How Do Families Allocate Elder Care Responsibilities Between Siblings?

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Adult children are important providers of care to their frail parents. Despite the attention focused on the high cost of nursing home care, most elder care is provided informally at home by family members. In 1996, just 4.2 percent of persons ages 65 and older were in nursing homes (National Center for Health Statistics 1998), but many more elderly persons living in the community required care. For example, 10.5 percent of the noninstitutionalized elderly in 1996 were unable to complete basic personal activities such as getting out of bed or dressing without help and another 11 percent were limited in their ability to perform these basic activities unaided. The help that frail elderly persons receive at home generally comes from close relatives. For example, 57 percent of primary caregivers for impaired, community-dwelling persons ages 70 and older are either the spouses or adult children of the care recipients (McGarry 1998). For unmarried elderly care recipients, adult children account for 42 percent of all caregivers. Informal care from children allows many frail adults to remain in the community and out of nursing homes (Lo Sasso and Johnson 2002).

Despite the central role played by adult children in the care of their frail parents, little is known about how families decide *which* child will provide help. Do they delegate most responsibilities to children who are not employed, or do children drop out of the labor force when their parents become frail in order to provide care? Does the low-wage child bear a disproportionate share of the caregiving duties, because her opportunity costs are low? Do other family responsibilities, such as childcare, shift elder care duties to other siblings, or do they completely crowd out elder care? Or does gender play a deciding role, with daughters almost always providing care when they are available? Does the child's income reduce the likelihood that he provides hands-on help, perhaps because he chooses to pay for formal care for his parent? To what extent do siblings share responsibilities? Does the care provided by multiple siblings, who may compete with each other for parental bequests, increase with parental income and wealth, as exchange theory predicts?

This paper uses longitudinal data from the Health and Retirement Study (HRS) to address these questions and examine the factors affecting the allocation of caregiving responsibilities between siblings. The analysis highlights the role played by each adult child's wages, income, employment, and competing family responsibilities in the caregiving decision. Because the HRS provides information on multiple adult children (not just caregivers) and follows families over time, allowing us to relate child characteristics before the onset of parental frailty to caregiving outcomes, it is an ideal source of data for this type of analysis.

Methods

To investigate how families decide *which* sibling, if any, provides elder care, we estimate a series of equations for families with a frail elder and exactly two adult children – the modal number of surviving children in the data. Restricting the analysis to two-child families keeps the estimation tractable while providing new information about how frail elderly adults receive care from their families. The equations in our system indicate whether both children, exactly one

child, or neither child provides care to the frail parent:

$$Both = \boldsymbol{b}_{B1}X_1 + \boldsymbol{b}_{B2}X_2 + \boldsymbol{g}_B Z + \boldsymbol{e}_B \tag{1}$$

$$Child 1 = \boldsymbol{b}_{S11}X_1 + \boldsymbol{b}_{S12}X_2 + \boldsymbol{g}_{S1} Z + \boldsymbol{e}_{S1} \tag{2}$$

$$Child 2 = \boldsymbol{b}_{S21}X_1 + \boldsymbol{b}_{S22}X_2 + \boldsymbol{g}_{S2} Z + \boldsymbol{e}_{S2} \tag{3}$$

$$None = \boldsymbol{b}_{N1}X_1 + \boldsymbol{b}_{N2}X_2 + \boldsymbol{g}_N Z + \boldsymbol{e}_N, \tag{4}$$

where X_i represents the characteristics of child $i,$ and Z represents parent characteristics. Under the assumption that the ε terms are extreme value distributed, the discrete choice model can be estimated as a multinomial logit. Assuming *None* is the base category, the estimated values of $\boldsymbol{b}_{S11}$ tell us which characteristics make child 1 more likely to be the sole informal caregiver for the parent, while the estimated values of $\boldsymbol{b}_{S12}$ identify the characteristics that make child 2 unlikely to provide care when his or her sibling does provide care. In both cases the value of the coefficients are relative to the case when neither child provides assistance. Similarly, $\boldsymbol{g}_B$, $\boldsymbol{g}_{S1}$ and $\boldsymbol{g}_{S2}$ tell us what parent characteristics make them more likely to receive care from both children and just one child, respectively, relative to having neither child provide care.

We estimate the model for a sample of frail respondents aged 65 and older who do not initially report any difficulty with activities of daily living (ADLs) but who report problems in later waves. By conditioning on the onset of frailty—a plausibly exogenous event—we can examine the impact on caregiving decisions of key child characteristics existing before the parent became ill. Contemporaneously observed characteristics, such as child employment and earnings, are likely to be endogenous to the caregiving decision, underscoring the critical importance of longitudinal data to our study. We will also experiment with restricting the sample to unmarried frail elders, who are especially likely to rely on care from children.

Data come from the 1992-2002 waves of the HRS. Because we restrict the sample to those ages 65 and older, most cases will come from the AHEAD and CODA cohorts. Preliminary analysis indicates that 488 frail AHEAD and CODA respondents in 1998 had exactly two surviving adult children. The dependent variables in the model are based on responses to survey questions about whether the frail respondent received ADL help from a child during the past month. The elements of Z include parental age, self-rated global health status, any limitations with particular ADLs, diagnoses of particular medical problems (heart problems, cancer, stroke, lung disease, diabetes, and arthritis), score on the cognitive test administered to respondents, gender, race, education, marital status, and health of spouse if married. The elements of X_j include the child's age, gender, marital status, number of young children, potential wage, and employment.

References:

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