.2	16.5
One	123	1.72	56.1	23.9	20.0
Two	220	1.69	57.7	23.6	18.7
Three or more	565	1.98**	51.2**	24.8**	24.0
Unmarried women with thr	·ee				
or more ADL limitations	420	2.03	45.5	26.8	27.7
By no. of children					
None	53	1.66	65.3	17.0	17.7
One	71	1.87	48.3	24.1	27.6
Two	122	1.91	45.0**	29.0	26.0
Three or more	280	2.21**	41.1**	29.0	20.0 30.6*

 Table 4. Number of Unpaid Caregivers Helping Care Recipients, by Number of Adult Children, Gender, Marital Status and Disability

Source: Author's estimates from the 2000-2004 Health and Retirement Study (HRS).

*Notes:* The sample consists of adults age 65 and older with at least one limitation with an activity of daily living (ADL) or an instrumental activity of daily living who live in the community and receive unpaid help. ADLs consist of getting in and out of bed, bathing, dressing, eating, walking across the room, and using the toilet. Asterisks indicate significant differences from the values for those with no adult children (\*  $.10 \le p < .05$ ; \*\*  $p \le .05$ ).

-		All		Unmarried				
	Unpaid	<b></b>		Unpaid	<b>D</b> • • • • •			
	help	Paid help	Any help	help	Paid help	Any help		
Number of adult children	0.007***	0.007*	0.046**	0 177***	0.041*	0 100***		
Zero	-0.097***	0.027*	-0.046**	-0.177***	0.041*	-0.102***		
0	(0.029)	(0.016)	(0.021)	(0.036)	(0.025)	(0.029)		
One	-0.069*** (0.025)	0.011	-0.035** (0.017)	-0.078**	0.011 (0.021)	-0.029 (0.021)		
[Deference: True on March		(0.012)	(0.017)	(0.033)	· /	(0.021)		
[Reference: Two or More]	•••	•••	•••		•••	•••		
Age	0.049***	0.017**	0.005	0.076***	0.028*	0.033**		
	(0.017)	(0.008)	(0.012)	(0.024)	(0.015)	(0.016)		
Age squared	-0.0003***	-0.0001	0.000	-0.0004***	-0.0001	-0.0002*		
	(0.0001)	(0.000)	(0.0001)	(0.0001)	(0.0001)	(0.0001)		
Female	0.010	0.016*	0.022**	0.057**	-0.002	0.047***		
	(0.017)	(0.009)	(0.011)	(0.027)	(0.018)	(0.018)		
Not married	-0.155***	0.059***	-0.082***					
	(0.018)	(0.009)	(0.012)					
Number of ADL limitations	0.005	0.029***	0.046***	-0.025***	0.038***	0.026***		
	(0.006)	(0.003)	(0.004)	(0.008)	(0.005)	(0.006)		
Number of IADL limitations	0.268***	0.039***	0.250***	0.259***	0.057***	0.232***		
	(0.008)	(0.003)	(0.008)	(0.012)	(0.006)	(0.012)		
Medical conditions								
Heart problems	0.023	0.014*	0.019*	-0.012	0.019	-0.003		
	(0.016)	(0.008)	(0.010)	(0.023)	(0.015)	(0.014)		
Cancer	-0.011	0.006	0.003	-0.008	0.014	0.008		
	(0.019)	(0.010)	(0.012)	(0.028)	(0.019)	(0.017)		
Lung problems	0.037*	0.021*	0.029**	0.075***	0.012	0.055***		
	(0.020)	(0.011)	(0.012)	(0.028)	(0.020)	(0.015)		
Diabetes	0.069***	0.009	0.046***	0.078***	0.017	0.056***		
	(0.017)	(0.010)	(0.010)	(0.025)	(0.018)	(0.014)		
Stroke	0.040*	0.013	0.030**	0.023	0.033*	0.018		
	(0.021)	(0.010)	(0.013)	(0.029)	(0.019)	(0.018)		
Psychological problems	-0.002	0.023**	0.000	-0.015	0.037**	-0.008		
	(0.019)	(0.010)	(0.013)	(0.027)	(0.018)	(0.017)		
Arthritis	-0.041**	-0.015	-0.036***	-0.032	-0.013	-0.041**		
	(0.018)	(0.010)	(0.011)	(0.028)	(0.020)	(0.015)		
Cognitive impairment	-0.024	-0.024**	0.035*	-0.005	-0.029	0.060**		
	(0.030)	(0.010)	(0.018)	(0.040)	(0.021)	(0.022)		
Depression	0.011	0.037***	0.000	0.021	0.039**	0.004		
-	(0.018)	(0.011)	(0.012)	(0.025)	(0.019)	(0.015)		
Net worth less than \$2,000	-0.001	0.046***	0.035**	0.013	0.074***	0.051***		
• /	(0.023)	(0.013)	(0.013)	(0.028)	(0.020)	(0.015)		
Level of net worth above	-0.003**	0.002***	-0.001	-0.003	0.005***	-0.001		
	(0.001)	(0.0004)	(0.001)	(0.003)	(0.002)	(0.002)		

### Table 5. Multivariate Estimates of the Probability of Receiving Care

(continued)

#### Table 5 (continued)

		All		Unmarried				
	Unpaid			Unpaid				
	help	Paid help	Any help	help	Paid help	Any help		
Income below poverty level	0.036	0.008	0.026*	0.025	0.010	0.019		
	(0.022)	(0.011)	(0.014)	(0.027)	(0.018)	(0.016)		
Income-to-poverty-level ratio	-0.001	-0.0004	-0.001	-0.005	0.0001	-0.001		
for those above poverty level	(0.002)	(0.001)	(0.001)	(0.003)	(0.002)	(0.002)		
Education								
Did not attend high school	0.079***	-0.033***	0.039***	0.104***	-0.053***	0.041**		
	(0.021)	(0.010)	(0.013)	(0.030)	(0.018)	(0.017)		
High school dropout	0.051**	-0.003	0.035**	0.057*	0.002	0.043**		
	(0.021)	(0.012)	(0.013)	(0.031)	(0.021)	(0.017)		
[Reference: High school grad]								
Some college	0.015	-0.015	-0.003	0.008	-0.035	-0.026		
	(0.023)	(0.012)	(0.015)	(0.034)	(0.021)	(0.023)		
Four or more years of college	-0.046*	0.064***	-0.001	-0.078*	0.082***	0.014		
	(0.028)	(0.019)	(0.017)	(0.046)	(0.034)	(0.024)		
Race and ethnicity								
African American	0.051**	-0.022**	0.015	0.066**	-0.034*	0.023		
	(0.022)	(0.010)	(0.014)	(0.029)	(0.018)	(0.017)		
Hispanic	-0.101***	0.062***	-0.017	-0.099**	0.047	0.003		
	(0.033)	(0.020)	(0.021)	(0.045)	(0.032)	(0.027)		
[Reference: White or other]								
Proxy interview	0.138***	0.011	0.100***	0.147***	-0.007	0.121***		
	(0.024)	(0.013)	(0.013)	(0.037)	(0.023)	(0.017)		
Year of interview								
2000	-0.046**	0.012	-0.033**	-0.043	0.033*	-0.029		
	(0.020)	(0.010)	(0.014)	(0.029)	(0.020)	(0.019)		
2002	-0.039**	-0.005	-0.019	-0.006	-0.003	0.000		
	(0.018)	(0.009)	(0.012)	(0.026)	(0.017)	(0.016)		
[Reference: 2004]								
Pseudo R <sup>2</sup>	0.327	0.281	0.437	0.334	0.220	0.470		

Source: Author's estimates from the 2000–2004 Health and Retirement Study (HRS).

*Notes:* The table reports marginal effects estimated with a probit model, with standard errors in parentheses. The sample consists of 5132 adults age 65 and older (2728 of whom are unmarried) with at least one limitation with an activity of daily living (ADL) or an instrumental activity of daily living (IADL) who live in the community (\*  $.10 \le p < .05$ ; \*\*  $.05 \le p < .01$ ; \*\*\*  $p \le .01$ ).

		All		Unmarried				
	Unpaid			Unpaid				
	help	Paid help	Any help	help	Paid help	Any help		
Number of adult children								
Zero	-0.126	-0.319*	-0.090	-0.230	-0.365**	-0.163		
	(0.115)	(0.170)	(0.100)	(0.145)	(0.177)	(0.117)		
One	-0.028	-0.001	-0.017	0.010	-0.107	-0.018		
	(0.090)	(0.144)	(0.080)	(0.118)	(0.166)	(0.099)		
[Reference: Two or More]	•••	•••			•••	•••		
Age	0.137**	0.210*	0.136**	0.089	0.285**	0.145**		
8	(0.061)	(0.110)	(0.054)	(0.083)	(0.126)	(0.071)		
Age squared	-0.001**	-0.001*	-0.001**	-0.0005	-0.002**	-0.001*		
0 1	(0.0004)	(0.001)	(0.0003)	(0.005)	(0.001)	(0.0004		
Female	0.097	-0.014	0.117*	-0.066	-0.030	-0.036		
	(0.068)	(0.120)	(0.061)	(0.105)	(0.148)	(0.090)		
Not married	-0.557***	0.216	-0.365***		•••	•••		
	(0.072)	(0.133)	(0.065)					
Number of ADL limitations	0.180***	0.103***	0.215***	0.126***	0.117***	0.187***		
	(0.017)	(0.031)	(0.016)	(0.025)	(0.036)	(0.022)		
Number of IADL limitations	0.358***	0.155***	0.401***	0.344***	0.213***	0.402***		
	(0.025)	(0.045)	(0.023)	(0.035)	(0.052)	(0.030)		
Medical conditions	()	(/	(,	()	( /	()		
Heart problems	0.016	0.082	0.019	0.142	0.062	0.108		
F	(0.060)	(0.106)	(0.054)	(0.085)	(0.121)	(0.072)		
Cancer	0.148**	0.074	0.161**	0.116*	0.201	0.166*		
	(0.074)	(0.132)	(0.067)	(0.108)	(0.153)	(0.092)		
Lung problems	0.121	-0.168	0.125*	-0.150	-0.308*	-0.104		
Long process	(0.077)	(0.141)	(0.070)	(0.113)	(0.169)	(0.096)		
Diabetes	0.280***	0.049	0.244***	0.231**	0.062	0.174**		
	(0.067)	(0.125)	(0.060)	(0.096)	(0.144)	(0.082)		
Stroke	-0.049	0.145	0.002	-0.048	0.112	0.076		
	(0.071)	(0.117)	(0.064)	(0.099)	(0.134)	(0.085)		
Psychological problems	0.000	0.177	0.057	-0.017	0.122	0.048		
	(0.070)	(0.117)	(0.063)	(0.098)	(0.137)	(0.084)		
Arthritis	-0.029	-0.318**	-0.087	0.085	-0.304**	-0.010		
	(0.071)	(0.127)	(0.064)	(0.106)	(0.153)	(0.090)		
Cognitive impairment	0.221**	0.184	0.211***	0.153	0.288*	0.189*		
g <b>F</b> F	(0.087)	(0.146)	(0.078)	(0.118)	(0.169)	(0.102)		
Depression	-0.024	0.215	0.056	-0.136	0.173	-0.015		
	(0.077)	(0.138)	(0.069)	(0.107)	(0.155)	(0.090)		
Net worth less than \$2,000	-0.039	0.140	0.058	-0.064	0.184	0.074		
	(0.03)	(0.146)	(0.073)	(0.097)	(0.140)	(0.083)		
Level of net worth above	0.008	0.008	0.003	-0.020	0.019*	0.018*		
\$2,000 (measured in \$100,000s)	(0.007)	(0.008)	(0.005)	(0.016)	(0.010)	(0.009)		
, , (	(	(	()	(0.010)	()	()		

### Table 6. Multivariate Estimates of Monthly Hours of Care Obtained by Frail Older Care Recipients

(continued)

#### Table 6 (continued)

		All		Unmarried				
	Unpaid help	Paid help	Any help	Unpaid help	Paid help	Any help		
Income below poverty level	-0.064	0.289**	-0.039	-0.070	0.277*	-0.005		
	(0.082)	(0.135)	(0.073)	(0.097)	(0.149)	(0.084)		
Income-to-poverty-level ratio	0.004	0.019	0.004	-0.006	0.042**	-0.001		
for those above poverty level	(0.006)	(0.016)	(0.006)	(0.016)	(0.019)	(0.012)		
Education								
Did not attend high school	-0.081	0.095	-0.138*	0.056	0.181	-0.026		
	(0.084)	(0.152)	(0.076)	(0.115)	(0.172)	(0.099)		
High school dropout	-0.020	0.097	-0.019	-0.036	0.224	-0.007		
	(0.087)	(0.161)	(0.079)	(0.122)	(0.179)	(0.105)		
[Reference: High school grad]								
Some college	-0.127	0.364**	-0.011	-0.136	0.314	0.069		
	(0.094)	(0.181)	(0.086)	(0.140)	(0.213)	(0.122)		
4 or more years of college	-0.222*	0.488***	0.016	-0.321*	0.422**	0.085		
	(0.115)	(0.179)	(0.101)	(0.185)	(0.210)	(0.148)		
Race and ethnicity African American	 0.145*	 -0.014	 0.081	 0.215**	-0.004	 0.124		
American	(0.083)	(0.158)	(0.075)	(0.108)	-0.004 (0.171)	(0.094)		
Hispanic	0.346***	0.343*	0.429***	0.366***	0.224	0.404***		
Inspanie	(0.114)	(0.183)	(0.101)	(0.153)	(0.218)	(0.130)		
[Reference: White or other]								
Proxy interview	0.193**	0.177	0.247***	0.446***	-0.007	0.416***		
·	(0.087)	(0.160)	(0.078)	(0.123)	(0.181)	(0.106)		
Year of interview								
2000	0.070	0.114	0.120*	-0.044	0.157	0.036		
	(0.075)	(0.127)	(0.067)	(0.105)	(0.147)	(0.090)		
2002	-0.054	0.022	-0.048	-0.113	0.168	-0.092		
	(0.071)	(0.125)	(0.064)	(0.098)	(0.143)	(0.084)		
[Reference: 2004]								
Intercept	-3.000	-6.218	-3.374	-1.348	-9.142*	-3.981		
-	(2.416)	(4.493)	(2.156)	(3.387)	(5.209)	(2.885)		
Ν	2702	713	2935	1388	520	1577		
Adjusted R <sup>2</sup>	0.261	0.145	0.341	0.259	0.195	0.367		

Source: Author's estimates from the 2000-2004 Health and Retirement Study (HRS).

*Notes:* The table reports coefficients from ordinary least squares regressions of the natural logarithm of monthly hours of care received, with standard errors in parentheses. The sample consists of adults age 65 and older with at least one limitation with an activity of daily living (ADL) or an instrumental activity of daily living (IADL) who live in the community and receive help (\*  $.10 \le p < .05$ ; \*\*  $.05 \le p < .01$ ; \*\*\*  $p \le .01$ ).

		All		Unmarried				
	Unpaid			Unpaid				
	help	Paid help	Any help	help	Paid help	Any help		
A. PROBABILITY OF REC	EIVING CAI	RE						
Number of Adult Children								
Zero	-0.103*** (0.043)	0.050 (0.054)	-0.008** (0.006)	-0.170*** (0.061)	0.049 (0.063)	-0.022*** (0.017)		
One	-0.039 (0.032)	0.026 (0.045)	-0.002 (0.003)	-0.045 (0.052)	-0.005 (0.060)	-0.002 (0.005)		
[Reference: Two or More]	•••		•••					
Ν	1169	1169	1169	669	669	669		
Pseudo R <sup>2</sup>	0.236	0.142	0.411	0.225	0.112	0.438		
<b>B. MONTHLY HOURS OF</b>	CARE							
Number of Adult Children								
Zero	-0.042 (0.193)	-0.209 (0.233)	-0.060 (0.152)	-0.253 (0.242)	-0.221 (0.251)	-0.124 (0.174)		
One	-0.228 (0.145)	-0.019 (0.196)	-0.217 (0.121)	-0.120 (0.207)	-0.140 (0.242)	-0.148 (0.159)		
[Reference: Two or More]	•••	•••	•••			••••		
Ν	923	417	1021	496	280	574		
Adjusted R <sup>2</sup>	0.227	0.136	0.315	0.228	0.200	0.363		

#### Table 7. Multivariate Estimates of Care for Older Adults with Three or More ADL Limitations

Source: Author's estimates from the 2000–2004 Health and Retirement Study (HRS).

*Notes:* The sample consists of adults age 65 and older with at least three limitations with activities of daily living (ADL) who live in the community. Panel A reports marginal effects estimated with a probit model, with standard errors in parentheses. Panel B reports coefficients from ordinary least squares regressions of the natural logarithm of monthly hours of care received, with standard errors in parentheses. The sample in Panel B is further restricted to care receipients. All models also control for age, gender, marital status, the number of ADL and IADL limitations, medical conditions, cognitive impairment, depression, income and assets, education, race, proxy response status, and year of interview (\*  $.10 \le p < .05$ ; \*\*  $.05 \le p < .01$ ; \*\*\*  $p \le .01$ ).