

HCPDS Working Paper Series

When I'm 54: Working longer starts younger than we think

Beth C. Truesdale, PhD,^{1,2} Lisa Berkman, PhD,¹ and Alexandra Mitukiewicz, MA³

December 8, 2021

HCPDS Working Paper Volume 21, Number 9

The views expressed in this paper are those of the author(s) and do not necessarily reflect those of the Harvard Center for Population and Development Studies.

Affiliations

Harvard Center for Population and Development Studies, Cambridge, MA W.E. Upjohn Institute for Employment Research, Kalamazoo, MI Harvard University, Cambridge, MA

Corresponding Author

Beth Truesdale, PhD

Research Fellow, W.E. Upjohn Institute for Employment Research Visiting Scientist, Harvard Center for Population and Development Studies Email: <u>truesdale@upjohn.org</u>

ABSTRACT

Those who are not employed during their 50s – and who may not be candidates for working into their 60s – are frequently invisible in the working longer discussion. We bring these individuals back into the conversation by examining who is and is not working in their 50s, the stability of individuals' employment in their 50s, and their likelihood of working into their 60s. We find that those who lack stable employment during their 50s are disproportionately nonwhite, women, and those without college degrees. While disadvantaged groups start from a lower base, employment rates fall by about 20 percentage points for *all* groups between ages 50 and 60. We also find that continuous employment during one's 50s appears to be a critical foundation for working longer, but about half of Americans do not have continuous employment during their 50s. Policies that improve the quality and consistency of employment in late middle age may increase rates of working longer.

Keywords: Life course, aging, inequality, working longer, employment rates, employment stability, labor force participation, early retirement

Acknowledgements: This paper was prepared for the volume *Overtime: America's Aging Workforce and the Future of "Working Longer"* (Lisa Berkman and Beth C. Truesdale, editors), which is supported by the Alfred P. Sloan Foundation's Working Longer project. We gratefully acknowledge comments from fellow participants. We thank Courtney Coile and Gary Burtless for helpful feedback and J.L. Herrera for valuable research assistance.

1 Introduction

Most research on retirement decisions begins by focusing on men and women who are in paid employment in their late 50s and early 60s. By definition, those who are already out of work in their early- to mid-50s are excluded: we cannot observe retirement decisions among those who have no job from which to retire. However, focusing on those who remain in the labor force as they age leaves substantial gaps in our understanding of the limits of working longer as a solution to the challenge of aging populations faced by the U.S. and other developed nations. We bring those who are out of the labor force during late middle age – who are unlikely to be candidates for working longer, that is, working past the Social Security earliest eligibility age of 62 – back into view.

If the fraction of the adult *population* that can realistically work longer is substantially smaller than the fraction of *workers* that can realistically work longer, our view of the working longer ideal may be too rosy. In addition, because members of disadvantaged groups are disproportionately likely to be out of employment in middle age, trends toward working longer may further increase social inequalities in work, income, and well-being at older ages.

Individuals who are out of the labor force in late middle age are invisible in the usual unemployment statistics, just as they are invisible in many discussions about working longer. In 2018, the unemployment rate among American adults ages 55 to 59 years was only 2.9 percent, slightly lower than the 3.3 percent unemployment rate among 25- to 54-year-olds. However, those figures set aside the 28 percent of 55- to 59-year-olds who were not in the labor force – a number that is much higher than the 18 percent of 25- to 54-year-olds who were not in the labor force (U.S. Bureau of Labor Statistics 2019). Employment exit in late middle age is often

permanent, because many factors, including age discrimination, make it difficult for older Americans to get new jobs after they have been out of work (Johnson and Gosselin 2018).

During the past 20 years, labor force participation rates have fallen among both men and women during their prime working years, even as they have risen among both men and women at older ages. The bodies of research examining these two trends have been largely separate. We argue that they should be linked, as employment earlier in life is likely to affect one's options for employment later in life. We examine working longer using a life course perspective. Understanding connections across the life course sheds light on the timing of potential policy interventions.

We focus on who is left out of the working longer conversation by examining differences in employment across and within cohorts. We use the 1962 to 2019 waves of the Current Population Survey (CPS) to describe employment rates across the life course. We then turn to the 1992 to 2018 waves of the Health and Retirement Study (HRS) to investigate employment stability among individuals in their 50s and how employment stability during one's 50s relates to employment beyond age 62, the earliest age of eligibility for Social Security retirement benefits. We examine changes across birth cohorts as well as inequalities by gender, race, and education within cohorts. By understanding who is (and who is not) working across the life course now, we can better understand what working longer might mean for future cohorts.

Our results suggest that working longer is not as straightforward as many people in the policy arena may assume.¹ We find that consistent employment in one's 50s is an important precursor of employment beyond age 62. Yet employment rates and patterns in one's 50s are

¹ For a discussion of the working longer policy consensus, see Ghilarducci (2021),

highly heterogeneous. We show that employment rates are much lower among disadvantaged groups over the entire life course, and they drop sharply among *all* sociodemographic groups – by about 20 percentage points – between ages 50 and 60. We find that only about half of Americans are continuously employed during the decade before age 62, while a third have intermittent employment patterns and 15 percent never worked for pay during those years.

We find that employment stability in late middle age is strongly related to working longer. Some 80 percent of those continuously employed in their 50s are employed at some point between ages 62 and 66, compared to 35 percent of those in the intermittent group and only 4 percent of those who were not working in their 50s.

We find that inequalities in employment rates and employment stability within cohorts are much greater than changes across cohorts, especially across the past two or three decades. While there are stark differences in employment patterns by education, gender, and race, it is employment stability in one's 50s that predicts whether someone works longer, even when sociodemographic, health, and other characteristics are taken into account.

There are strong social gradients, especially by education, in the proportion of those who are never employed in their 50s. This group of individuals – who are largely invisible in the working longer discussion precisely *because* they are not working during their 50s – are disproportionately non-white, women, and those without college degrees. Disability is an important reason people in this group are not employed. Among those consistently out of the workforce in their 50s, about 60 percent of men and 27 percent of women received Social Security Disability Insurance (SSDI) benefits.

There is a silver lining to these otherwise sobering results. We find that the experience of employment at some point during the life course is nearly universal. In the HRS, less than 1

percent of men and less than 4 percent of women say they have never worked for pay. Even among those not working in the run-up to traditional retirement ages, the large majority last worked at some point after age 40. As a result, there may be many missed opportunities to retain people in the labor force earlier in life.

Bringing people who are out of employment in their 50s into the working longer debate has implications for policy. Policy recommendations to support working longer, such as job flexibility (e.g., Moen 2016; Maestas et al. 2017), often focus on the needs and preferences of older workers, which may be quite different than the needs and preferences of those who are not employed in late middle age. Working longer is concentrated among those who are continuously employed during their 50s. A renewed focus on employment in late middle age suggests a much broader range of policies to support working longer. In terms of life course perspectives, our results are in line with social trajectory models, suggesting that interventions to improve employment stability among middle-aged Americans could support working longer.

2 Employment across the life course

At its most fundamental, a life course approach pays attention to the connections between different phases of life, acknowledging that events and contexts in a given phase may have consequences years or even decades later (Elder, Johnson, and Crosnoe 2003). We examine working longer using a life course perspective. This perspective is useful for research on working longer because employment patterns in prime age and in the run-up to retirement, as well as other experiences, likely shape individuals' decisions and options to work and retire.

Life course research suggests three different, but not mutually exclusive, pathways by which experiences earlier in life affect well-being later in life (Berkman and Kawachi 2014). First, in a *sensitive period* model, exposure to a risk has especially serious long-term

consequences if the exposure takes place during a particular phase of life, and intervention later in life may not be successful. Second, in a *cumulative disadvantage* model, early-life experiences put individuals on a track either toward or away from future risks, and the effect of experiences on well-being adds up or compounds over time. Third, in a *social trajectory* model, early-life experiences make exposure to certain risks in adulthood more or less likely, but it is the adult exposures that directly affect well-being. Each of these three pathways has implications for the timing of policy interventions in people's lives.

We use a life course perspective to connect two large bodies of research that have been mostly separate. An influential line of research examines the motivations for older workers' retirement decisions, typically excluding adults who were out of employment in their 50s. This research often uses longitudinal data on adults in their 50s and 60s to investigate the reasons that individuals transition from employment to retirement, including the adequacy or inadequacy of Social Security benefits, individual wealth, health and health insurance, spouses' retirement decisions, and labor demand (e.g., Han and Moen 1999; Warner, Hayward, and Hardy 2010; Coile 2015). Because this research investigates why, when, and how older adults retire, researchers usually focus on adults who had a job or were in the labor force at the start of the window of observation and follow them over time to examine retirement behavior. Some important studies narrow the selection further; for instance, Cahill, Giandrea, and Quinn (2006) study retirement patterns among older Americans who recently worked full-time in career jobs. This line of research, which has been central to the working-longer conversation, sets aside adults who worked for pay intermittently or not at all in their 50s.

To be clear, some research on retirement does include all older adults, regardless of their employment or labor force status. This subset of research uses cross-sectional data to count those

who are out of the labor force at older ages (e.g., Burtless and Quinn 2002; Coile 2019; Abraham, Hershbein, and Houseman 2021), but the nature of the data makes it impossible to observe how individuals' experiences evolve across substantial sections of the life course.

Distinct from the retirement research, another large body of research is focused on changes in labor force participation among men and women in prime ages, conventionally defined as ages 25 to 54. Among prime-age men, rates of labor force participation have declined substantially since the 1960s, especially among men with less than a college degree. This decline is attributed, in part, to increasingly unstable employment that leads men to cycle in and out of the labor force (Coglianese 2018; Binder and Bound 2019). Women's employment patterns are very different than men's because women are more likely to take time out of work for childrearing. Among prime-age women, rates of labor force participation have increased since the 1960s and have stagnated in recent years (Goldin and Katz 2018). This research on primeage workers is relevant to the working-longer discussion because individuals who are out of the labor force in their late 40s and early 50s are likely to retire several years earlier than their counterparts who are in the labor force in midlife (Ciecka and Skoog 2017).

Less research focuses on labor force participation and employment during the decade before age 62, the Social Security Earliest Eligibility Age (EEA). This decade bridges the age brackets customarily studied in research on retirement decisions and research on prime-age work. Even less work investigates the conditions that shape employment in one's 50s in a life course context that takes account of employment both earlier and later, or examines differences in employment by race and education as well as by gender. Investigating heterogeneities is important because averages can obscure substantial variation. For example, variability in the timing of men's retirement increased substantially in the U.S. in the last third of the 20th century, even as average retirement ages first fell and then rose (Han and Moen 1999). Around the turn of the 21st century, the modal age of men's retirement was 62, but more than three-quarters of male retirements took place "off time" in Social Security terms, either earlier than age 62 or later than age 65 (Warner, Hayward, and Hardy 2010). Focusing on heterogeneities in employment patterns during one's 50s should provide a more complete perspective on working longer as the outcome of events and contexts earlier in life.

3 Data and Methods

In order to bring those who are not working during their 50s back into the working longer discussion, we investigate (a) employment rates across the life course, (b) employment stability among individuals in the decade before the Social Security Earliest Eligibility Age (EEA) of 62 (for brevity, "the 50s"), and (c) how individuals' employment stability during those years relates to working beyond age 62. We examine changes across birth cohorts as well as heterogeneity by gender, race, and education within cohorts.

We focus on employment (having paid work) rather than labor force participation (either having paid work or actively seeking it). For many questions, the distinction makes little difference, and many studies of retirement behavior focus on labor force participation because they are interested in the larger group of individuals who intend to work or are working rather than the slightly smaller group of those who are working for pay at a given moment. However, labor force participation rates can understate the actual size of inequalities in working because *both* labor force nonparticipation *and* unemployment rates tend to be higher among disadvantaged groups than among advantaged groups. Labor force participation rates also neglect *de facto* unemployment among "discouraged workers" who would like to work but are not actively seeking employment, including individuals who have been forced to retire earlier

than they would wish. In addition, several important outcomes related to working longer – including one's Social Security benefits and one's ability to save for retirement – are based not on individuals' labor force history but on their employment history. We therefore focus on employment.

To address the three questions above, we use two sources of data.

3.1 Current Population Survey (CPS)

First, for a broad overview of employment rates across cohorts and across the life course, we use the 1962 through 2019 waves of the Annual Social and Economic Supplement of the Current Population Survey (CPS-ASEC) (Flood et al. 2020). Conducted by the U.S. Census Bureau and the Bureau of Labor Statistics, the CPS is a large, nationally representative crosssectional survey that is the main source of U.S. federal statistics on employment. The definition of employment includes "any work at all for pay or profit," including self-employment and parttime employment, which are important at older ages (Abraham, Hershbein, and Houseman 2021).

To compare employment rates across cohorts, we construct synthetic cohorts for individuals who were born in 1930 through 1969. For instance, the 1930 birth cohort includes those who turned 25 in 1955, those who turned 26 in 1956, and so on. In the most recent data (2019), individuals born in the 1930s and 1940s were older than 70; those born in the 1950s were in their 60s; and those born in the 1960s were in their 50s.

After examining trends by birth cohort, we pool the 1930-1959 cohorts to increase sample size and present employment rates across the life course within groups defined by educational attainment, race, and gender. Finally, we examine trends in education-based inequalities in employment over time.

3.2 Health and Retirement Study (HRS)

Next we turn from population employment *rates* to individual employment *patterns*. Employment patterns during the run-up to the earliest eligibility age (EEA) for Social Security, age 62, may tell us a great deal about the fraction of these cohorts who are likely to be candidates for working longer. We use longitudinal data from the Health and Retirement Study (HRS). The HRS is a nationally representative biennial study of Americans over age 50. For our analysis we use the RAND version of the HRS, a merged and cleaned version of the dataset, supplemented with RAND's version of the raw public-use HRS files (the RAND HRS Fat Files). We use all waves of data currently available, spanning 1992 to 2018. Since 1992, additional cohorts have been added to the study every six years, creating a multi-cohort panel design.²

We examine individual employment patterns between ages 51 and 61 (for brevity, "the 50s"), as well as the association between employment patterns in one's 50s and employment later in life, that is, working between ages 62 and 66. We use data on two cohorts: the HRS Original Cohort, born between 1936 and 1941; and the War Babies, born between 1942 and 1947.³ Members of these cohorts were ages 51 to 56 at first interview and are interviewed every two years. Both cohorts have aged past age 66, allowing us to examine how employment patterns in the run-up to the EEA relate to working between ages 62 and 66. We select those individuals who were present at the first interview for their cohort and who reported their

² The HRS (Health and Retirement Study) is sponsored by the National Institute on Aging (grant number NIA U01AG009740) and is conducted by the University of Michigan.

³ The complete HRS Original Cohort includes individuals born between 1931 and 1941, who were between ages 51 and 61 at the first interview. Because we are interested in employment patterns in the run-up to the EEA, we restrict the sample to those who were ages 51 to 56 at the first interview to match the sampling design of the War Babies cohort and subsequent cohorts.

employment status (employed or not employed) in at least three interviews between ages 51 and 61 and reported their employment status in at least one interview between ages 62 and 66.⁴

Our dependent variable, working longer, is a dichotomous variable equal to one if an individual is employed during at least one interview between ages 62 and 66 and equal to zero if not employed.

Our independent variable, employment stability, is the portion of time an individual is employed during the years between their first interview between ages 51 and 56, and their last interview before age 62. For each respondent in our sample we divide the number of interviews they were employed over the total number of interviews when they reported their employment status between ages 51 and 61 ("the 50s"). To allow the relationship between employment stability during one's 50s and working longer to be non-linear, we create mutually exclusive categories:

- Steady Out: Never employed in one's 50s.⁵
- Intermittent
 - Low intermittent: employed more than 0 and less than 50 percent of one's 50s.
 - Medium intermittent: employed more than 50 and less than 80 percent of one's 50s.
 - High intermittent: employed more than 80 and less than 100 percent of one's 50s.
- Steady In: Always employed during one's 50s.

⁴ Results are substantively similar when include only those who reported their employment status every wave between ages 51 and 61.

⁵ We use employment status at the time of the interview. We may miss short employment and non-employment spells between survey waves, which occur every two years. Because the first interview takes place between ages 51 and 56, the longest period of time we call "the 50s" includes ages 51 to 61, while the shortest includes ages 56 to 61. As mentioned earlier, we limit our sample to individuals who reported their employment status in at least three interviews between ages 51 and 61.

We estimate linear probability models to examine the association between employment stability during the 50s and working longer (reporting employment at some point between ages 62 and 66). We first estimate the bivariate regression of working longer on employment stability. Then we evaluate whether other factors help explain this association, controlling for sociodemographic characteristics, employment history, wealth, and health.⁶

We control for the following socio-demographic characteristics: respondent's educational attainment (less than high school, high school diploma or GED, some college, or college degree), race (white, Black, or other race), gender, marital status (married or partnered at first interview vs. not married or partnered), birth cohort (HRS Original Cohort or War Babies), age at first interview, nativity status (born in the U.S. or born outside the U.S.), and region of residence at first interview (one of nine Census Bureau-designated divisions).

We next control for individuals' pension coverage, employment history, and wealth. People with pensions tend to retire earlier than their counterparts without (Coile 2015). We include a dichotomous variable equal to one if a respondent, at first interview, has a pension from their current or previous two jobs and equal to zero if the respondent is not covered by a pension. Because employment history earlier in life is likely associated with both employment in one's 50s and working longer, we control for the percent of respondent's lifetime spent working at first interview (the number of self-reported years of previous employment divided by the respondent's age at first interview). Greater wealth may enable earlier retirement (Coile 2015), so we also include a measure of household net worth percentile at the first interview.

⁶ We estimate linear probability models for the sake of interpretability. Our conclusions do not change when we use logistic regression.

Finally, we control for health characteristics because poor health is a major driver of early retirement (Johnson and Gosselin 2018). Following Cutler et al. (2011), we control for individuals' baseline health status and changes in their health during their 50s. We include five measures of baseline health status: the respondent's number of (1) major and (2) minor health conditions at first interview,⁷ and the respondent's number of difficulties with (3) activities of daily living (ADLs), (4) instrumental activities of daily living (IADLs), and (5) other functional limitations at second interview.⁸ We include two measures of health shocks: whether a respondent reports (1) a new major health condition or (2) a new minor health condition during their 50s.

We consider our results in light of life course models. If variables that represent experiences relatively early in life (such as educational attainment) largely explain the association between employment stability and working longer, such a result would suggest that late childhood or early adulthood is a *sensitive period* for social processes that lead jointly to employment stability and to working longer. If *cumulative disadvantage* is at work, we would expect the combination of early-life experiences (such as educational attainment) and midlife experiences that are shaped by early-life experiences (such as health and work history before one's 50s) to explain much of the association between employment stability and working longer.

⁷ *Major health conditions* is a count of up to five conditions a respondent reports at first interview: heart condition, lung condition, cancer, stroke, and psychiatric diagnosis. *Minor health conditions* is a count of up to three conditions a respondent reports at first interview: arthritis, hypertension or high blood pressure, and diabetes. Our results do not change when we treat these as dichotomous variables (any condition or no condition).

⁸ *ADLs* include bathing, dressing, eating, getting out of bed, and walking to the other side of the room. *IADLs* include using a phone, managing money, and taking medications. *Other functional limitations* include sitting for two hours, getting up from a chair after sitting for long periods, lifting or carrying weights over 10 pounds, stooping kneeling, or crouching, reaching arms above shoulder level, pushing or pulling large objects, and picking up a dime from the table. For comparability across waves, we use data on these questions from wave 2 and beyond because the question wording changed substantially between the first and second waves. Our results do not change when we treat these as dichotomous variables (any difficulty or no difficulty).

Finally, if employment stability in one's 50s is robustly related to working longer even after we take earlier experiences into account, such a result would suggest a *social trajectory* model in which early-life experiences (such as educational attainment) shape individuals' employment stability during their 50s, but employment stability itself shapes further later-life employment.

We also we take a closer look at the group of people who never worked in their 50s (the Steady Outs). We examine what proportion of this group receive Social Security Disability Insurance (SSDI) benefits, which is an important consideration because few people who meet the stringent qualifications for disability benefits ever return to the workforce (Liu and Stapleton 2010). We also examine when Steady Outs last worked using work history data.

4 **Results**

4.1 CPS: Employment Rates

We begin with an overview of employment rates over the life course. Many of the stylized facts in this section will be familiar to researchers studying work and retirement, but they are not often visualized as trends across the life course within birth cohorts. Figure 1 shows how employment rates have changed for cohorts born between 1930 and 1969. Among men, rates of employment during prime ages, 25 to 54, have fallen consistently from cohort to cohort. Among women, rates of prime age employment rose dramatically from the cohorts born in the 1930s to the cohorts born in the 1950s, but stalled or fell among the cohort born in the 1960s. The effect of the Great Recession is clearly visible: children of the 1960s were aged 39 to 48 in 2008. Among both men and women, employment rates dropped substantially for adults in the 1960s birth cohorts in their 40s.

[FIGURE 1]

Compared to falling or stalling employment rates from cohort to cohort during prime ages, cohort trends are noticeably different among older adults. Above age 60, rates of employment rise from cohort to cohort at older ages among both men and women. Despite the rise in employment at older ages, only a minority of adults are still employed after age 65. Rates of employment at age 65 are below 50 percent among men and 40 percent among women even in recent cohorts.

Next, we examine how employment rates change across the life course among different sociodemographic groups. As Figure 2 shows, education-related inequalities in employment are large across the life course among both men and women. Notably, although less educated groups start from a lower base, employment rates fall rapidly among all groups between ages 50 and 60. For instance, among men, employment rates fall between ages 50 and 60 from roughly 94 to 74 percent among those with college degrees, from 86 to 63 percent among those with high school diplomas, and from 73 to 50 percent among those without high school diplomas. There are similar decreases among women. In absolute terms, the drop is similar across subgroups, approximately 20 percentage points.

[FIGURE 2]

Figure 3 shows differences within education groups by race, focusing on white and Black adults. Among men, there are notable disparities in employment rates between Black and white respondents with the same educational attainment. It is striking that employment rates for Black men with a college degree are almost identical to those of white men with a high school degree, while employment rates of Black men with a high school degree are almost identical to those of white men without a high school degree. Among women, however, racial differentials are reversed. Black women have a higher rate of employment than white women at each education level early in the life course. Later in the life course, the racial gaps close, although the educational gaps do not.

[FIGURE 3]

Finally, we examine how disparities in employment rates have changed over time. As Figure 4 shows, absolute disparities in employment rates by education rose between the 1960s and 2019 in both late middle age (ages 50 to 61) and at older ages (ages 62 to 70) among both men and women. Increasing inequalities are especially notable among those in the younger age group. Among men in late middle age, inequalities increased because employment rates fell faster among less educated groups than among college graduates. Among women in late middle age, inequalities increased because employment rates rose faster among more educated women than among those with less than a high school degree. In the older age group, among men, absolute disparities have remained relatively steady as employment rates fell and then rose among all educational groups. Among older women, absolute disparities fell, then rose, mostly driven by changes in employment rates among more-educated women. However, especially in the past two to three decades, the picture is chiefly of large and persistent education-based disparities in both age groups, with inequalities between educational groups greater than changes across cohorts.

[FIGURE 4]

Proponents of working longer frequently point out that Americans are increasingly delaying retirement. However, Figure 4 allows us to consider these trends over a longer timeframe than we were able to see in Figure 1. The cohorts born between the 1930s and the 1950s, who are depicted in Figure 1, reached retirement age between the 1990s and the 2010s. These cohorts saw a trend toward later retirement among both men and women. Figure 1 shows the trend across cohorts; Figure 4 shows the same trend across time. Between the 1990s and the 2010s, employment rates rose among older men and women in all educational groups. However, among men, the rise in employment rates at older ages from the 1990s to the 2010s was much smaller than the fall from the 1960s through the 1980s. Among women, the peak in rates of working longer in the 2010s only just exceeded rates of working longer around 1960.

In summary, although rates of employment at older ages have risen across recent cohorts, the cohorts now in their 40s and 50s are approaching retirement with lower employment rates than the cohorts now in their 60s and 70s, which may mean that fewer members of younger cohorts are in a good position to work longer. Changes in employment rates across recent cohorts are relatively small, however, compared both to the historical record and to inequalities within cohorts. There is a great deal of heterogeneity by race and education in employment rates across the entire life course, with especially large inequalities by education. A life course perspective suggests that social inequalities in working longer are likely linked to social inequalities earlier in the life course.

4.2 HRS: Employment Stability

Descriptive Results

We turn next to the results of our analysis of the HRS data, which allow us to examine how employment patterns over a decade are associated with the likelihood of working longer. Employment patterns during one's 50s may be important in part because they predict who is likely to be a candidate for working longer and who is not. The HRS data are well suited to investigating this because the study interviews a nationally representative sample of American adults starting between ages 51 and 56 and following up every two years. Table A1 in the Appendix contains full descriptive statistics.

As Figure 5 shows, based on HRS data, 52 percent of adults worked throughout their 50s whereas the rest were not consistently employed. About 15 percent of adults never worked during their 50s and the remaining 34 percent experienced intermittent employment. That is, roughly half of Americans approached the earliest eligibility age for Social Security without a consistent employment history over the previous decade.

In terms of working longer, we find that slightly more than half of adults (54 percent) worked between ages 62 and 66. Figure 6 shows how the likelihood of working longer is stratified by employment stability in one's 50s. Of Steady Ins (those steadily employed in their 50s), 80 percent worked longer; by contrast, only 4 percent of Steady Outs (those never employed in their 50s) were employed at some point between ages 62 and 66. Of those with intermittent employment, 35 percent worked longer, ranging from 18 percent among those in the Low Intermittent category to 53 percent among those in the High Intermittent category.

When we examine the overlap between employment stability in one's 50s and working longer, we find that only 42 percent of American adults were *both* continuously employed during

their 50s (Steady Ins) *and* employed at some point between ages 62 and 66. That is, the common perception of solid employment up to retirement is a reality only for a minority of Americans.

[FIGURE 5]

[FIGURE 6]

Next we examine differences by education, gender, and race. Rates of continuous employment are far lower among disadvantaged groups. As Figure 7 shows, both the Steady In and Steady Out employment categories are highly stratified by education. Only 36 percent of those without a high school degree reported continuous employment during their 50s (Steady Ins), compared to 65 percent of college graduates. Conversely, only 6 percent of college graduates reported never being employed during their 50s (Steady Outs), compared to 32 percent of those without a high school diploma. The intermittent categories were somewhat more similar across educational groups, although compared to college graduates, those without a high school diploma were about twice as likely to have a Low Intermittent employment pattern and half as likely to have a High Intermittent pattern.

[FIGURE 7]

Employment stability is also stratified by race and gender, but these disparities are substantially smaller than disparities by education. As Figure 8 shows, women were more likely than men to be in the Steady Out or Low Intermittent categories, and less likely to be in the Steady In category. Similarly, Black adults were more likely than white adults to be in the Steady Out or Low Intermittent categories, and less likely to be in the Steady In category.

[FIGURE 8]

In summary, based on HRS data, only about half of adults were consistently employed (Steady Ins) during their 50s; the other half were not employed at least some of the time. These averages mask large differences by race, gender, and especially by education. In descriptive terms, employment stability in one's 50s is strongly related to working longer in one's 60s. *Regression Results*

We turn to regression analysis to investigate what other factors might account for the bivariate association between employment stability in one's 50s and working longer. Figure 9 shows the key results (coefficients are available in Table A2 in the Appendix). Overall, employment stability in one's 50s is strongly associated with working between ages 62 and 66, and this association changes very little when we control for socio-demographic, employment, wealth, and health characteristics.

[FIGURE 9]

The bivariate regression of working longer on employment patterns in one's 50s (Model 1) shows the marked increase in the probability of working longer with more stable employment patterns in one's 50s, as seen in Figure 6. The predicted probability of working longer does not change much when socio-demographic characteristics are added in Model 2,

employment history and wealth variables are added in Model 3, and health status variables are added in Model 4. Nor does the proportion of variance explained (R^2) change much as we add an increasingly rich set of control variables: it increases from 0.37 in Model 1 to 0.39 in Model 4. Employment patterns in the decade prior to traditional retirement ages are strong predictors of whether individuals work for pay during their 60s.

Together, the descriptive results and regression models using the HRS suggest that there is a social gradient in employment stability in one's 50s, which translates into a strong social gradient in the likelihood of working longer. These results are most consistent with social trajectory life course models. That is, it appears that factors such as educational attainment influence individuals' employment stability during their 50s, but employment stability itself shapes further later-life employment.

4.3 Steady Outs: Work History and Disability

Finally, we investigate the group of men and women who have not been employed between ages 51 and 61, those we call Steady Outs, in more detail. The possibility that initiatives targeting this group could result in substantially higher rates of employment at older ages may depend both on whether disabilities prevent them from working and on the length of time since they were last employed.

Receipt of federal disability benefits is an important indicator of work-related health and disability. We compare the proportion of men and women in each employment pattern who report ever receiving Social Security Disability Insurance (SSDI), between ages 51 and 61. Although some disability benefit recipients have some work capacity (Liebman 2015), receipt of benefits indicates a high level of impairment. Workers do not qualify if it is "possible for [them]

to do work which exists in the national economy," even if such work does not exist in the local area or there are no job openings.⁹

In this section, we use HRS data on the HRS Original, War Babies, and Early Baby Boomers cohorts, all of whom were older than age 61 by the 2018 survey. HRS Original respondents were born between 1936 and 1941; War Babies were born between 1942 and 1947; and Early Baby Boomers were born between 1948 and 1953.¹⁰

In total, only about 10 percent of interviewees report ever receiving SSDI in their 50s. Figure 10 shows the distribution by gender, cohort, and employment stability. Among male Steady Outs, around 60 percent in all three cohorts received SSDI. Among female Steady Outs, the proportion of disability recipients rises with more recent cohorts from 22 percent to 37 percent, reflecting the increase in women's eligibility for SSDI benefits as more women accrue the work history needed to qualify (Liebman 2015). Approximately 13 percent of both women and men with intermittent employment in their 50s report receiving SSDI at some point, a number that does not change much across cohorts. Among both men and women, fewer than 1 percent of Steady Ins report receiving disability benefits, so we omit them from the graph.

The high proportion of Steady Outs who receive disability benefits suggests that many Steady Outs are unlikely to be candidates for working longer because their health severely limits the work they can do. By contrast, the relatively low proportion of people with intermittent employment patterns who receive disability benefits suggests that work disability is not the main reason for intermittent employment in one's 50s, although it is a contributor. To understand why

⁹ For federal disability qualifications, see https://www.ssa.gov/OP_Home/cfr20/404/404-1566.htm.

¹⁰ As mentioned earlier, the complete HRS Original Cohort includes individuals born between 1931 and 1941, who were between ages 51 and 61 at the first interview. We again restrict the sample to those who were ages 51 to 56 at the first interview to match the sampling design of the War Babies cohort and subsequent cohorts.

people experience intermittent employment in their 50s, future research should consider alternative explanations such as caregiving responsibilities, precarious jobs, and age discrimination.

[FIGURE 10]

We also examine the work histories of those who were Steady Out during their 50s. Employment policy solutions for this group may depend on whether a large fraction have never worked for pay, have some work experience many years ago, or have recently worked. Figure 11 shows the results. Among both men and women, a substantial majority of those who are never employed in their 50s say they have had a job after age 40. Only 18 percent of female Steady Outs and 4 percent of male Steady Outs say that they have never been employed. Among all adults, 0.4 percent of men and 3.7 percent of women say they have never worked. This suggests that some experience of paid employment may be closer to universal than is commonly recognized, and could provide a basis for intervention earlier in the life course.¹¹

[FIGURE 11]

5 Discussion

This paper aims to bring those who are not employed during their 50s back into the working longer discussion and to situate this pivotal decade in the context of employment both

¹¹ If the HRS is biased toward healthier individuals with more employment history, these figures may underestimate the experience of never working in the U.S. non-institutionalized civilian population. However, our figures are of a similar magnitude as those of Scott & Hatalla (1990), who find that only 2.1 percent of college-educated women who were born around 1937 (overlapping with the HRS Cohort) had never been employed 25 years after graduation.

earlier and later in life. A life course perspective has informed our work. We examine both changes across birth cohorts and heterogeneity by gender, race, and education within cohorts, finding that heterogeneity within cohorts is much greater than changes across recent cohorts. We first describe population trends using the Current Population Survey. Then, using the Health and Retirement Study, we find that the large majority of people who work longer (defined as employed at some point between ages 62 and 66) are those who were continuously employed during their 50s. The likelihood of working longer is strongly associated with employment stability in one's 50s, even when we take sociodemographic characteristics, pensions, wealth, work history, and health conditions into account.

We find that a substantial proportion of Americans are unlikely to be strong candidates for working longer. Continuous employment during one's 50s is a strong predictor of working longer, yet only about half of Americans – about 61 percent of men and 43 percent of women – are in continuous employment during their 50s. In other words, for many Americans, difficulties with working longer appear to start not in the mid- to late-60s but a decade or more earlier. Working longer starts younger than we might think.

There are strong social gradients, especially by education, in employment rates across the life course. Likewise, we find strong social gradients in the proportion of people in their 50s who are in continuous employment (Steady Ins) or continuous non-employment (Steady Outs). About two-thirds of college graduates are continuously employed during their 50s, compared to 36 percent of those without a high school diploma. Only 6 percent of college graduates never work for pay in their 50s, compared to about a third of those without a high school degree. Among those who were continuously not employed, about 60 percent of men and 27 percent of women received Social Security Disability Insurance benefits at some point during their 50s,

suggesting that many of those who have left employment before their 50s have impairments that limit their capacity to work.

Changes *during* one's 50s are more similar across sociodemographic groups, however. Although disadvantaged groups start from a much lower base, employment rates fall by about 20 percentage points among *all* groups between ages 50 and 60. Similarly, roughly a third of all sociodemographic groups experience some sort of intermittent employment pattern during their 50s. These results resemble Maestas' (2010) finding that there is little socioeconomic gradient to "unretirement." Future research needs to examine the reasons that Americans experience intermittent employment during their 50s.

Most of our findings are concerning news for prospects of working longer. However, our examination of work histories before the early 50s suggests reasons for optimism and a potential focus for policy solutions. Less than 1 percent of men and 4 percent of women say they had never worked for pay. Even among those who are not employed during the run-up to traditional retirement ages, a large majority say they last worked after age 40. Some experience of paid work appears to be nearly universal. As a result, there may be many missed opportunities to retain people in the labor force earlier in life.

From a policy perspective, a key reason to favor working longer is that continued employment may improve the financial well-being of individuals and their families, supplementing income from Social Security, pensions, and personal retirement savings. Our results show that the most vulnerable groups – those who are most likely to lack adequate retirement income – are least likely to have steady employment in their 50s that could provide a

foundation for working longer in their 60s. As it currently stands, working longer is not a realistic cure for retirement insecurity for many Americans.¹²

In order to succeed, interventions must be targeted toward moments where change is possible. Our findings, seen with a life course perspective, are most consistent with social trajectory models. That is, factors such as educational attainment shape individuals' employment stability during their 50s, but employment stability during one's 50s itself shapes further later-life employment. Our results suggest that policies geared toward improving the quality and consistency of employment earlier in the life course, especially among disadvantaged groups, may increase rates of working longer.

¹² Some proponents argue that working longer will boost national income by increasing labor supply among older workers. However, those who leave the workforce at earlier ages are disproportionately those with less education and lower wages. Thus, increasing labor force participation rates among older low-wage workers is likely to have only modest effects on national income.

References

- Abraham, Katharine G., Brad Hershbein, and Susan N. Houseman. 2021. "Contract Work at Older Ages." *Journal of Pension Economics & Finance* 20 (3): 426–47. https://doi.org/10.1017/S1474747220000098.
- Berkman, Lisa F., and Ichiro Kawachi. 2014. "A Historical Framework for Social Epidemiology." In *Social Epidemiology*, edited by Lisa F. Berkman, Ichiro Kawachi, and M. Maria Glymour. Oxford: Oxford University Press.
- Binder, Ariel J., and John Bound. 2019. "The Declining Labor Market Prospects of Less-Educated Men." *Journal of Economic Perspectives* 33 (2): 163–90. https://doi.org/10.1257/jep.33.2.163.
- Burtless, Gary, and Joseph F. Quinn. 2002. "Is Working Longer the Answer for an Aging Workforce?" Boston, MA: Center for Retirement Research at Boston College. http://fmwww.bc.edu/EC-P/wp550.pdf.
- Cahill, Kevin E., Michael D. Giandrea, and Joseph F. Quinn. 2006. "Retirement Patterns from Career Employment." *The Gerontologist* 46 (4): 514–23.
- Ciecka, James E., and Gary R. Skoog. 2017. "Expected Labor Force Activity and Retirement Behavior by Age, Gender, and Labor Force History." *Statistics and Public Policy* 4 (1): 1–8. https://doi.org/10.1080/2330443X.2017.1358125.
- Coglianese, John. 2018. "The Rise of In-and-Outs: Declining Labor Force Participation of Prime Age Men." Working Paper.

http://econweb.umd.edu/~davis/eventpapers/CoglianeseRise.pdf.

- Coile, Courtney C. 2015. "Economic Determinants of Workers' Retirement Decisions." *Journal* of Economic Surveys 29 (4): 830–53. https://doi.org/10.1111/joes.12115.
- ———. 2019. "Working Longer in the United States: Trends and Explanations." In Social Security Programs and Retirement around the World: Working Longer, edited by Courtney C. Coile, Kevin Milligan, and David A. Wise, 299–324. Chicago: University of Chicago Press. https://www.nber.org/chapters/c14052.
- Cutler, David M., Ellen Meara, and Seth Richards-Shubik. 2011. "Health Shocks and Disability Transitions Among Near-Elderly Workers." *Boston College Retirement Research Center Working Paper*, no. 11–08. http://crr.bc.edu/wp-content/uploads/2011/08/Health-Shocks.pdf.
- Elder, Glen H., Monica Kirkpatrick Johnson, and Robert Crosnoe. 2003. "The Emergence and Development of Life Course Theory." In *Handbook of the Life Course*, edited by Jeylan T. Mortimer and Michael J. Shanahan. New York: Kluwer Academic/Plenum Publishers.
- Flood, Sarah, Miriam King, Renae Rodgers, Steven Ruggles, and J. Robert Warren. 2020. Integrated Public Use Microdata Series, Current Population Survey: Version 8.0. [Dataset]. Minneapolis, MN: IPUMS. https://doi.org/10.18128/D030.V8.0.
- Ghilarducci, Teresa. 2021. "Making Old People Work: Three False Assumptions Supporting the 'Working Longer Consensus." *Politics & Society* 49 (4): 549–74. https://doi.org/10.1177/0032329220987084.
- Goldin, Claudia, and Lawrence F. Katz, eds. 2018. *Women Working Longer: Increased Employment at Older Ages*. Chicago: University of Chicago Press.
- Han, Shin-Kap, and Phyllis Moen. 1999. "Clocking Out: Temporal Patterning of Retirement." *American Journal of Sociology* 105 (1): 191–236. https://doi.org/10.1086/210271.

- Health and Retirement Study, (RAND HRS Longitudinal File 2018 (V1); RAND HRS 1992 Fat File (V1B); RAND HRS 1998 Fat File (V2C)) public use dataset. Produced and distributed by the University of Michigan with funding from the National Institute on Aging (grant number NIA U01AG009740). Ann Arbor, MI, (2021; 1992; 1998).
- Johnson, Richard W., and Peter Gosselin. 2018. "How Secure Is Employment at Older Ages?" Urban Institute.

https://www.urban.org/sites/default/files/publication/99570/how_secure_is_employment_ at_older_ages_2.pdf.

- Liebman, Jeffrey B. 2015. "Understanding the Increase in Disability Insurance Benefit Receipt in the United States." *Journal of Economic Perspectives* 29 (2): 123–50. https://doi.org/10.1257/jep.29.2.123.
- Liu, Su, and David Stapleton. 2010. "How Many SSDI Beneficiaries Leave the Rolls for Work? More Than You Might Think." Disability Policy Research Brief 10–01. Mathematica Policy Research.

https://www.ssa.gov/disabilityresearch/documents/TTW5_Brief_2_DIcohort_REV2.pdf. Maestas, Nicole. 2010. "Back to Work: Expectations and Realizations of Work after

- Retirement." *Journal of Human Resources* 45 (3): 718–48. https://doi.org/10.3368/jhr.45.3.718.
- Maestas, Nicole, Kathleen J. Mullen, David Powell, Till von Wachter, and Jeffrey B. Wenger.
 2017. "The Value of Working Conditions in the United States." In 19th Annual Joint Meeting of the Retirement Research Consortium. Washington, D.C.
- Moen, Phyllis. 2016. *Encore Adulthood: Boomers on the Edge of Risk, Renewal, and Purpose*. New York, NY: Oxford University Press.
- RAND HRS Longitudinal File 2018 (V1); RAND HRS 1992 Fat File (V1B); RAND HRS 1998 Fat File (V2C). Produced by the RAND Center for the Study of Aging, with funding from the National Institute on Aging and the Social Security Administration. Santa Monica, CA (February 2021; June 2004; April 2013).
- Scott, Judith, and Josie Hatalla. 1990. "The Influence of Chance and Contingency Factors on Career Patterns of College-Educated Women." *The Career Development Quarterly* 39 (1): 18–30. https://doi.org/10.1002/j.2161-0045.1990.tb00231.x.
- U.S. Bureau of Labor Statistics. 2019. "Employment Status of the Civilian Noninstitutional Population by Age, Sex, and Race." https://www.bls.gov/cps/cpsaat03.htm.
- Warner, David F., Mark D. Hayward, and Melissa A. Hardy. 2010. "The Retirement Life Course in America at the Dawn of the Twenty-First Century." *Population Research and Policy Review* 29 (6): 893–919. https://doi.org/10.1007/s11113-009-9173-2.



Figure 1. Across birth cohorts, the employment rate is falling during prime ages and rising at older ages







Figure 3. Employment rates by race and education across the life course

Figure 4. Disparities in employment rates by education, ages 50 to 61 and ages 62 to 70, from 1962 to 2019



Men

Women









Figure 6. Likelihood of working longer, by employment stability between ages 51 and 61



Figure 7. Employment stability between ages 51 and 61, by educational attainment









Figure 9. Predicted probability of working longer, by employment stability: Regression results



Figure 10. Proportion of adults who report ever receiving Social Security Disability Insurance (SSDI) benefits between ages 51 and 61, by employment pattern

Figure 11. Ages at which Steady Outs last worked



Appendix

Table A1.	Descriptive	statistics for	r the HRS	sample
-----------	-------------	----------------	-----------	--------

	Full Sample	By Employment Pattern in One's 50s				50s
		Steady Out	Low	Medium	High	Steady In
WORKING LONGER						
Employed Between Ages 62-66	0.54	0.04	0.18	0.42	0.53	0.80
EMPLOYMENT IN ONE'S 50s						
Employment Pattern, Ages 51-61						
Steady Out	0.15	Х				
Low Intermittent	0.14		Х			
Medium Intermittent	0.11			Х		
High Intermittent	0.09				Х	
Steady In	0.52					Х
SOCIO-DEMOGRAPHIC CHARACTERISTICS						
Education						
Less Than High School	0.16	0.34	0.20	0.15	0.09	0.11
High School	0.36	0.39	0.41	0.39	0.29	0.34
Some College	0.23	0.17	0.23	0.23	0.31	0.23
College Graduate	0.25	0.10	0.16	0.23	0.31	0.31
Race						
White	0.86	0.80	0.84	0.87	0.88	0.88
Black	0.10	0.13	0.12	0.09	0.09	0.08
Other Race	0.04	0.06	0.05	0.04	0.03	0.04
Female	0.50	0.71	0.59	0.53	0.49	0.41
Married or Partnered at First Interview	0.76	0.74	0.73	0.79	0.78	0.76

Cohort						
HRS Cohort (1936-1941)*	0.47	0.54	0.48	0.49	0.44	0.45
War Babies (1942-1947)	0.53	0.46	0.52	0.51	0.56	0.55
Age at First Interview	53.00	53.25	52.88	53.30	51.80	53.10
	1.79	1.85	1.78	1.75	1.10	1.80
U.S. Born	0.92	0.90	0.93	0.91	0.95	0.92
Region at First Interview						
New England	0.05	0.04	0.03	0.05	0.05	0.05
Middle Atlantic	0.14	0.16	0.16	0.14	0.09	0.13
East North Central	0.17	0.18	0.17	0.17	0.20	0.16
West North Central	0.08	0.04	0.08	0.09	0.08	0.10
South Atlantic	0.24	0.22	0.22	0.20	0.26	0.25
East South Central	0.05	0.05	0.06	0.04	0.04	0.06
West South Central	0.09	0.14	0.10	0.08	0.08	0.08
Mountain	0.05	0.05	0.05	0.05	0.06	0.05
Pacific	0.14	0.12	0.12	0.16	0.15	0.14
PENSION COVERAGE, WORK HISTORY, AND WEALTH						
Ever Covered by a Pension at First	0.66	0.34	0.60	0.72	0.73	0.75
Interview						
Share of Life Spent Working at	0.54	0.32	0.51	0.56	0.58	0.60
First Interview	0.20	0.25	0.22	0.18	0.15	0.14
Net Worth Percentile at First	51.42	43.08	51.14	54.14	54.08	52.89
Interview	28.67	31.52	29.07	27.55	26.85	27.79
HEALTH						
Number of Major Health Conditions	0.33	0.69	0.35	0.29	0.25	0.24
at First Interview (0-5)	0.61	0.85	0.61	0.56	0.54	0.50
Number of Minor Health	0.72	1.07	0.86	0.68	0.64	0.61
Conditions at First Interview (0-3)	0.79	0.91	0.79	0.79	0.75	0.73
Number of Difficulties with	0.13	0.53	0.19	0.10	0.04	0.03
Activities of Daily Living at Second Interview (0-5)	0.53	1.07	0.57	0.42	0.20	0.19

Ν	5,605	922	799	618	450	2,816
Condition in 50s						
At Least One New Minor Health	0.42	0.37	0.46	0.43	0.48	0.41
	0.40	0.27	0.46	0.42	0.40	0.41
Condition in 50s						
Condition in 50n	÷.27	0.00	0.09	0.01	0.29	0.22
At Least One New Major Health	0.27	0.33	0.39	0.31	0.29	0.22
at Second Interview (0-7)	1.08	2.29	1.82	1.40	1.24	1.20
at Saaan 1 Interniere (0,7)	1 60	2.20	1.02	1 10	1.24	1 20
Number of Functional Limitations	1.21	2.78	1.55	1.00	0.92	0.75
Living at Second Interview (0-3)						
	0.22	0.00	0.20	0.20	0.10	0.19
Instrumental Activities of Daily	0 29	0 53	0.28	0 23	0.18	019
Number of Difficulties with	0.06	0.21	0.07	0.04	0.03	0.03

Note: Standard deviations in italics. Statistics calculated using survey weights. Proportions may not sum to 1 due to rounding.

* We limit the HRS Original Cohort to individuals aged 51 to 56 at first interview to match the sampling design of the War Babies Cohort.

	Bivariate	+ SOC10- demographic	+ rension and	
		a e mo gr a prine	work history	+ Health
Employment pattern				
(omitted: Steady In)				
Steady Out	-0.763***	-0.753***	-0.784***	-0.766***
	(0.010)	(0.012)	(0.013)	(0.017)
Low Intermittent	-0.622***	-0.611***	-0.622***	-0.611***
	(0.018)	(0.018)	(0.017)	(0.017)
Medium Intermittent	-0.389***	-0.388***	-0.389***	-0.383***
	(0.026)	(0.026)	(0.025)	(0.026)
High Intermittent	0 270***	0.272***	0.274***	0.272***
	(0.030)	(0.029)	(0.029)	(0.029)
Educational attainment				
(omitted: High school diploma)		0.015	0.026	0.025
Less than high school		-0.013	-0.020	-0.023
		(0.018)	(0.018)	(0.018)
Some college		0.012	0.013	0.014
		(0.016)	(0.016)	(0.016)
College graduate		0.080***	0.082***	0.083***
		(0.023)	(0.023)	(0.023)
Race				
(omitted: White) Black/African American		0.050**	0.061***	0.057**
		(0.016)	(0.016)	(0.017)
Other		0.020	0.034	0.022
Other		(0.029)	0.034	(0.020)
		(0.027)	(0.028)	(0.028)
Gender		0.023	0.005	0.006
Female		(0.012)	(0.014)	(0.014)
Relationship status		0.017	0.009	0.006
Married or partnered at		(0.015)	(0.014)	(0.014)
first interview		()	()	()
Survey cohort		-0.006	-0.002	0.001
HRS Original Cohort		(0.012)	(0.012)	(0.012)

Table A2. Relationship between employment stability in one's 50s and working longer

Nativity Foreign born	0.032^{*} (0.015)	0.023	0.017 (0.014)
Pension coverage Pension coverage at first interview	()	-0.082*** (0.016)	-0.083*** (0.015)
Work history Share of life spent working at first interview		-0.039 (0.04)	-0.031 (0.041)
Wealth Net worth percentile at first interview		0.0005* (0.0002)	0.0004 (0.0002)
Health Number of major health conditions at first interview (0-5)			-0.021 (0.011)
Number of minor health conditions at first interview (0-3)			-0.008 (0.009)
Number of difficulties with Activities of Daily Living at second interview (0-5)			-0.003 (0.010)
Number of difficulties with Instrumental Activities of Daily Living at second interview (0-3)			0.007 (0.014)
Number of functional limitations at second interview (0-7)			0.001 (0.005)
At least one new major health condition in 50s			-0.046** (0.015)
At least one new minor health condition in 50s			0.003 (0.013)

Control for age at first interview	Ν	Y	Y	Y
Control for U.S. Census region at first interview	Ν	Y	Y	Y
Constant	0.804 ^{***} (0.009)	0.737 ^{***} (0.024)	0.806*** (0.036)	0.829 ^{***} (0.036)
R^2	0.373	0.383	0.389	0.392

Note: Coefficients from a linear probability model using HRS data, survey weights included. Standard errors in parentheses.

N=5605.* p < 0.05, ** p < 0.01, *** p < 0.001