Health, Wealth, and Intergenerational Transfers in Later Life: An Analysis Using the

Wisconsin Longitudinal Study*

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^{*} Paper prepared for meetings of the Population Association of America, Los Angeles, March 2006. The research reported herein was supported by the National Institute on Aging (R01 AG-9775, P01-AG21079 and T32-AG00129), by the William Vilas Estate Trust and by the Graduate School of the University of Wisconsin-Madison. Computation was carried out using facilities of the Center for Demography and Ecology at the University of Wisconsin-Madison, which are supported by P30 Center Grants from the National Institute of Child Health and Human Development and from the National Institute on Aging. The opinions expressed here are those of the authors. The first and second authors contributed equally to this paper.

Introduction

It is by no means new knowledge that health and wealth are intricately crosslinked across the individual's life course. A plethora of research has explored the intricate nexus between wealth and health, illustrating connections between wealth stocks and mortality, functional disability, self-reported health status, and the like. A smaller body of research has assessed the relationship from health to wealth accumulation (or health selection in epidemiological terms). Underscoring the scant amount of research on the relationship from health to wealth, social scientists have called for more research on the means and ways health may affect wealth accumulation. We take up this general research topic, assessing how the onset of health problems in particular (referred to as health events or shocks in the literature) affects wealth accumulation for a cohort of pre-Baby Boom men and women. In addition to assessing the impacts of health events on individuals' wealth accumulation, we also assess how health events may be related to an individual's transfers to her or his children. This is an important question given the role of intergenerational transfers in individual wealth accumulation but, inexplicably, has been ignored in the literature in general. For instance, intergenerational transfers from family account for roughly 50 to 80 percent of individual wealth accumulation (Gale & Scholz 1994; Kotlikoff & Summers 1981), thus health events can have deleterious effects not only for individual's and their immediate household but for other generations as well if individuals must circumscribe transfers to children in the face of a health event.

We begin with a brief review of the extant research on the relationship from health to wealth or health selection and issues related with such research. Having reviewed the literature, we use OLS and quantile regression to assess the relationship

between the onset of a serious health condition or limiting disability on the change in wealth for a sample of middle-aged individuals for approximately a 10-year period between the early 1990s and the beginning of the next century. We then similarly model the relationship between the onset of a serious health condition or limiting disability on the amount of money a member of our sample transfers to his or her children. We conclude with a discussion of the implications of our findings.

Wealth and Health: To and Fro

The body of research on the numerous and significant connections between socioeconomic status and health is substantial and growing given the large numbers of uninsured in the U.S., the growing costs of health care, and the general aging of the population. Within this broad genre of research, the majority of research on the relationship between wealth and health has concentrated on the relationship from wealth to health. Generally, this literature has found asset accumulation is associated with a number of facets of health including self-rated health, functional health, and a number of chronic conditions net of income, educational attainment, and standard demographic controls (Robert and House 1996; Adams et al 2003; Smith and Kington 1997).

Comparatively little research, however, has focused on the path from health to wealth, and scholars across a gamut of disciplines have called for further research (e.g. Smith 1999). It is generally difficult to determine the direction of the relationship between health and wealth, and in order to examine how health may affect wealth accumulation, scholars have generally utilized the onset of new and to some extent, unforeseen health conditions from panel data with multiple measures of health and wealth

to estimate the magnitude of the path from health to wealth. For example, Smith (1999) utilizes inter-period changes in various measures of wealth and income and the onset of serious health events in panel data from the Health and Retirement Study (HRS) to assess how health influenced wealth accumulation. Model controls included basic demographic characteristics, health risk behaviors, pre-existing health conditions, and whether an individual had health insurance. He reports the onset of mild to severe chronic health conditions such as cancer had substantial effects on wealth accumulation, depleting wealth by as much as \$40,000 across five waves of the study. Families in the HRS were often forced to turn to non-financial sources of wealth to cover health costs, including using home equity to obtain loans. Smith (1999) also reports that the onset of chronic health conditions or health shocks leads individuals to revise their expectations of how long they live and whether they will leave large inheritances.

Smith (2003) updates his earlier work, exploring the antecedents of the onset of new health events, refining previous models of the relationship from health events to changes in wealth, and expanding the outcomes of interest to work, income, and other measures of socioeconomic status. In regards to wealth accumulation, Smith (2003) reports that the effect of new health conditions, particularly serious conditions defined as cancer, diseases of the lung, stroke, and heart attack, on changes in wealth is mediated to some extent by the respondent's labor market status though the net effect remains large and significant. In his sample, health events did not affect hours worked so much as whether an individual worked or not. The negative effect of the onset of a severe health condition was particularly large for those with higher income at the beginning of the period of observation in the sample. Smith (2003) also explores the antecedents or

predictors of the onset of a new health condition and finds that various measures of socioeconomic status are not predictive of new health conditions with the exception of education. The effect of education is strong and statistically significant in his analysis for all health conditions except for cancer, suggesting that education provides a "powerful protection" that other measures of socioeconomic status do not. This effect persists net of statistical controls for whether the individual ever smoked, whether the respondent was exposed to a job-related health hazard, the education of parents, the age at death of each parent, self-reported childhood health, and economic situation.

Lee and Kim (2003) also write on the effects of health on wealth depletion using AHEAD data. The authors measure wealth depletion as a binary variable denoting whether the respondent experienced a 10 percent or greater decline in wealth between two waves of the study and run the model separately for married and non-married respondents. Controlling for basic demographic characteristics, income changes, health insurance, wealth transfers, and the respondent's living arrangement, Lee and Kim report a husband's new health events were significantly associated with wealth depletion in married households while new health events were not significantly associated with wealth depletion in single households net of controls.

In a third paper assessing health events and wealth accumulation, Wu (2003) looks only at married households in the HRS. Net of controls for age, race, education, initial health status and retirement due to poor health in a quantile regression model, Wu finds that husband's health events do not lead to changes in household wealth though a wife's health events do. A wife's new health condition is associated with asset depletion to pay for general living expenses in the sample. In a final work on the relationship from

health to wealth, Michaud and Van Soest (2004) once again turn to the HRS data. However, they utilize a dynamic vector autoregressive model to account for unobserved heterogeneity. They include a variety of measured controls including previous health status and conclude that both husband and wives' health events affect wealth depletion in their sample though wives' health events have an immediate effect on wealth while husbands' health events appear to have a significantly lagged effect.

Overall, then, it appears the literature has tentatively established a relationship from individual health to wealth with the onset of health conditions playing a significant and substantial role in wealth depletion for middle-aged and older individuals. This relationship appears to be larger for married households and more immediate for wives than for single households and husbands. However, these conclusions are based on a small number of studies utilizing a single source of data. Moreover, wealth is accumulated within families *and* across generations. Yet, to our knowledge, no research has directly assessed the relationship of health events in one generation with financial transfers to other generations. This is despite the importance of intervivos transfers in wealth accumulation processes.

A number of issues also remain in the inchoate literature on the relationship from health to wealth. For instance, Smith (2003) and others have suggested that wealth is ridden with greater measurement error than other socioeconomic status indicators such as income, producing larger standard errors, greater probability of Type II error, and variable effect estimates. Another issue involved in using the onset of serious and in some cases, severely limiting health conditions stems from the degree to which individuals may or may not anticipate the onset of health conditions and accordingly

adjust their savings and transfer behavior to compensate. Thus, it is important to control for individual and household characteristics that may affect the extent to which individuals believe they may have to deal with the onset of a severe health condition. *Any* individual experiences that might affect the individual's health outlook become pertinent, from childhood health to the health of parents and biological relatives. Moreover, wealth is accrued within households so that the health events of anyone in the household will potentially affect wealth accumulation and intertransfers out of the household. Evidence presented by Wu (2003) and Michaud and Van Soest (2004) underscores the importance of measuring health events at the household level and how these may differ among spouses.

Given the state of the literature and the issues that remain, we proceed to assess the relationship between the onset of individual health conditions and wealth accumulation, net of detailed controls for previous individual health status including childhood health, biological relative health status, spouse health status as well as sociodemographic and economic controls for a sample drawn from the Wisconsin Longitudinal Study (WLS). In addition, we model the relationship between the onset of health conditions net of extensive controls and the amount of any transfers made to children between 1993 and 2004. This paper presents preliminary results for these analyses and does not address all of the unresolved issues in the literature. In future revisions, for instance, we hope to use spouse survey data to correct for measurement error in wealth estimates and to measure health events at the household level in more detail for a sub-sample of WLS respondents.

Data and Methods

For these analyses, we draw a sample from the Wisconsin Longitudinal Study. The WLS is a random one-third sample of 1957 Wisconsin high school seniors originally surveyed to assess the need for Wisconsin's public colleges. A total of 10,317 individuals were included in the original WLS sample, 5,325 of whom were women and 4,992 of whom were men. Data were primarily collected in four waves in 1957, 1975, 1993, and 2004. In addition to the data collected from these four waves, a 1964 postcard survey of parents ascertaining the educational attainment of respondents beyond high school, the current occupation of men, an occupation ever held by female respondent after high school graduation, and tax return information from the Wisconsin Department of Revenue from 1957-1960 for the parents of the graduate and for male respondents.

Though the WLS sample is not nationally representative and contains only respondents who have at least a high school degree, it provides a rich data set with a broad time horizon (approximately a 50-year-period) over which to observe a cohort representative of a substantial segment of the US population. Additionally, this data set has extremely high response rates. With such rich data, one can both control for a variety of social background and individual characteristics as well as extensive health status measures for a longer window of observation than more temporally and substantively narrow data sets. Moreover, this cohort immediately pre-dates the Baby Boom cohort and provides a unique opportunity to explore the various issues Baby Boomers will likely face.

This data set seems particularly suitable for the analyses of health-wealth differentials. Respondents were about 63 to 65 years of age in the last wave of the survey in 2004, and previous health and wealth and intertransfer measures were taken in 1993 when respondents were generally about 54 years of age. Therefore, the study captures an important period of time when SES-health differentials tend to be largest (House et al 1994) and when many individuals experience declines in their health and the onset of serious health conditions such as cancer or heart problems. Moreover, previous research has found that the likelihood of making financial transfers to children increases with the age of the parents until sometime in midlife and then declines (Kronebusch and Schlesinger 1994). Thus, the third and fourth waves of the WLS cover an important time period in which many financial transfers are made to children. This arguably provides greater variation in health and wealth and transfer measures that allow more precision in estimating the effect of health events on wealth accumulation/depletion and transfers.

For these analyses, we limit the sample to white individuals who responded to the first, third, and fourth waves of the study and who remained in the same marriage since 1993 or maintained the same marital status since 1993. We invoked the latter criteria in order to avoid confounding the association of a health event with complex marital histories. Because we are primarily interested in the effect of new health conditions between the third wave of the study in 1993 and the fourth wave in 2004, we listwise delete cases with missing information on measures used to construct the health event measure. We also listwise delete cases that have missing data on all asset questions or on all intertransfer questions. For the remaining sample, we use multiple imputation for missing observations (N=4,202).

Independent Variables

In analytic models, we are primarily interested in the effect of the onset of a severe health condition between the ages of approximately 55 and 64 years in the third and fourth waves of the study. To this end, we use a dummy variable to denote whether an individual experienced the onset of a heart attack, cancer, stroke, diabetes, or a limiting disability since 1993. We follow previous research in focusing on heart attack, cancer, stroke, and limiting disabilities as serious health conditions known to have an effect on wealth. We extend the literature by including diabetes, an important and growing health concern with often severe health implications. We define a limiting disability as a condition that limited the respondent's ability to do things either on or off the job. Table 1 presents descriptive statistics for all analytic variables included in our analyses by sex. In that table, 23 percent of female respondents compared to 29 percent of male respondents had at least one diagnose of cancer, stroke, heart attack or diabetes between 1993 and 2004.

In analytical models, we control for a number of socio-demographic and individual characteristics that have been shown to be associated with wealth accumulation and in order to equalize respondents in regard to health prior to the onset of a health event. We first control for a number of socio-demographic and individual characteristics that have been shown to be associated with wealth or income accumulation. We control for social origin effects with five distinct measures: whether the respondent hails from a farm background, whether the respondent lived with both parents at the age of 16, the total number of siblings up to 12, and a socioeconomic status

index constructed using factor analysis of the respondent's family income in 1957, when respondents were in their last year of high school, the household head's occupation, and each parent's education. We prefer the socioeconomic index in this case in order to save degrees of freedom and because socioeconomic background is not the primary measure of interest. We divide this measure by 100, thus a one unit change in family SES corresponds to a 100 unit change in the original metric. We also control adolescent cognitive ability using a normalized measure of cognitive ability taken in the freshman or junior year of high school. We divide this variable by 10 so; a one unit change in IQ corresponds to a 10 unit change in the original metric. Table 1 shows that 91 percent of female and 90 percent of male respondents had an intact family at age 16. On average, the female and male respondents have 2.7 siblings (1.3 logged), and 21 percent hail from a farm origin. Both males and females have an IQ of just over 10 on average.

In subsequent models, we include extensive controls for the respondents' baseline socioeconomic and individual characteristics in 1993 before the onset of a new health event. We measure educational attainment in 1993 with three dummy variables: whether the respondent attained some college; whether the respondent achieved a bachelor's degree; and whether the respondent attained schooling beyond the bachelor's degree. The reference category is high school graduate of which 68 percent of females and 54 percent of males were high school respondents. Among the female respondents, 12 percent acquired some college education, 14 percent graduated from college and 5.5 percent attained some college education, 14 percent graduated from college and 18 percent acquired some college education, 14 percent received a bachelors' degree, and 18 percent attained some graduate level training. We measure marital status using a dummy variable

indicating whether or not the respondent is married. About 80 percent of female respondents and 88 percent of male respondents are married in our sample. For total number of children, we add a constant and take the natural log of the number of children in order to account for non-linearities in its effects. Female respondents report 2.09 children (logged 1.128) and male respondents report 1.96 children (logged 1.085) on average. Occupational status for the respondent and the respondent's spouse is measured by Duncan's occupational SEI for the current or last job in 1993 and divided by 100. SES as measured by Duncan's SEI, is approximately 16 for both males and females, and one unit change in SEI corresponds to a 100 unit change in the original metric. We also include dummy measures of whether the respondent or spouse was self-employed in 1993 and whether the respondent was working in 1993. We control for logged household income in 1993 (measured in 2004 dollars) as well.

We include further controls from the fourth wave of the study in 2004 as well. We control for change in household income by subtracting 1993 household income from 2004 household income. In 2004, female respondents reported an average annual household income of \$51,444 for an average change in household income of \$789. The male respondents reported an average household income of \$63,296 for an average change in household income of \$709 between 1993 and 2004. We include dummy measures of whether or not the respondent is working in 2004, retired in 2004, or selfemployed in 2004 as well as dummy measures of whether or not the respondent has private insurance and long-term insurance in 2004. We include measures of whether the respondent considers him or herself retired in 2004 and of whether the respondent is working in 2004 in the same model because many WLS respondents consider themselves

retired from a career or long-term job but have continued to work as a consultant or taken a job in another field or line of work.

In order to equalize respondents by health prior to the onset of a health event between the third and fourth wave of the WLS, we include a dummy for the self-rated health of the respondent in 1993. Though spouses' health events have been shown to have significant effects on wealth, we are unable to specifically assess the extent to which spousal health events impact wealth pending completion of a survey of the WLS respondents' spouses. Instead, we control for the spouse's 2004 and 1993 health status with a dummy measure. Thus, we focus explicitly in this paper on the relationship of a respondent's health event with the outcomes of interest net of the spouse's health. We will turn to the impact of health events of the spouse in a future revision to this paper. For all general health status measures, we use a dummy measure denoting whether or not the respondent or spouse experience fair to very poor health (versus good and excellent health). In 1993, 10 percent of female and 11 percent of male graduates rated their health as fair or worse. Just over six percent of male and female respondents rated their spouse's health as fair or worse in 1993. This last figure increased to about 13 to 14 percent in 2004 when respondents were asked to rate their spouse's health in the fourth wave of the study.

Expanding upon extant work on the effect of health events on wealth, we also assess the extent to which more refined measures of an individual's health profile change the relationship of a given health event on the outcome of interest. These measures provide more refined controls of the extent to which respondents may or may not anticipate the onset of a severe health condition. To assess how health across the life

course may affect the impact of a health event in later life, we include a count of illnesses each respondent had prior to the age of 16. To normalize this variable, we logged it and added 1. We prefer this measure of childhood health over a general question ascertaining the general self-rated health status of respondents during childhood on a 5-point scale because it provided greater variation across respondents. We also include a measure of biological relatives' conditions. For this measure, we use a dummy variable denoting whether the respondent reported that a biological parent or sibling suffered from a serious health condition, limited to cancer, stroke, heart attack, and diabetes.

Dependent Variables

We employ two dependent variables in our analytic models: change in wealth between the third and fourth waves of the study and the total amount of money transferred to children for any reason between the third and fourth waves of the study. Both variables are measured in 2004 dollars. We define wealth as net worth or total assets less total liabilities, including home equity, business or farm equity, other real estate equity, vehicle equity, and net financial assets. Very few individuals had negative net worth in 1993 or 2004, but those who did are given a zero value. Additionally, net worth is top coded at 3 standard deviations above the mean and logged with a starting value of \$5,000 to normalize it. For the net worth items on Table 1, the first row presents the logged net worth and below it is the transformed net worth. Female respondents reported an average net worth of \$197, 805 and \$261,199 in 1993 and 2004 respectively for an average change in net worth of \$63,000. Male respondents reported an average net

worth of \$255,146 and \$331,381 in 1993 and 2004 respectively for an average change in net worth of \$76,000 between 1993 and 2004.

Total amount of transfers to children is logged with a starting value of \$1,000 added. Forty percent of female respondents and 46 percent of male respondents with children made financial transfers to their children between 1993 and 2004. The average transfers were \$1,470 and \$2,044 for female and male respondents respectively who had any children.

Model Specification

In our analyses, we estimate a reduced-form model. This model can be written as:

$$\mathbf{Y}_{j} = \boldsymbol{\beta}_{0} + \mathbf{X}_{j} \boldsymbol{\beta}_{x} + \mathbf{u}_{j}$$

where X_j represents a vector of sequentially entered measures described above. In all OLS models, we employ post sampling weights to correct for the bias in non response over time in the WLS. In the first model, we estimate the total effect of a health event on our dependent variable of interest. In a second model we add controls for social origin and all family and SES controls from 1993 and 2004. A third model adds baseline health measures for the respondent and the spouse as well as spouse's 2004 health. Model 4 adds a measure for childhood health, and Model 5 adds a measure for biological relatives' health. We repeat this series of models for each respective dependent variable of interest. All models are run separately for men and women because men and women report wealth holdings differently (e.g. Ruel and Hauser (2005) find that men in the WLS consistently report higher wealth holdings than women).

Finally, we estimate the full model for each outcome using quantile regression in order to assess how the effect of a health event may vary across the distribution of the dependent variables (Koenker and Hallock 2001). We run the model for the first, second, and third quartiles of change in net worth but only for the second and third quartiles of the total amount of transfers to children between 1993 and 2004 because the first third of the distribution made no financial transfers to their children.

Results

Table 2 provides a descriptive look at average net worth and transfers by health events between 1993 and 2004. These outcomes are further disaggregated by fair or worse health in1993 and by good or better health in 1993 in the last part of the table. Both men and women who did not experience a health event between 1993 and 2004 show greater net worth in 2004 and 1993 than those who did experience a health event though the difference is not significant. Those who did not experience a health event between 1993 and 2004 also transfer more to their children than those who experience a health event. Disaggregating descriptive statistics by baseline health status in 1993 and by whether or not the respondent experienced a health event, we find that females who report poor health or worse in 1993 and who experience the onset of a serious health condition between 1993 and 2004 do not show much wealth accumulation. They do appear to transfer slightly more to their children for the same time period, but this difference was not statistically different from zero. Men who report fair health or worse in 1993 and who experience the onset of a serious health condition show only slightly greater wealth accumulation between 1993 and 2004 than the women who report similar

health status but do *not* experience the onset of a serious health condition. Somewhat surprisingly, men who report fair health or worse in 1993 and experience a health event between 1993 and 2004 accumulate more wealth in both 1993 and 2004 and transfer more money to children than their male counterparts who do not experience a health event. Similar to women, this difference between men is insignificant. Men who reported fair health or worse and who experienced a health event may report higher levels of wealth in both years yet these men experience slightly less growth in wealth on average than men with a similar health status who did not experience a health event.

We now turn to those who reported good health or better in 1993. Overall, those who reported good health or better in 1993 accumulated greater wealth between 1993 and 2004 and transferred more to children than respondent who reported fair or worse health, regardless of experiencing a health event between 1993 and 2004. Among respondents who reported they were at least in good health in 1993, respondents who did not experience a health event accumulate more and transfer more than those with a health event though the difference is not significant. Patterns we observe among women with fair health or worse in 1993. That is, women who experience a serious health event and who report good or better health in 1993 report lower levels of wealth in both 1993 and 2004, accumulate less wealth between those two years, and transfer fewer financial resources to their children than their counterparts who do not experience a health event. However, in contrast, men who experience a serious health event and who report good or better health in 1993 report lower levels of wealth in transfer fewer financial resources to their children than their counterparts who do not experience a health event.

less to their children than their counterparts unlike men who report fair health or worse in 1993.

Change in Net Worth

We now turn to our multivariate analysis. Table 3 presents five models regressing logged change in net worth between 1993 and 2004 on health events (Model 1), controls for social origin, family, and SES characteristics (Model 2), respondent and spouse adult health statuses (Model 3), childhood health (Model 4), and biological relative's health (Model 5). Model 1 suggests the onset of a health event between 1993 and 2004 for both men and women (~8 percent for women and 10 percent for men). In Model 2 we find that experiencing a health event between 1993 and 2004 (-.079 for women or about 8 percent less and –.114 for men or about 11 percent less) after controlling for social origins, adolescent cognitive ability, educational attainment, marital status, family size, family income, spouse's characteristics, occupational status, work status, transfers received from others between 1993 and 2004, and baseline net worth.

Model 3 adds respondent's baseline health and spouse's baseline and 2004 health status. This model equalizes respondents by health status prior to the onset of a health event while controlling for potential drains on wealth due to spouse's poor health. This model closely mirrors models typically employed in the extant literature on the effect of health events on wealth, and with this model, we can begin to speak in terms of causation because we have equalized respondent's baseline health so that health events can be

treated as exogenous for the last three models of change in net worth. Net of social origin controls, though, controlling for baseline health has little impact on the association between the onset of a health event and change in net worth. The relationship remains significant and negative for both men and women and changes little in magnitude from Model 2. For women, respondent's baseline health rated as fair health or worse significantly reduces wealth accumulation between 1993 and 2004 as does spouse's 2004 health being fair or worse. For men, baseline health and spouse's health in 2004 does not significantly impact wealth accumulation between 1993 and 2004; however, spouse's baseline health rated as fair or worse significantly reduces wealth accumulation suggesting a similar pattern for men and women. A woman's poor health in 1993 decreases wealth accumulation while a man's poor health in 1993 does not decrease wealth accumulation. Poor health in 2004 differs for the male and female respondents. Poor health in 2004 for the spouse has an impact for female respondents but not for male respondents in our sample.

Model 4 includes a retrospectively reported measure of childhood health by the respondent. Net of 1993 health and 2004 health, our measure of childhood health does not explain change in wealth accumulation between 1993 and 2004 for men or women. However, once childhood health is introduced, the effect of a health event between 1993 and 2004 on change in net worth is attenuated slightly and is significant only at the p<.10 level for women. Adding childhood health in magnitude or significance for men though. That is, the onset of a health event still leads to about an 11 percent decrease in wealth between 1993 and 2004 at the .05-level. Lastly, Model 5 adds a measure of biological

relatives' health events. For both men and women, biological relatives' health is not associated with change in wealth accumulation net of 1993 and 2004 health measures and the effect of the onset of a health event remains the same in magnitude and significance at about 6 percent decrease in wealth for women at the .10-level of significance and about 11 percent decrease in wealth for men at the .05-level.

Total Amount of Intertransfers

Table 4 presents the five models regressing logged total amount of transfers to children between 1993 and 2004 on health events (Model 1); social origin, family, and SES characteristics (Model 2); baseline health status for respondents and spouse's 1993 and 2004 health status (Model 3); childhood health (Model 4); and biological relatives' health (Model 5). Across all five models for both men and women, the onset of a health event is not statistically significant. Model 4 adds a measure of retrospective childhood health which is not associated with reduced transfers to children and does not change the general magnitude or sign of the health event measure. Similarly, Model 5 shows that biological relatives' health is not associated with reduced transfers to children and does not change the direction or magnitude of the coefficient for a health event between 1993 and 2004 for our sample.

Though these results suggest that the onset of an individual health event does not affect the amount she or he may transfer to her or his children in general, this nonrelationship may be due to the fact that we have completely controlled for the mechanisms by which a health event may affect the amount of money respondents transfer to their children. To that end, we ran supplementary models omitting controls for

the respondent's work status in 2004, changes in family income between 1993 and 2004, and inheritances received between 1993 and 2004 and then sequentially re-introduced them into the model. Results remain the same for both men and women in our sample. This suggests that a respondent's work status, changes in family income, nor inheritances mediate the relationship between a health event and the total amount transferred to children between 1993 and 2004.

Beyond the insignificant coefficient for the onset of a health condition, we see across all models including health status measures that neither the health of a respondent nor the health of a spouse is related to the total amount of money a respondent transfers to her or his children. It appears to be the case that respondents who are able to make financial transfers to their children do so irrespective of their general health status, the general health status of their spouse, and the onset of a serious and presumably unforeseen health condition. In contrast to the seeming non-relationship between transfers to children and respondent and spouse health, we do see across models that adolescent cognitive ability, economic status in 1993 and 2004, and the amount of financial gifts the respondent received in 1993 are highly predictive of the total amount of transfers to children in 2004, increasing or decreasing the total amount of transfers to children by 10 to 30 percent each.

Health Events across the Distribution of Change in Wealth and Total Intertransfers

Given the seeming null relationship between a serious health event and the total amount of transfers to children for both men and women, we use quantile regressions to explore the possibility that the onset of a health event may have a significant effect on the

total amount of transfers to children between 1993 and 2004 at different points in the distribution of the total amount of transfers. We ran these models for change in net worth as well. Table 5 presents the results for these quantile regressions of change in net worth across its distribution and of transfers to children at the top two quartiles. For women, we find that experiencing the onset of a health event does not lead to a significant change in wealth between 1993 and 2004 nor does a health event have a significant effect on the total amount of transfers. For men, the onset of a health event has a statistically significant and substantively large effect on change in net worth and a marginally significant effect on the total amount transferred to children in the top quartile of the distribution. In regards to net worth, the onset of a health event leads to a 10 percent decline in net worth between 1993 and 2004 at the .05-level of significance for these men. In regards to total amount transferred to children, these men appear to *increase* transfers to children by 20 percent when faced with the onset of a serious health condition at the .10-level of significance. In secondary analyses not presented in detail here, we limited the sample to those who made any transfers to their children and ran the quantile regression model for total amount of transfers to children. These results reinforce the tentative relationship between a serious health event and transfers to children observed for men in Table 5: men who experienced a health event between 1993 and 2004 and who are in the top quartile of the distribution of total transfers are significantly more likely to transfer about 31 percent more to their children than their counterparts who do not experience the onset of a health event at the .05-level. The results for this model only for respondents who made any transfers to their children were the same for women across the

distribution and for men in the 50th percentile as quantile regression models with the full sample.

Discussion

In this paper, we examine the relationship between the onset of a serious health condition on wealth accumulation and intervivos transfers to children between 1993 and 2004. Using a sample of men and women from the Wisconsin Longitudinal Study, we find that experiencing a recent health event decreased wealth accumulation net of prior health status, health as a child, and biological relatives' health events. Our results on wealth accumulation replicate prior findings that were limited to AHEAD or HRS data and suggest that health does affect wealth accumulation. Similar to Smith (1999), we find that the onset of a health event leads to about an 11 percent decline in wealth accumulation for men and perhaps about a 6 percent decline for women in our sample. Smith (1999) reports respondents in his sample experience an average 7 percent decline in wealth due to the onset of a serious health condition.

Though controlling for baseline health status in 1993 allows one to treat the onset of a health event between 1993 and 2004 as an exogenous factor and to therefore move to a causal discussion, we find that controlling for baseline health does not necessarily change the magnitude or significance of the health event coefficient net of detailed controls for social background for both the men or women in our sample. Based on our results, we also find that concerns that extant research does not control for important aspects of an individual's health profile such as health in childhood or knowledge of one's family medical history that may be related to the extent to which a health event is

truly exogenous or truly unforeseen should not be given priority. A control for biological relatives' health did not affect the magnitude or significance of a health event in our models, and a control for childhood health only slightly changed the magnitude and significance of the health event coefficient in our models.

In general, a recent health event is not associated with a decrease in transfers to children. In fact, it appears to be associated with increased transfers to children among male respondents at the upper end of the distribution. In the case of men, it appears that the onset of a health event may lead men who are already giving the most transfers to their children to revise their life expectancy and subsequently increase their transfers to children compared to their counterparts who do not experience a health event. Along those lines, we tabulated measures of whether respondents expected to live another 10 years and of whether respondents expected to live another 10 percent fewer men in the third quartile of total transfers to children who experience a serious health event expect to live another 10 and 20 years than men in the third quartile of total transfers for children among women in our sample.

Our analysis suggests that health may play an important role in intertransfer behavior for some men, but this work is preliminary. Unlike the analysis of changes in net worth between the years in question, we are concerned that our results may be sensitive to whether the majority of transfers to children possibly precede the health event. Thus, we need to more rigorously enforce a temporal order in future analyses. Additionally, we did not control for the reason for transfers and the age of offspring, both

of which may influence the transfers given. This is clearly an important area for further exploration as it could add much to our understanding of what is important to aging individuals

In future analyses we will include spouse's current health events rather than health status in order to assess how the onset of a health event may vary within couples. We will also control for measurement error using spouse data on wealth and intertransfers. As wealth measures contain a considerable amount of measurement error, this may improve the relationships we observe here. Furthermore, we employ post sampling weights to correct for the bias in non response over time in the WLS, but we have not yet accounted for the early death of some respondents in these weights. Future revisions will account for that as well.

References

- Adams, P., Hurd, M.D., McFadden, D., Merrill, A., and Ribiero, T. (2003). "Health, Wealthy, and Wise? Tests for Direct Causal Paths between health and Socioeconomic Status." *Journal of Econometrics* 112:3-56.
- Gale, W.G. and Scholz, J.K. (1994). "IRAs and Household Saving." American Economic Review 84:1233-60.
- Koenker, R. and Hallock, K.F. (2001). "Quantile Regression." *Journal of Economic Perspectives* 15(4): 143-156.
- Kotlikoff, L.J. and Summers, L.H. (1981). "The Role of Intergenerational Transfers in Aggregate Capital Accumulation." *Journal of Political Economy* 89:706-732.
- Kronebusch, K. and Schlesinger, M. (1994). "Intergenerational Transfers." In Bengtson,
 V.L., and Harootyan, R.A. (eds.), *Intergenerational Linkages: Hidden Connections in American Society*, pp. 112-151. New York: Springer.
- Lee, J. and Kim, H. (2003). "An Examination of the Impact of Health on Wealth Depletion in Elderly Individuals." Journal of Gerontology 58B(2):S120-S126.
- Michaud, P. and Van Soest, A. (2004). "Health and Wealth of Elderly Couples: Causality Tests Using Dynamic Panel Data Models." RAND Working Paper WR-191.
- Robert, S. and House, J.S. (1996). "SES Differentials in Health by Age and Alternative Indicators of SES." *Journal of Aging and Health* 8(3):359-388.
- Ruel, E. and Hauser, R.M. (2005). "Gender, Education, Ability, and Wealth: A
 Prospective Study." Paper Presented at ISA Research Committee 28: Social
 Stratification Conference. Los Angeles, CA. August 2005.

- Smith, J.P. (1998). "Socioeconomic Status and Health." *American Economic Review* 88(2): 192-198.
- Smith, J. P. (1999). "Healthy Bodies and Thick Wallets: The Dual Relation Between Health and Economic Status." *Journal of Economic Perspectives* 13(2):145-166.
- Smith, J.P. (2003). "Consequences and Predictors of New Health Events." NBER Working Paper No. 10063. October 2003.
- Smith, J.P. and Kington, R. (1997). "Demographic and Economic Correlates of Health in Old Age." *Demography* 34(1)159-170.
- Wu, S. (2003). "The Effects of Health Events on the Economic Status of Married Couples." *Journal of Human Resources* 38(1):219-230.

ble 1: Descriptive Statistics						
riables	Means/Prop.	<u>Women</u> Std. Dev.	N=2,297 Range	Means/Prop.	<u>Men</u> Std. Dev.	N=1,887 Range
g Net worth 2004	12.492	1.159	8.517-16.764	12.726	1.091	8.517-16.280
et worth 2004 \$	261,199	1.100	0.017 10.704	331,381	1.001	0.017 10.200
g Net Worth 1993	12.22	1.095	8.517-15.619	12.469	1.009	8.517-15.634
et worth 1993 \$	197,805			255,146		
g Change in Net Worth 1993-2004	0.272	0.813	-3.199-5.936	0.257	0.757	-3.468-4.859
ange in net worth 1993-2004 \$	63,394			76,235		
g Total transfers to children ^a	7.812	1.324	6.908-12.974	8.021	1.468	6.908-13.817
tal transfers to children \$	1,470			2,044		
er transferred to Children?	0.395		0-1	0.458		0-1
ealth Event since 1993	0.234		0-1	0.292		0-1
ouse Fair Health or Worse in 04?	0.143		0-1	0.133		0-1
espondent Fair Health or Worse in 93?	0.103		0-1	0.11		0-1
ouse Fair Health or Worse in 93?	0.066		0-1	0.065		0-1
blogical Parent or Sib Have Serious ealth Event?	0.789		0-1	0.761		0-1
mber of Illnesses as Child (logged)	0.377	0.449	0-1.946	0.325	0.43	0-2.079
act Natal Family?	0.910		0-1	0.904		0-1
gged Number of Siblings	1.3	0.594	0-3.975	1.288	0.564	0-2.773
rm Origins	0.218		0-1	0.218		0-1
57 Family SES	16.061	11.318	1-97	16.105	11.231	1.000-81.000
enmon-Nelson IQ /10	10.108	1.396	6.100-14.500	10.126	1.483	6.1-14.5
gh School Degree	0.683		0-1	0.549		0-1
me College	0.124		0-1	0.13		0-1
llege Degree	0.138		0-1	0.144		0-1

		<u>Women</u>	N=2,297		Men	N=1,887
Variables	Means/Prop.	Std. Dev.	Range	Means/Prop.	Std. Dev.	Range
Graduate or professional	0.055		0-1	0.177		0-1
Spouse Educational Attainment	13.465	2.577	1-26	12.99	1.726	4-20
Married	0.799		0-1	0.881		0-1
Logged Number of Children	1.128	0.576	0-2.565	1.085	0.532	0-2.197
Logged Family Income 2004	10.877	0.804	7.313-13.928	11.079	0.798	7.313-14.622
Family Income 2004 \$	51,444			63,296		
Logged Family Income 1993	10.862	0.708	7.313-13.891	11.068	0.687	7.313-15.597
Family Income 1993 \$	50,656			62,587		
Change in Family income 1993-2004 (logged)	0.032	0.802	-5.472-13.928	0.011	0.753	-5.081-2.876
Change in Family Income \$	789			709		
Respondent SEI / 100	4.905	2.014	0.293-9.300	5.202	2.42	0.410-9.600
Spouse SEI / 100	4.941	2.261	0.200-9.600	4.877	1.875	0.590-9.648
Currently Working in 1993	0.951		0-1	0.965		0-1
Self-employed in 1993	0.117		0-1	0.177		0-1
Logged Transfers and Inheritances Received since 1993	8.088	1.77	1.767-15.607	8.163	1.817	3.572-15.607
Transfers and Inheritances since 1994 \$						
Currently Working in 2004	0.511		0-1	0.599		0-1
Retired in 2004	0.627		0-1	0.679		0-1
Self-employed in 2004	0.115		0-1	0.221		0-1
Insurance 1993?	0.912		0-1	0.921		0-1
Private Insurance 2004?	0.648		0-1	0.578		0-1
Long term Insurance 2004?	0.267		0-1	0.292		0-1

Table 1: Descriptive Statistics

 $^{\rm a}$ Restricted to those that have children: females N=1,925; Males N=1,607

		<u>\</u>	<u>Women</u>			Men				
Variables	Ν	Health Event	Ν	No Health Event	Ν	Health Event	Ν	No Health Event		
Log Net worth 2004	534	12.338 (1.223)	1763	12.539 (1.135)	534	12.520 (1.098)	1344	12.811 (1.076)		
Log Net Worth 1993	534	12.129 (1.090)	1763	12.248 (1.094)	534	12.335 (1.032)	1344	12.525 (0.994)		
Log Change in Net Worth 1993-2004	534	0.209 (0.836)	1763	0.291 (0.805)	534	0.185 (0.789)	1344	0.286 (0.741)		
Log Total Transfers to Children	441	7.751 (1.129)	1484	7.830 (1.334)	468	7.972 (1.469)	1139	8.042 (1.467)		
Self-reported health was fair or worse in 1993										
Log Net worth 2004	87	11.992 (1.249)	145	12.056 (1.366)	89	12.382 (1.054)	117	12.298 (1.122)		
Log Net Worth 1993	87	11.952 (1.249)	145	11.908 (1.243)	89	12.190 (1.087)	117	12.077 (0.976)		
Log Change in Net Worth 1993-2004	87	0.040 (0.947)	145	0.149 (0.915)	89	0.192 (0.701)	117	0.221 (0.794)		
Log Total Transfers to Children	75	7.702 (1.197)	112	7.632 (1.260)	77	7.714 (1.256)	95	7.541 (1.169)		
Self-reported health was good or better in 1993										
Log Net worth 2004	447	12.407 (1.206)	1618	12.583 (1.102)	454	12.547 (1.105)	1227	12.860 (1.059)		
Log Net Worth 1993	447	12.164 (1.100)	1618	12.279 (1.075)	454	12.364 (1.019)	1227	12.568 (0.985)		
Log Change in Net Worth 1993-2004	447	0.243 (0.808)	1618	0.304 (0.793)	454	0.184 (0.805)	1227	0.293 (0.736)		
Log Total Transfers to Children	366	7.761 (1.305)	1372	7.847 (1.336)	391	8.024 (1.503)	1044	8.089 (1.483)		

Table 2: Descriptive Statistics Comparing Respondents with and without a Health Event

Table 3: Logged Change in Net Worth 1993-2004

			Women					Men		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	0.291***	0.447	0.640*	0.672*	0.691*	0.286***	0.646*	0.790*	0.789*	0.796*
	(0.020)	(0.325)	(0.326)	(0.327)	(0.327)	(0.021)	(0.369)	(0.371)	(0.372)	(0.372)
2004 health										
Health Event Since 1993	-0.081*	-0.079*	-0.068*	-0.064+	-0.064+	-0.101*	-0.114*	-0.110*	-0.110*	-0.107*
	(0.041)	(0.037)	(0.037)	(0.037)	(0.037)	(0.039)	(0.036)	(0.037)	(0.037)	(0.037)
Social Origins										
Intact Family		-0.033	-0.022	-0.023	-0.021		0.117*	0.119*	0.119*	0.121*
		(0.055)	(0.055)	(0.055)	(0.057)		(0.057)	(0.057)	(0.057)	(0.057)
Logged Number of Siblings		0.028	0.029	0.028	0.032		0.020	0.021	0.021	0.027
		(0.029)	(0.029)	(0.029)	(0.029)		(0.031)	(0.030)	(0.030)	(0.031)
Farm Origins		0.117*	0.106*	0.109*	0.109*		0.100*	0.099*	0.099*	0.095*
		(0.042)	(0.042)	(0.042)	(0.042)		(0.044)	(0.044)	(0.044)	(0.044)
1957 Family SES		0.005*	0.004*	0.004*	0.004*		0.002	0.002	0.002	0.002
		(0.002)	(0.002)	(0.002)	(0.002)		(0.002)	(0.002)	(0.002)	(0.002)
Henmon-Nelson IQ		-0.034*	-0.033*	-0.033*	-0.033*		-0.020	-0.020	-0.020	-0.020
		(0.013)	(0.013)	(0.013)	(0.013)		(0.013)	(0.013)	(0.013)	(0.013)
Family and SES Characteristics	<u>S</u>									
Some College		-0.056	-0.055	-0.053	-0.052		0.018	0.014	0.014	0.014
		(0.050)	(0.051)	(0.051)	(0.051)		(0.052)	(0.052)	(0.052)	(0.052)
College		-0.013	-0.014	-0.014	-0.014		0.066	0.067	0.067	0.068
		(0.055)	(0.054)	(0.054)	(0.054		(0.056)	(0.056)	(0.056)	(0.056)
Graduate or Professional Degre	ee	0.050	0.046	0.045	0.042		0.132*	0.132*	0.132*	0.132*
		(0.079)	(0.079)	(0.079)	0.079		(0.060)	(0.060)	(0.060)	(0.060)
Married		0.047	0.083	0.084	0.083		0.109+	0.133*	0.133*	0.132*
		(0.050)	(0.050)	(0.051)	(0.051)		(0.058)	(0.058)	(0.059)	(0.058)
Logged Number of children		0.033	0.027	0.024	0.022		0.010	0.009	0.008	0.009
		(0.030)	(0.030)	(0.030)	(0.030)		(0.033)	(0.033)	(0.034)	(0.034)
Spouses Educational Attainment	nt	0.020*	0.020*	0.020*	0.020*		0.005	0.003	0.003	0.003
		(0.008)	(0.008)	(0.008)	(0.008)		(0.012)	(0.012)	(0.012)	(0.012)
Logged Family Income 1993		0.345***	0.337***	0.336***	0.338***		0.336***	0.330***	0.330***	0.329***
		(0.034)	(0.034)	(0.034)	0.034		(0.038)	(0.038)	(0.038)	(0.039)
Logged change in family incom	e 2004	0.195***	0.191***	0.190***	0.192***		0.226***	0.226***	0.226***	0.225***
		(0.024)	(0.024)	(0.024)	(0.024)		(0.026)	(0.026)	(0.026)	(0.026)
Respondent SEI		0.014	0.014	0.014	0.01		-0.009	-0.009	-0.009	-0.009
		0.009	(0.009)	(0.009)	(0.009)		(0.009)	(0.009)	(0.009)	(0.009)
Spouse SEI		0.000	-0.002	-0.002	-0.002		0.003	0.002	0.002	0.002
		(0.009)	(0.009)	(0.009)	(0.009)		(0.010)	(0.010)	(0.010)	(0.010)
Logged net worth 1993		-0.357***	-0.364***	-0.364***	-0.364***		-0.347***		-0.352***	-0.351***
		(0.019)	0.019	(0.019)	(0.019)		(0.022)	(0.022)	(0.022)	(0.022)
Had Insurance 1993		0.011	0.009	0.009	0.008		-0.028	-0.024	-0.024	-0.021

	(0.060)	(0.059)	(0.059)	(0.059)	(0.064)	(0.064)	(0.064)	(0.064)
Have private health insurance 2004	0.128**	0.129**	0.131**	0.131**	0.075*	0.068*	0.069*	0.069*
	(0.035)	(0.035)	(0.035)	(0.035)	(0.034)	(0.034)	(0.034)	(0.035)
Have long term care insurance	0.001	0.002	0.004	0.004	-0.001	-0.001	-0.001	-0.002
	(0.039)	(0.039)	(0.039)	(0.039)	(0.036)	(0.036)	(0.036)	(0.036)
Logged inheritances and gifts since 1993	0.020*	0.020*	0.020*	0.021*	0.012	0.013	0.013	0.013
	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)
Currently working 2004	-0.000	-0.008	-0.008	-0.009	-0.054	-0.058	-0.058	-0.057
	(0.038)	(0.038)	(0.038)	(0.038)	(0.039)	0.039	(0.039)	(0.039)
Retired since 1993	0.024	0.024	0.025	0.026	-0.010	-0.012	-0.012	-0.012
	(0.040)	(0.039)	(0.039)	(0.039)	(0.041)	(0.041)	(0.041)	(0.041)
Self Employed 2004	0.114*	0.117*	0.118*	0.116*	0.117*	0.122*	0.121*	0.120*
	(0.052)	(0.051)	(0.051)	(0.051)	(0.043)	(0.043)	(0.043)	(0.043)
Other Health								
R Fair or worse self-rated health 1993		-0.172**	-0.166*	-0.167*		-0.054	-0.054	-0.052
		(0.052)	(0.052)	(0.052)		(0.053)	(0.053)	(0.053)
Spouse's fair or worse self-rated health 199	3	0.001	0.003	0.003		-0.153*	-0.153*	-0.155*
		(0.069)	(0.068)	(0.068)		(0.073)	(0.073)	(0.073)
Spouse's fair or worse self-rated health 200)4	-0.152*	-0.153*	-0.154*		-0.034	-0.034	-0.033
		(0.050)	(0.050)	(0.050)		(0.055)	(0.055)	(0.055)
Logged number of childhood illnesses			-0.057	-0.058			0.003	0.004
			(0.035)	(0.035)			(0.038)	(0.038)
Parent or Sibling Serious Health Event				-0.049				-0.046
- -				(0.040)				(0.038)
+ p<- 10 * p<- 05 ** p<- 001 *** p<- 0001								

+ p<=.10 * p<=.05 ** p<=.001 *** p<=.0001

Table 4: Logged Amount Transferred to Children 1993-2004^a

			<u>Women</u>	N=1,925				<u>Men</u>	N=1,607	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	7.830***	0.329	0.183	0.146	0.138	8.042**	-2.328*	-2.270*	-2.277*	-2.277*
	(0.035)	(0.603)	(0.609)	(0.610)	(0.612)	(0.044)	(0.789)	(0.799)	(0.798)	(0.798)
2004 health										
Health Event Since 1993	-0.080	0.013	0.011	0.010	0.009	-0.070	0.091	0.098	0.096	0.096
	(0.072)	(0.065)	(0.066)	(0.066)	(0.066)	(0.081)	(0.071)	(0.072)	(0.072)	(0.072)
Social Origins										
Intact Family		0.008	0.011	0.012	0.011		-0.070	-0.068	-0.072	-0.072
		(0.096)	(0.096)	(0.096)	(0.096)		(0.112)	(0.113)	(0.113)	(0.113)
Logged Number of Siblings		0.022	0.020	0.021	0.021		0.105+	0.105+	0.110+	0.110+
		(0.050)	(0.050)	(0.050)	(0.050)		(0.060)	(0.060)	(0.060)	(0.061)
Farm Origins		-0.051	-0.045	-0.049	-0.048		0.003	0.004	0.002	0.002
		(0.073)	(0.073)	(0.073)	(0.073)		(0.084)	(0.084)	(0.084)	(0.084)
1957 Family SES		0.005*	0.005*	0.005*	0.005*		0.009*	0.009*	0.009*	0.009*
		(0.003)	(0.003)	(0.003)	(0.003)		(0.003)	(0.003)	(0.003)	(0.003)
Henmon-Nelson IQ		0.102***	0.101***	0.100***	0.101***		0.038	0.038	0.037	0.037
		(0.023)	(0.023)	(0.023)	(0.023)		(0.026)	(0.026)	(0.026)	(0.026)
Family and SES Characteristics				0.044	0.044		0.440	0.440	0.400	0.400
Some College		-0.039	-0.038	-0.041	-0.041		0.116	0.112	0.109	0.109
0		(0.092)	(0.092)	(0.092)	(0.092)		(0.104)	(0.104)	(0.104)	(0.104)
College		0.197*	0.195*	0.195*	0.195*		-0.017	-0.022	-0.019	-0.019
Creducto er Drofossional Darras		(0.098)	(0.098)	(0.098)	(0.098)		(0.112)	(0.112)	(0.112)	(0.112)
Graduate or Professional Degree		0.266	0.270	0.270	0.269		0.284*	0.280*	0.282*	0.282*
Marriad		(0.166)	(0.166)	(0.166) -0.247*	(0.166)		(0.120)	(0.120)	(0.120) -0.460**	(0.120)
Married		-0.218*	-0.246*		-0.247*		-0.465**	-0.459**		-0.460**
Loggod Number of children		(0.099)	(0.101)	(0.101)	(0.101)		(0.141)	(0.142)	(0.142)	(0.142)
Logged Number of children		-0.166+	-0.164+	-0.162+	-0.160+		-0.038	-0.037	-0.039	-0.039
Spausas Educational Attainment		(0.088) 0.013	(0.088) 0.015	(0.088) 0.014	(0.088) 0.014		(0.107) -0.005	(0.107)	(0.107) -0.005	(0.108) -0.005
Spouses Educational Attainment			(0.015)	(0.014)			-0.005 (0.023)	-0.005	-0.005 (0.023)	
Loggod Family Income 1002		(0.014) 0.316***	(0.014) 0.323***	.0326***	(0.014) 0.325***		(0.023) 0.505***	(0.023) 0.501***	(0.023) 0.500***	(0.023) 0.500***
Logged Family Income 1993				(0.063)					(0.076)	
Logged change in family income		(0.063)	(0.062)	(0.063)	(0.063)		(0.076)	(0.076)	(0.076)	(0.076)
Logged change in family income 2004		0.221***	0.223***	0.225***	0.224***		0.193**	0.191**	0.192**	0.192**
2007		-						(0.053)		
Respondent SEI		(0.041) -0.007	(0.041) -0.008	(0.041) -0.007	(0.041) -0.008		(0.053) 0.046*	(0.053) 0.046*	(0.053) 0.046*	(0.053) 0.046*
		-0.007 (0.016)	-0.008 (0.016)	-0.007 (0.016)	-0.008 (0.016)		0.046 (0.017)	0.046 (0.017)	0.046 (0.017)	(0.046)
Spouse SEI		(0.016) 0.020	0.016)	0.016)	0.016)		-0.017)	-0.017)	-0.017)	-0.012
Spouse SEI		(0.020	(0.021)							
Lagged pot worth 1002		(0.015) 0.221***	(0.015) 0.227***	(0.015) 0.227***	(0.015) 0.227***		(0.019) 0.308***	(0.019)	(0.019) 0.307***	(0.019)
Logged net worth 1993								0.307***		0.307***
		(0.034)	(0.034)	(0.034)	(0.034)		(0.044)	(0.044)	(0.044)	(0.044)

Had Insurance 1993	-0.281* (0.107)	-0.283* (0.107)	-0.282* (0.107)	-0.282* (0.107)	-0.011 (0.135)	-0.009 (0.136)	-0.013 (0.136)	-0.013 (0.136)
Have private health insurance	(0.107)	(0.107)	(0.107)	(0.107)	(0.100)	(0.100)	(0.100)	(0.100)
2004	0.022	0.025	0.023	0.023	-0.006	-0.006	-0.008	-0.008
	(0.062)	(0.062)	(0.062)	(0.062)	0.068	0.068	0.068	0.068
Have long term care insurance	-0.015	-0.019	-0.020	-0.020	0.072	0.068	0.068	0.068
have long term care mediance	(0.063)	(0.063)	(0.063)	(0.063)	(0.071)	(0.072)	(0.072)	(0.072)
Logged Transfers and	(01000)	(0.000)	(0.000)	(0.000)	(0.01.1)	(0.072)	(0.012)	(01072)
Inheritances Received since 1993	0.080***	0.080***	0.080***	0.080***	0.086***	0.086***	0.087***	0.087***
	(0.016)	(0.016)	(0.016)	(0.016)	(0.020)	(0.020)	(0.020)	(0.020)
Currently working 2004	-0.148*	-0.141*	-0.142 [*]	-0.142 [*]	-0.095	-0.097	-0.096	-0.097
, 3	(0.068)	(0.069)	(0.069)	(0.069)	(0.076)	(0.076)	(0.076)	(0.076)
Retired since 1993	-0.051	-0.045	-0.046	-0.046	-0.129	-0.129	-0.130	-0.130
	(0.077)	(0.077)	(0.077)	(0.077)	(0.078)	(0.079)_	(0.079)	(0.079)
Self Employed 2004	0.067	0.062	0.061	0.062	0.048	0.048	0.049 [´]	0.049 [´]
	(0.091)	(0.091)	(0.091)	(0.091)	(0.084)	(0.084)	(0.084)	(0.084)
Other Health	(()	()	(,	(()	()	()
R Fair or worse self-rated health								
1993		0.032	0.026	0.027		-0.096	-0.105	-0.105
		(0.095)	(0.096)	(0.096)		(0.106)	(0.106)	(0.106)
Spouse's fair or worse self-rated		· · · ·	()	、 ,		· · ·	· · · ·	()
health 1993		0.179	0.176	0.176		0.024	0.024	0.024
		(0.118)	(0.118)	(0.118)		(0.139)	(0.139)	(0.139)
Spouse's fair or worse self-rated		· · · ·	()	、 ,		· · ·	· · · ·	()
health 2004		0.034	0.036	0.036		-0.009	-0.010	-0.010
		(0.086)	(0.086)	(0.086)		(0.103)	(0.103)	(0.103)
Logged number of childhood		· · · ·	()	、 ,		· · ·	· · · ·	· · ·
illnesses			0.066	0.066			0.075	0.075
			(0.063)	(0.063)			(0.075)	(0.075)
Parent or Sibling Serious Health			. ,	. ,			. ,	. ,
Event				0.014				0.003
				(0.070)				(0.077)

+ p<=.10 * p<=.05 ** p<=.001 *** p<=.0001 ^a sample restricted to those who have children: females N=1,925; males N=1,607

Logged Change in Net Worth		<u>Women</u> Model 5		<u>Men</u> Model 5				
Quantiles	25th	50th	75th	25th	50th	75th		
Health Event Since 1993	-0.025 (0.049)	-0.042 (0.039)	-0.025 (0.051)	-0.07 (0.050)	-0.049 (0.039)	-0.103* (0.045)		
Psuedo R2	0.08	0.09	0.12	0.11	0.09	0.10		
Logged Transfers to Children		<u>Women</u> Model 5		<u>Men</u> Model 5				
Quantiles	25th	50th	75th	25th	50th	75th		
Health Event Since 1993		0.002 (0.029)	-0.075 (0.120)		0.064 (0.094)	0.203+ (0.125)		
Psuedo R2		0.05	0.18		0.13	0.21		

+ p<=.10 * p<=.05 ** p<=.001 *** p<=.0001