

Dementia, Help with Financial Management, and Financial Well-Being

Geoffrey T. Sanzenbacher and Anek Belbase
Boston College

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Abstract

Earlier research has indicated that the vast majority of retirees with dementia do not use Social Security's Representative Payee Program, despite the fact that many will lose the capacity to manage their own finances. However, that same research indicates most retirees with dementia do have access to people who could provide assistance (e.g., a resident child or non-impaired spouse). Unfortunately, the data used in earlier research do not indicate whether these potential helpers actually provide help with financial management tasks. This paper uses the *National Health and Aging Trends Study* to determine whether beneficiaries with dementia receive help managing finances from informal caregivers. The paper also examines the financial well-being of those with assistance compared to those without assistance.

This paper found that:

- Over 85 percent of individuals with established dementia receive help with simple banking matters like paying bills as well as more complex money matters like managing retirement accounts.
- Those with established dementia who receive help are indistinguishable from those without dementia in terms of any difficulties they experience paying for utilities, rent, medicine, and food.
- The minority of adults who have established dementia but do not receive help managing money are more likely to experience difficulty paying for necessities.
- The benefits of help are robust to controls for socioeconomic factors like race, education, and income.

The policy implications of this paper are:

- One reason the Representative Payee Program may be used infrequently by those with dementia is that they have other sources of assistance with finances.
- Because that assistance is generally preventing financial distress, families may feel the need to utilize the program only as a last resort.

Introduction

The human life cycle starts and ends with dependence. The growing pains associated with becoming a self-sufficient adult are well documented. But, as adults grow old and lose physical and mental capacity, many face another difficult transition from hard won self-sufficiency to dependence. For older adults who develop dementia, this loss of capacity is particularly severe and drawn-out: people can live a decade or more with dementia, and need help with a wide range of routine activities, such as cooking and dressing, as the disease progresses. The ultimate result is that people with dementia often lose their autonomy as caregivers step in to prevent them from hurting themselves or others. Unlike children, who are legally required to have a guardian make important decisions on their behalf, dementia patients are not required to give up their independence and may be slow to relinquish control of their affairs. As a result, control over decisions must be negotiated within families or, in extreme cases, decided in a court of law.

One particularly difficult transition that adults with dementia and their caregivers must navigate is relinquishing control over financial decisions. Indeed, an early sign of dementia is difficulty in managing finances, and within a few years of developing dementia most people lose the capacity to manage money in their own best interest.¹ Yet people with dementia are often not aware of their impaired judgment and often resist giving up control.² Therefore, people in the early stages of dementia are susceptible to fraud and likely to make financial mistakes.³ As dementia progresses, and people become increasingly dependent on caregivers to carry out everyday activities, they face a higher risk of financial abuse.⁴

To prevent financial exploitation, Social Security allows beneficiaries who cannot manage their own benefit to relinquish control of their benefits to a Representative Payee. Once designated, a representative payee is required to decide how to spend a beneficiary's Social Security income and keep records of that spending to prove benefits were spent appropriately. Most of the program's 5.5 million beneficiaries are children – who require a legal guardian – or disabled

¹ See Marson et al. (2011) for a good review of the literature.

² Hsu and Willis (2013).

³ Triebel et al., (2009); Martin et al., (2003).

⁴ New York City Department of Aging, (2011).

adults.⁵ However, a little over half-a-million retirement beneficiaries have a representative payee. While this number may seem large, it represents less than 2 percent of this population even though over 10 percent of those 65 and older have dementia.⁶ This imbalance is reflected in a recent study by Belbase and Sanzenbacher (2016) that finds just over 9 percent of retirees with dementia have a representative payee. As a result, some studies have suggested that SSA should cover more retirees under the Representative Payee Program.⁷

But to some observers, the program is striking the correct balance between maintaining the autonomy of beneficiaries and ensuring that payments are spent in beneficiaries' best interests. The reason for the disagreement over whether the program is underutilized stems from the unique problem posed by dementia. Some individuals with dementia can still receive and manage their own benefit, while others cannot.⁸ Although almost all people with common forms of dementia will eventually lose the ability to manage their finances, initially caregivers can make decisions jointly before permanently "taking the keys away" as impairment becomes more severe. So the difference between those who need a payee and those who do not often comes down to the quality of a person's informal care network – which Social Security cannot observe. But simply assuming those with dementia need a payee risks taking away someone's independence prematurely.⁹

Indeed, recent research suggests that beneficiaries with dementia do have access to potential sources of help, perhaps limiting the need for more coverage by representative payees. Belbase and Sanzenbacher (2016) find that 95 percent of beneficiaries with dementia either have a representative payee, have a non-impaired spouse or child, have given someone power of attorney, or live in a nursing home – where they often do not need to manage finances. In other words, despite the fact payee use is uncommon very few individuals with dementia are living in the community without any observed form of assistance. At the same time, the data used in this earlier study did not include information on whether the informal care network actually provided assistance with financial management specifically. This lack of data means it is not known to

⁵ Over 3 million SSI recipients also have a representative payee.

⁶ Anguelov, Ravida, and Weathers II (2015); Herbert et al., (2013).

⁷ For example, a 2010 audit by the Office of the Inspector General found retirees over the age of 85 in need of a payee, and some experts have argued that the process that field offices use to determine financial capacity tends to err on the side of finding someone capable rather than incapable (National Academy of Sciences, 2016).

⁸ Marson et al. (2009).

⁹ Brandon, Apesoa-Varano, and Gomez, (2015).

what extent these sources of help actually assist with managing the finances of those with dementia, and whether this help prevents misuse or abuse of financial resources.

This project fills this gap in the literature by examining the role of informal caregivers in helping beneficiaries with dementia manage their financial affairs using a relatively new dataset, the *National Health and Aging Trends Study* (NHATS). In particular, the study examines whether a retiree's informal care network provides help with simple financial matters like bill paying and more complex matters like managing retirement accounts as they make the transition from normal cognition to potential dementia and ultimately to established dementia. The project also examines the extent to which the retirees' financial well-being is improved through the receipt of this help and the extent to which those without help suffer negative consequences.

The results suggest that over 85 percent of those with established dementia receive help with their finances, including with both simple banking matters and more complicated money matters (if they have complicated financial matters to deal with). Those receiving help with their finances appear to be as financially well off as those without dementia, as measured by problems affording food, rent, utility payments, and medical bills. This finding persists even when controlling for socioeconomic factors likely correlated with both having help available and with financial well-being (e.g., education, race). On the other hand, the 15 percent of those with established dementia and without help with financial management are twice as likely as those with no cognitive impairment to have difficulty making ends meet. This result supports the notion that informal help managing finances has a positive impact on financial well-being – despite the risk that informal helpers may not be financially-savvy or engage in neglect or abuse.

The remainder of the paper is organized as follows. The second section describes the data and empirical approach and the third section will reports results. The final section concludes that the NHATS data suggests that one reason many retirees do not utilize the representative payee program is that they have help with financial management from their informal care network. Still, as the Baby Boom Generation approaches old age, it is worth considering how best to provide help to those that do not yet have it.

Data and Empirical Strategy

The NHATS is a nationally representative sample of Medicare beneficiaries age 65 and older. Since 2011, the NHATS has conducted annual, in-person interviews to capture trends in

late-life functioning. The dataset provides a comprehensive view of how older adults adapt to the changes associated with aging by capturing variables on economic and psychological well-being, difficulty carrying out daily activities, and help or accommodations made to carry out those activities. This paper uses NHATS data from 2011-2014, during which a total of 8,245 people were interviewed.¹⁰ Respondents were excluded from the sample if they lived in nursing homes or had irregularities in their dementia classification (see discussion below), which resulted in a sample consisting of 7,363 respondents.¹¹ The NHATS collects data on individual demographics and the variables used in this study include gender, race, marital status, education, and income. The NHATS also includes data on health, which the paper uses to create an index of major health conditions for each respondent using the self- or proxy-reported existence of a variety of chronic conditions and diseases.¹² The multi-morbidity index is the number of chronic conditions and diseases diagnosed by doctor (heart attack, heart disease, high blood pressure, arthritis, osteoporosis, diabetes, lung disease, stroke, or cancer).

An important aspect of NHATS is the use of proxies for sample respondents.¹³ For this study of financial assistance and dementia, the use of proxies is particularly important because it allows sample respondents to participate in the established of the disease, when most lack the capacity to respond to a survey. Thus, this study can examine how adaptations to declining cognitive functioning – especially the availability of financial assistance in the later-stages of dementia – affect well-being even when people lose the capacity to respond themselves.

To accomplish this examination, the study proceeds in three steps. First, it identifies members of the sample who experience cognitive impairment or dementia. Second, it identifies sources of assistance with financial management. Third, it identifies measures of financial and psychological well-being, and finally estimates the relationship between measures of well-being and assistance with finances.

¹⁰ NHATS data from 2015 were excluded from this analysis because a large portion of the sample was refreshed during that year, and this study relies on longitudinal trends to classify people with early or late-stage dementia.

¹¹ NHATS tends to oversample from older people and African Americans. For more on sampling in NHATS, see Montaquila et al. (2013).

¹² See Patel et al. (2014), Hunt et al. (2015), and Soones et al. (2016).

¹³ Proxies were used if the sample respondent had dementia, illness, speech/hearing impairment, language barriers, were temporarily unavailable, or were deceased. In its regression analysis, the study controls for the proxy status of the respondent in case proxies tend to respond differently than the respondents themselves.

Identifying Cognitive Impairment and Dementia

To identify respondents with cognitive impairment and dementia, this study relies on the methodology of Kasper et al. (2013). Recognizing that the NHATS (like most publicly available microeconomic data) does not contain medical diagnoses of dementia, Kasper et al. (2013) creates an algorithm using self-reported diagnosis of dementia, results of a dementia screening interview, and cognitive test scores to classify people as either having “no dementia,” “possible dementia,” or “probable dementia.” While this method is well grounded in the literature, it is not without its limitations.¹⁴ An indirect study of dementia may lead to a misidentification of diagnosis. To reduce the chance of incorrectly classifying people without dementia as having dementia, this study dropped participants from the analysis if their dementia classification improved across rounds.¹⁵ These cases were likely due to classification error since dementia is a degenerative disease.

Another limitation of the Kasper et al. approach (at least with respect to this study) is that it assigns a probability of dementia without necessarily producing a measure of severity. Since financial management help becomes increasingly important to prevent financial mistakes as dementia progresses, this study needs a way to measure the severity of dementia. To this end, this paper uses the longitudinal nature of the NHATS dataset to build on the Kasper et al. algorithm. Specifically, this paper categorizes respondents as having no impairment, impairment, potential dementia, or established dementia based on the severity and frequency of their Kasper et al. (2013) classifications.¹⁶ Respondents who had a combination of two or more years without dementia or with possible dementia are classified as not impaired. Respondents with possible dementia for three or more years are classified as impaired, but without dementia. Respondents with either possible or probable dementia in each of four years are classified as having potential dementia. Finally, respondents who had probable dementia for three or more consecutive years are classified as having established dementia.

¹⁴ For more on limitations of NHATs dementia classification, see Kasper et al. (2013).

¹⁵ This dropped 882 respondents from the sample.

¹⁶ An ideal classification would group people as having early, intermediate, and late-stage dementia using criteria that are consistent with the corresponding clinical classification for each stage. Unfortunately the NHATS dataset does not provide the information necessary to use this ideal classification. As a result, those with “established dementia” in this study include a mix of individuals who could be classified as having late-stage or intermediate-stage dementia.

Sources of Assistance for Financial Management and Other Activities

To identify financial management help received by those with dementia, this paper examines answers to questions on two topics: 1) how simple money matters were handled in the last month; and 2) whether respondents had any help with more complicated money matters in the last year. Simple money matters include writing checks, sending money orders or paying with cash, checking bank-balances, and making transfers, deposits or withdrawals from a bank or ATM. This paper classifies help with simple money matters in three ways: 1) received no help; 2) completed task together with someone; or 3) someone else carried out the task. If a respondent reports that they received help with their simple money matters, they are asked whether or not the help was received due to poor-health or other degradation in functional capacity (including deficits related to age, memory, vision, health condition/disease names, surgery, driving ability) or some other reason for receiving the help. If a respondent faced a less common money matter in the last year – for example, opening, closing, or cashing in Certificates of Deposits, checking money market, or retirement accounts, or applying for loans – they were simply asked if anyone helped them with these, and if so, who.

Although the focus of the paper is on financial management, controlling for the availability of assistance with other types of activities is important because the study attempts to distinguish the effect of financial help from other factors that might improve well-being. To assess the overall level of care received by dementia patients, this paper creates a dependency index for Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL).¹⁷ The ADL index is the sum of assistance needed for bathing/showering, eating, dressing, going to the toilet, basic mobility inside and outside.¹⁸ The IADL index is the sum of assistance needed for shopping for groceries, cooking hot meals, laundry, and managing finances. This study also creates a measure of each person's care network. The size of the care network is calculated as the sum of unique helpers for each respondent that help with mobility, driving and transportation, household activities, self-care activities, and medical care activities.¹⁹ Within the total care network, this study also identifies the total number of related and non-related individuals providing care in case the quality of care differs between the two.

¹⁷ See Stern et al. (1994) or Örjan et al. (2016)

¹⁸ See Lin (2014)

¹⁹ See Andersson and Monin (2017).

Measuring Well-being

This project measures two types of well-being: financial and psychological. Financial well-being is captured through the existence of food insecurity and measures of financial hardship. This study assesses food insecurity by whether respondents had skipped meals in the last month because they did not have enough money to buy food. Financial hardship is measured by whether survey participants reported instances in the last year when they did not have enough money to pay the rent/mortgage, utility bills, or medical/prescription drug bills.

To identify psychological well-being, the study uses the Generalized Anxiety Disorder scale-2 (GAD-2), which is part of the NHATS survey. Respondents to GAD-2 reported how often over the last month they felt nervous, anxious, or on edge and if they had been unable to stop or control worrying.²⁰ This study did not use other NHATS measures of well-being like affect or feelings of autonomy because these questions were not asked of proxy respondents and proxy respondents make up a substantial part of the sample that have dementia.

Results

The goal of the study is to identify what share of those with dementia have assistance in general and with their finances specifically and then to identify how that assistance (or lack thereof) affects their well-being.

Dementia and Caregiving

Around twenty-one percent of person-year observations in the sample have either potential or established dementia, with seven percent having established dementia. Figure 1 shows that older members of the sample are much more likely to have dementia than younger ones, as expected. For observations aged 65-69, just 4 percent have established dementia, with the number increasing to over 20 percent for observations in their 80s. In addition to the vulnerability inherent in having dementia, Table 1 shows that those with dementia tend to come from a more vulnerable population generally: they are more likely to earn less than \$25,000/year, less likely to have a high school degree, more likely to be a woman, and more likely to be widowed.

²⁰ See Appendix for the specification used in the study.

As dementia develops, individuals require more and more assistance. Figure 2 shows that by the time people have established dementia they need help with 2.3 Activities of Daily Living (ADLS) – which include basic activities like using the toilet or eating – and 2.3 Instrumental Activities of Daily Living (IADLS) – which include activities like grocery shopping and laundry. Indeed, fifty percent of those with established dementia need assistance to carry out 3 or more IADLS. Formal and informal caregivers are instrumental in providing help with these daily activities, with a team of 1-2 caregivers typically providing care for a person with dementia. As Figure 3 shows, as dementia progresses, and the caregiving need increases, so does the size of the network providing care.

Traditionally, women have held greater elder care responsibilities than men, and this trend is reflected in caregivers identified in this study.²¹ As Figure 4 shows, close kin – spouses and children – serve as the backbone of the caregiving network, but the composition of the network appears to change as dementia progresses. As dementia progresses, spouses were replaced by children within the caregiving network, particularly daughters. These caregivers provide help with a wide range of activities including mobility, driving and transportation, household activities, self-care activities, and medical care activities.²² But while these sources of care are all important, this study is specifically interested in whether this caregiving network helps with financial matters specifically.

To What Extent Do Caregivers Help Manage Money, and Who Provides the Help?

The previous section showed that as people move from no cognitive impairment to established dementia, their care network grows considerably. But while these individuals clearly have help with care generally, a diagnosis of dementia comes with social disenfranchisement so that those with dementia may be resistant to a change in their role identities until after they experience difficulties with their finances.²³ In other words, people may resist getting help with their finances until it is too late. Fortunately, as Figure 5 and 6 shows, over 85 percent of those with established dementia receive some form of help with both simple and complicated money matters.

²¹ See Bookman and Kimbrel (2011) or Riffin et al. (2017)

²² See Andersson and Monin (2017); Riffin et al. (2017)

²³ See: Beard and Fox (2008).

As with other types of assistance, Figure 7 shows that spouses and daughters provide assistance with managing finances in most cases, and relatives are the ones providing help in almost all cases. But as people become cognitively impaired, and progress through the stages of dementia, spouses become less involved in managing money and children become much more involved. Across all activities for daily living and financial management, daughters continued to play a larger role than sons in providing help for people with established dementia.²⁴ So the good news is that people with established dementia clearly have help available with their finances. This finding is especially important given Belbase and Sanzenbacher's (2016) finding that most do not use a representative payee. A remaining question is how well that financial assistance works.

To What Extent Does Help Managing Money Affect Well-Being?

At a descriptive level, help managing finances appears to be positively correlated with the financial well-being of people with established dementia. Figures 9 and 10 show that if people with dementia get help with their finances, they look just like those without cognitive impairment in terms of their ability to pay for food, rent, utilities, and for medicine. On the other hand, if people with established dementia do not get help managing their finances, they appear to suffer financially. In some cases these differences are stark. For example, about 3 percent of people without impairment have trouble paying their utility bills. This number increases to over 6 percent for those with established dementia and without any help. But for those with established dementia and with a source of assistance with financial management, the number is back down to 3 percent. Still, it is easy to imagine scenarios where that improvement has nothing to do with the help itself, but rather the characteristics of those receiving the help. For example, if those with access to financial management assistance are more educated than the result shown in Figures 9 and 10 may simply be reflecting that fact. Table 2 suggests those who are receiving help tend to have less education, less income, be married, female, and Black than those without assistance. Indeed, some of the most vulnerable people are receiving help.

To investigate this issue further, we conducted a simple regression analysis that looked to examine the effect on financial well-being of having assistance controlling for these other factors. The regression takes the following form:

²⁴ See Appendix table 8

$$f_{i,t} = \beta_0 + \beta_1 Dem_{i,t} + \beta_2 * Assist_{i,t} + \beta_3 Dem_{i,t} * Assist_{i,t} + X_{i,t}\gamma + \varepsilon_{i,t} \quad (1)$$

Where $f_{i,t}$ indicates that individual i had trouble at time t with at least one of the conditions tabulated in Figures 9 and 10, $Dem_{i,t}$ indicates that the individual has dementia, $Assist_{i,t}$ that they have assistance with simple or complicated money matters, and $X_{i,t}$ is a vector of individual-level controls. These individual level controls include standard demographic variables like education, race, income, and age and also a control for whether there was a proxy respondent. The control for proxy respondents is important in case proxies view the financial status of respondents differently than the respondent themselves. The coefficient β_1 indicates dementia's effect on well-being in the absence of assistance, β_2 the effect of assistance on well-being in the absence of dementia, and β_3 the effect on well-being of having assistance for someone with dementia. The coefficient β_3 is the primary coefficient of interest in the study and can be interpreted as the relationship between assistance and well-being for those with dementia holding constant the other factors considered.

The results of this regression are shown in Table 3. The results show that people with established dementia and without assistance are significantly worse off than those without dementia – being 7.1 percent more likely to be having trouble – but that having assistance effectively offsets this with a reduction of -9.9 percent. Other coefficients have the expected sign, with lower income, less education, and minority status being associated with significantly higher rates of financial difficulty. One thing worth noting is that the regression included two controls for dementia, one for established dementia and one for potential dementia (for simplicity, equation (1) just showed one control for dementia). It seems the relationship between help and well-being only exists for people with established dementia. For people with potential dementia or cognitive impairment only, no clear relationship exists between receiving informal help and financial well-being. This may reflect the fact that while those with established dementia need assistance regardless of their initial financial ability, those with potential dementia receive help only when they are trouble. Unfortunately, the regression alone cannot provide a definitive answer.

Regarding psychological outcomes, the paper runs the same regression reported in Table 4 but replaces the dependent variable with the extent to which whether or not the person has anxiety. The same general pattern emerges. People with established dementia and without assistance are 13.3 percent more likely to have anxiety and again the effect seems to be offset if

the individual has assistance. Financial assistance seems to be associated with improved outcomes both on the financial and psychological front. Although it is difficult to attribute these positive outcomes to the assistance itself even using regression analysis, the fact that the relationship holds up even given the use of controls suggests it is somewhat robust.

Conclusion

Social Security's representative payee program exists to protect beneficiaries who lack the capacity to use their benefit in their own best-interest. Most payees represent children, who require a guardian to manage their finances. But many old-age benefits recipients with dementia, especially late stage dementia, also lack the capacity to handle their own financial affairs, and are vulnerable to financial exploitation.²⁵ Despite their lack of financial capacity, only nine percent of people with dementia appear to use a representative payee.²⁶ This paper suggests one logical explanation for this lack of payee use – informal caregivers step in to manage finances in the same way that caregivers help dementia patients carry out a range of other daily activities. In this context, a beneficiary with established dementia who lives with a spouse that has been handling household finances or who has a child takeover may not need a payee, while another beneficiary with late stage dementia who lives alone in the community would plausibly benefit from a payee. These findings suggest that for most families, the representative payee program might only need to serve as a last resort (similar to legal guardianship) when help is either unavailable or not working. In most cases, however, family members appear to successfully negotiate control over daily activities including finances.

²⁵ For decline in financial capacity see: Pérès et al. (2008) and Widera et al. (2011). For exploitation, see Peterson et al (2014).

²⁶ See: Belbase and Sanzenbacher (2016).

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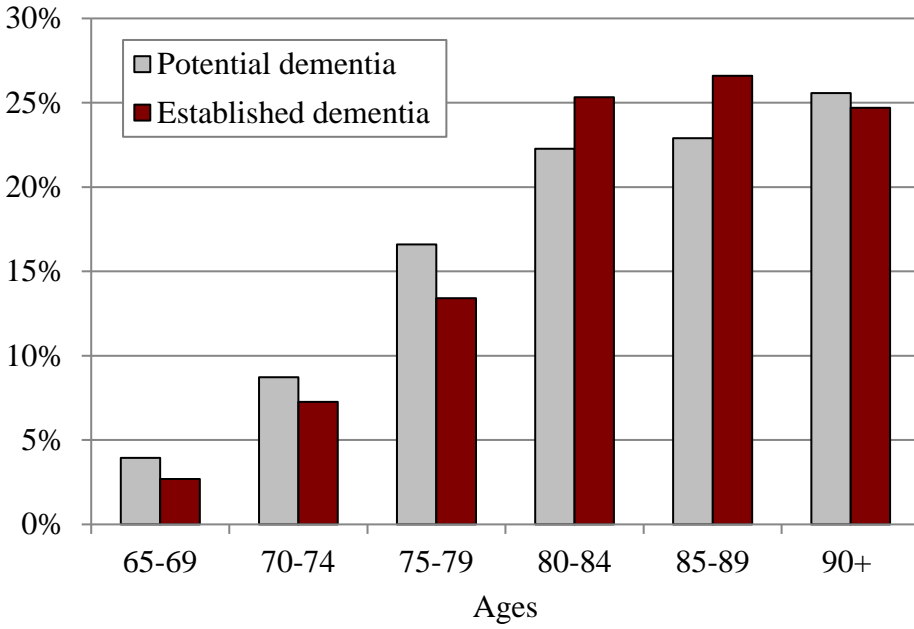
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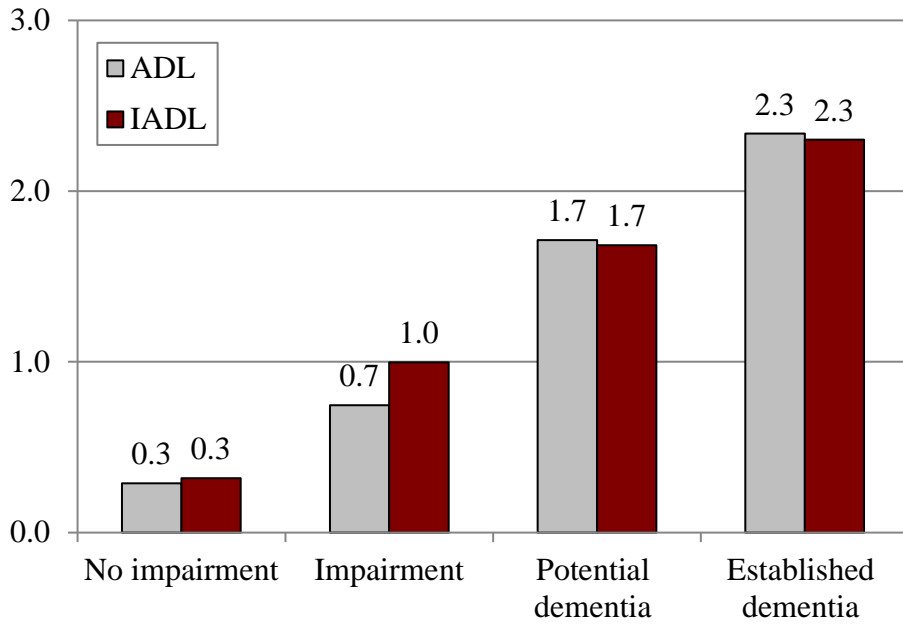
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Figure 1. *Share of Sample with Potential or Established Dementia by Age*



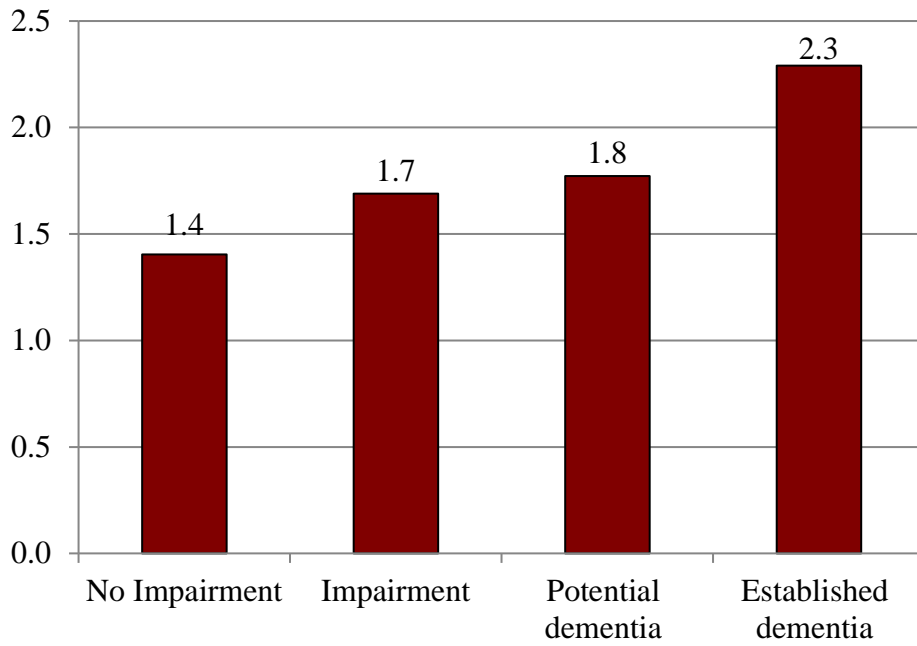
Source: Authors' calculation from the NHATS, 2011-2014.

Figure 2. *Average Number of Assisted ADL and IADL by Dementia Status*



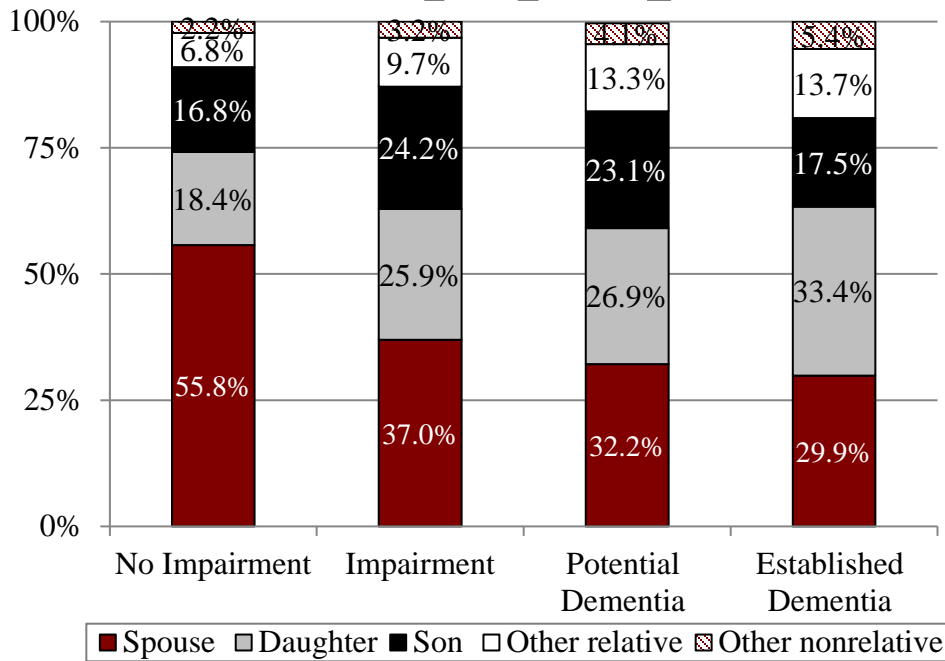
Source: Authors' calculation from the NHATS, 2011-2014.

Figure 3. Average Number of People Providing Some Kind of Assistance by Dementia Status



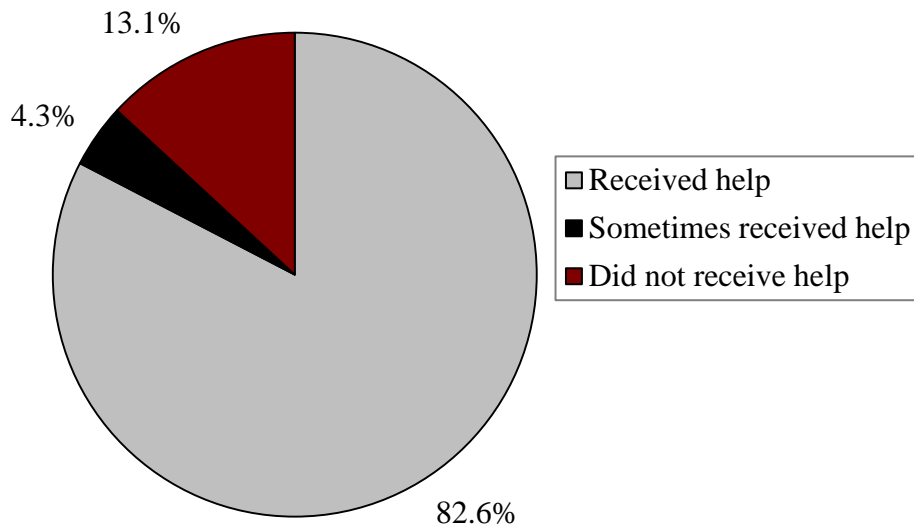
Source: Authors' calculation from the NHATS, 2011-2014.

Figure 4. Composition of Total Care Network



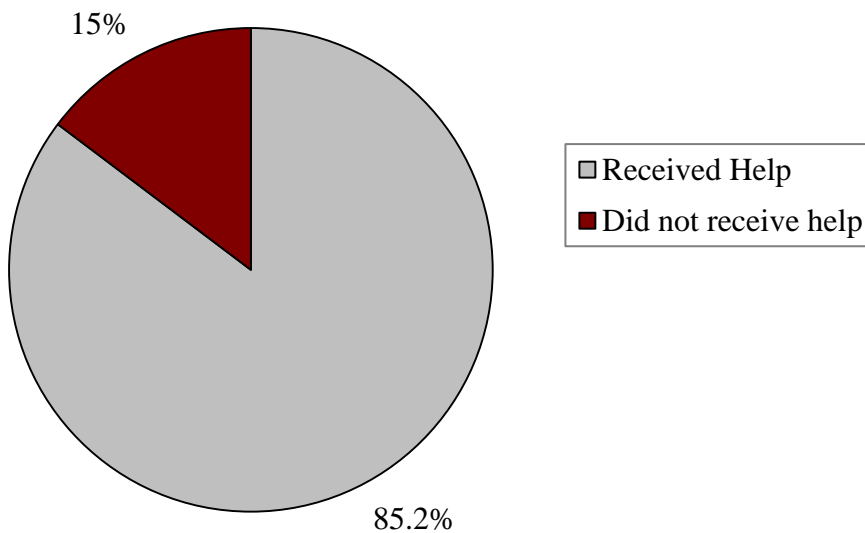
Source: Authors' calculation from the NHATS, 2011-2014.

Figure 5. *Share of Those with Established Dementia Who Have Simple Banking Matters and Receive Help*



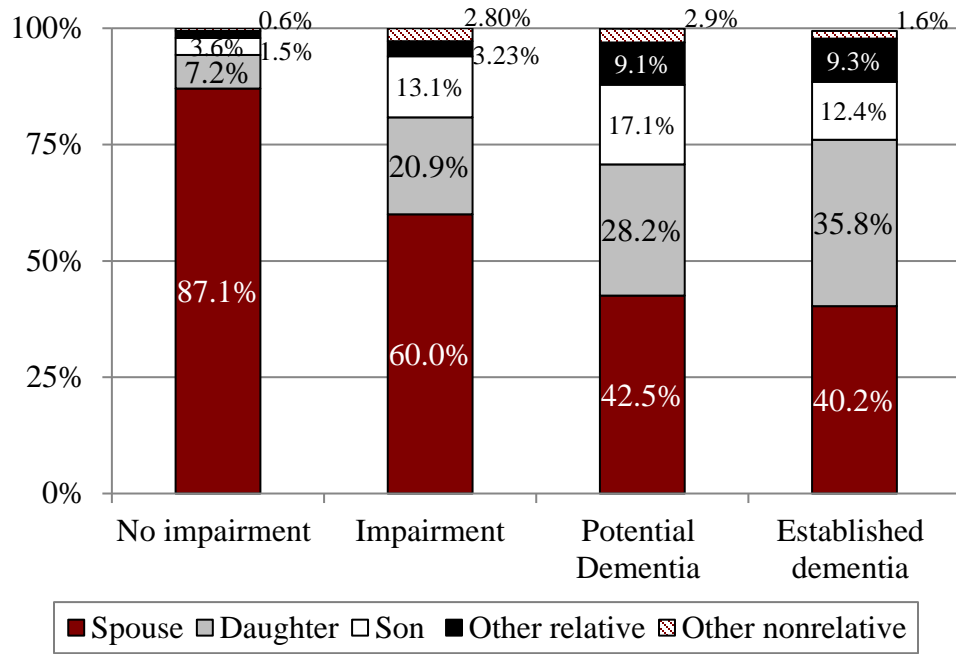
Source: Authors' calculation from the NHATS, 2011-2014.

Figure 6. *Share of those with Established Dementia Who Have Complicated Banking Matters and Receive Help*



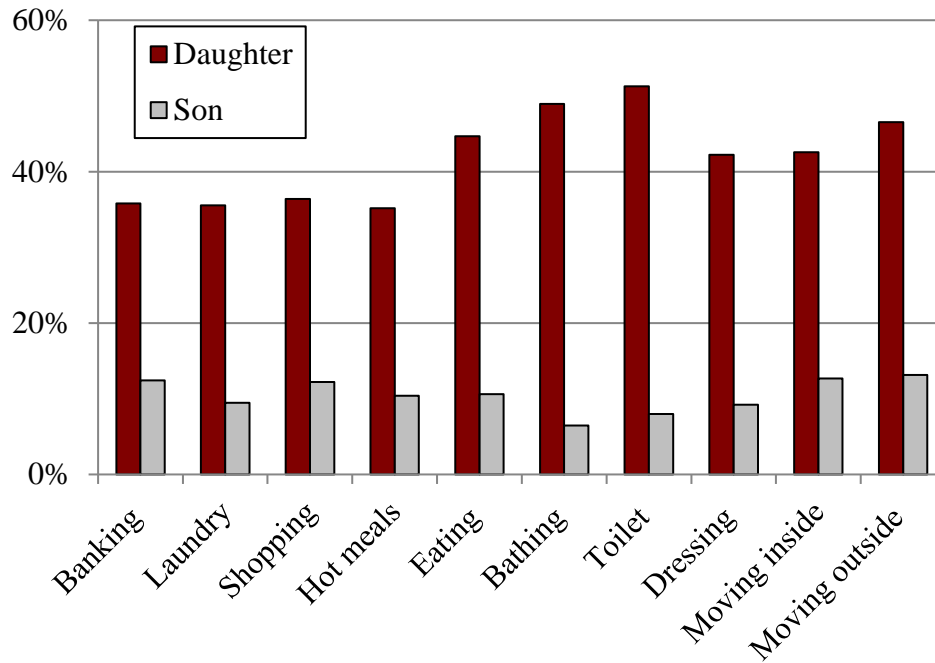
Note: For complicated money matters, individuals only asked if they had help or not.
Source: Authors' calculation from the NHATS, 2011-2014.

Figure 7. Share Helping with Simple Money Matters, by Relationship



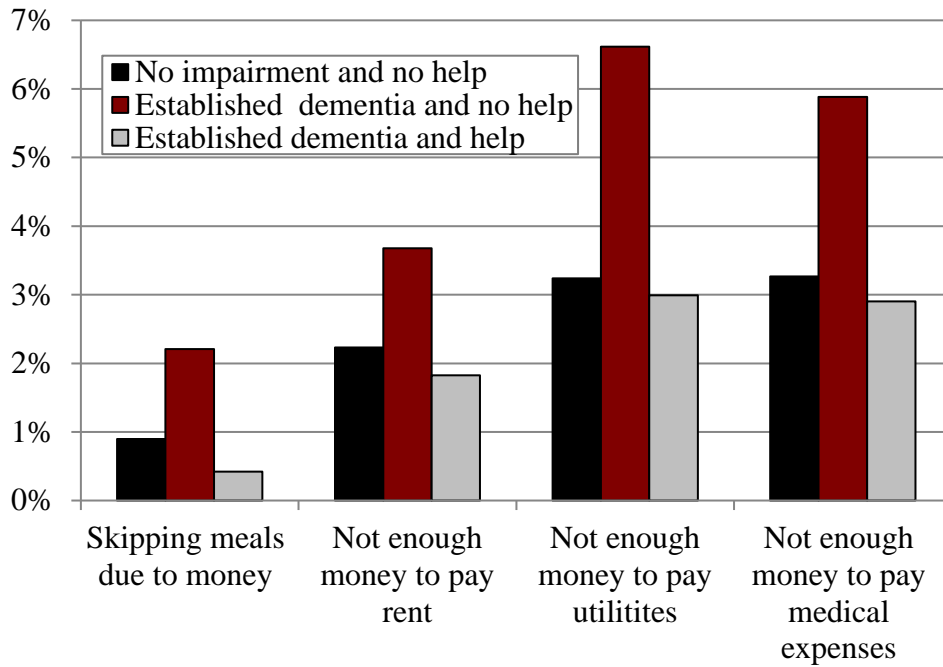
Source: Authors' calculation from the NHATS, 2011-2014.

Figure 8. Share of Sons and Daughters Helping for Established Dementia



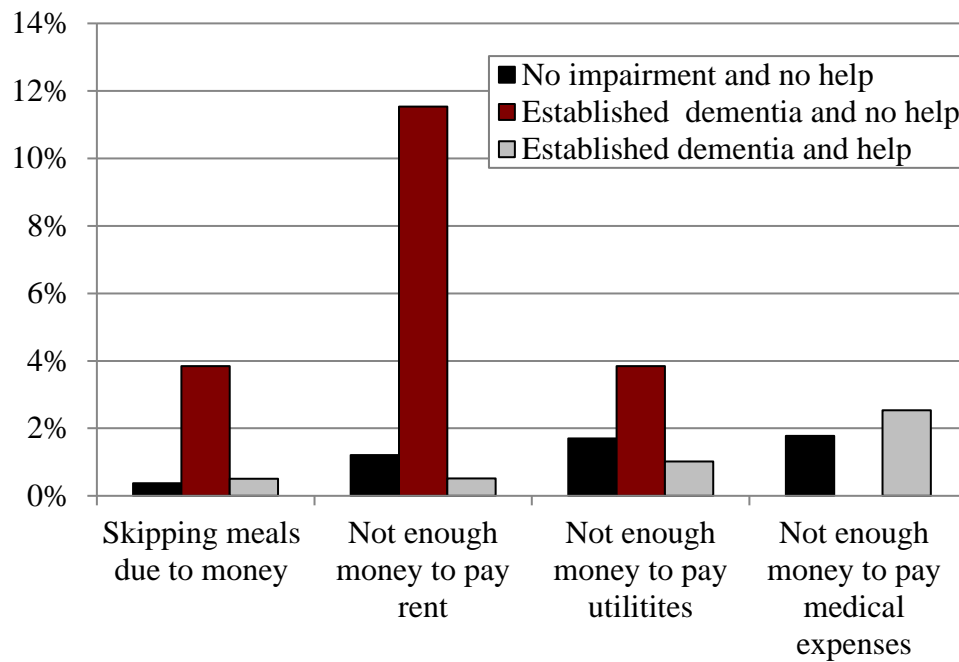
Source: Authors' calculation from the NHATS, 2011-2014.

Figure 9. Share of People with Financial Problems and Help with Simple Money Matters by Impairment Status



Source: Authors' calculation from the NHATS, 2011-2014.

Figure 10. Share of People with Financial Problems and Help with Complex Money Matters by Impairment Status



Source: Authors' calculation from the NHATS, 2011-2014.

Table 1. *Demographics by Cognitive Functioning*

Demographic	No impairment	Impairment	Potential dementia	Established dementia
Gender				
Female	58%	56%	62%	62%
Race				
White	73	59	59	57
Black	19	25	27	28
Hispanic	4	9	10	10
Other	2	5	3	4
Marital Status				
Married/ living with partner	55	44	34	36
Widowed	28	40	50	48
Single	16	16	16	16
Education				
Less than high school	19	42	44	48
High school	36	29	32	26
Some college	14	10	7	9
College	29	17	15	15
Refused	1	1	2	3
Income				
<\$25,000	38	59	68	71
\$25,000-\$99,999	53	37	29	26
> \$100,000	10	4	3	4
Average number of chronic illnesses	2.4	2.6	2.7	2.7

Source: Authors' calculation from the NHATS, 2011-2014.

Table 2. *Share of People with Established Dementia Receiving Help with Financial Management*

Demographic	With help	Without help
Gender		
Female	89%	11%
Male	81%	19%
Race		
White	85%	15%
Black	88%	12%
Hispanic	84%	16%
Other	82%	18%
Marital Status		
Married/ living with partner	88%	12%
Widowed	86%	14%
Single	80%	20%
Education		
Less than high school	88%	12%
High school	82%	18%
Some college	82%	18%
College	85%	15%
Income		
<\$25,000	86%	14%
\$25,000-\$99,999	82%	18%
> \$100,000	76%	24%
Average number of chronic illness	2.74	2.57

Source: Authors' calculation from the NHATS, 2011-2014.

Table 3. *Marginal effects of Assistance with Financial management on Financial Hardship*

	Experiences financial hardship
Established dementia and financial help	-0.099**
Established dementia	0.071*
Age 90+	-0.062***
White	-0.055**
Age 85-89	-0.050***
proxyr	-0.044***
Age 80-84	-0.040***
Income	-0.030***
Age 75-79	-0.028**
Lives in metropolitan area	0.016**
Multi-morbidity	0.009***
ADL dependency	0.008**
Potential dementia and financial help	0.025
Financial help	0.009
Potential dementia	0.006
Hispanic	0.006
IADL dependency	0.005
Black	0.005
Age 70-74	0.005
Male	-0.004
College	-0.009
Coupled	-0.009
Widowed	-0.011
N	8,024

Notes: *p<0.10, ** p<0.05, ***p<.01.

Source: Authors' calculation from the NHATS, 2011-2014.

Table 4. *Marginal Effects of Assistance with Financial Management on Anxiety*

	Has anxiety
Established dementia	0.133***
Established dementia and financial help	-0.080**
Potential dementia	0.063***
Age 90+	-0.061***
Black	-0.039*
College	-0.035***
IADL dependency	0.032***
Age 86-90	-0.028**
ADL dependency	0.024***
Multi-morbidity	0.024***
Age 80-84	-0.021**
Male	-0.020***
Income	-0.016***
Age 75-79	-0.016*
Financial help	-0.015**
Age 70-74	-0.015*
Hispanic	0.022
Lives in Metropolitan area	0.001
Proxy	0.001
Coupled	-0.001
Widowed	-0.01
Potential dementia and financial help	-0.011
White	-0.021
N	14,916

Notes: *p<0.10, ** p<0.05, ***p<.01.

Source: Authors' calculation from the NHATS, 2011-2014.

Appendix

Table 1. *Specification of Demographic Variables*

Variable	Specification
Race	White, Black, Hispanic, Other (Asian, American Indian, Native Hawaiian)
Marital Status	Married/living with a partner, widowed, single
Education	Less than high school, high school, some college, college
Age	65-69, 70-74, 75-79, 80-84, 85-89, 90+
Income ²⁷	Less than \$25,000, \$25,000-\$9,999, and more than \$100,000
Anxiety	Response categories for the two questions included: not at all, several days, more than half the days, and nearly every day. Scores were summed for each measure (0=not at all; 1=several days; 2=more than half the days; 3=nearly every day). A score of three or greater signified anxiety.
Activities for Daily Living index	the sum of assistance needed for bathing/showering, dressing, going to the toilet, basic mobility inside and outside, and eating
Instrumental Activities for Daily Living index	the sum of assistance needed for shopping for groceries, cooking hot meals, laundry, and managing finances
Multi-morbidity index	Number of chronic conditions and diseases diagnosed by doctor (heart attack, heart disease, high blood pressure, arthritis, osteoporosis, diabetes, lung disease, stroke, or cancer)
Visit friends	Whether or not respondent had visited family or friends in last month
Attend religious service	Whether or not respondent had attended religious service in last month
Other people in household	If there are more people in household beside respondent and spouse
Has daughter or son	Binary variables of whether respondent has son or daughter
Sense of community index	Sum of scores (1-3) of how well people know each other, people are willing to help in

²⁷ Income is the log of respondent's reported total income and imputed values of total income (Montaquila et al. 2012).

community, and if sample respondent trusts people in their community. Final index is 3-9 with higher scores indicating greater sense of community.

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