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ABSTRACT

A majority of married couples in the United States take advantage of the fact that employers often provide health insurance coverage to spouses. When the older spouses become eligible for Medicare, however, many of them can no longer provide their younger spouses with coverage. In this paper, we study how spousal eligibility for Medicare affects the health insurance and health care access of the younger spouse. We find spousal eligibility for Medicare results in the younger spouse having worse insurance coverage and reduced access to health care services.

JEL Classification Codes: I13, J3

Key Words: Health Insurance, Medicare, Individual Market, Marriage, Employer Benefits, ACA
The Effect of Medicare Eligibility on Spousal Insurance Coverage

Marcus Dillender* and Karen Mulligan†

Abstract

A majority of married couples in the United States take advantage of the fact that employers often provide health insurance coverage to spouses. When the older spouses become eligible for Medicare, however, many of them can no longer provide their younger spouses with coverage. In this paper, we study how spousal eligibility for Medicare affects the health insurance and health care access of the younger spouse. We find spousal eligibility for Medicare results in the younger spouse having worse insurance coverage and reduced access to health care services.

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The majority of married couples in the United States take advantage of the ability to receive insurance through a spouse’s employer. In 2010, 56.9 percent of dual-working couples purchased health insurance through one employer’s plan even if both members of the couple had access to insurance through their own employers. For couples who only had access to one employer-sponsored plan, both members received insurance coverage through that plan 68.7 percent of the time (Janicki (2013)). However, Medicare covers the vast majority of individuals once they reach the age of 65. Medicare provides high-quality coverage for a low premium, but unlike employer-sponsored health insurance coverage, Medicare does not allow eligible individuals to provide health insurance to spouses. Thus, for many couples, Medicare represents a transition from a system that covers couples to a system that covers only individuals. This transition has the potential to disrupt the health insurance coverage of younger spouses since many receive insurance through their older spouses’ employers. In this paper, we estimate the effect of an older spouse becoming eligible for Medicare on the younger spouse’s health insurance coverage and health care access.

Much research has been done on the effects of Medicare on the eligible population. Several papers have documented how Medicare increases the utilization of health services and reduces out-of-pocket spending (McWilliams et al. (2003); McWilliams et al. (2007); Card et al. (2008); Polsky (2009)). Other research has focused on establishing the link between the increased usage of services and life expectancy. Finkelstein and McKnight (2008) study the effects of Medicare by comparing how death rates change after Medicare’s introduction for people ages 65 to 74 versus how they change for people ages 55 to 64. They find no evidence that Medicare affects mortality rates. They do, however, find that the introduction of Medicare was associated with a large reduction in out-of-pocket spending and argue that the reductions in risk exposure alone can justify approximately two-fifths of the cost of Medicare. Card et al. (2009) use a regression discontinuity strategy along with death records matched to hospital discharge files and find that patients receiving more services because of Medicare results in a drop in death rates for people admitted to emergency rooms for certain
conditions. David et al. (2012) use claims data from North Carolina and Florida and find that people delay certain services until they are eligible for Medicare.

A separate literature has found that adults ages 55 to 64 have worse access to health insurance and health care than younger adults (Morrisey and Jensen (2001); Holahan (2004); Xu et al. (2006); Johnson (2007)). This inferior access to insurance and health care persists despite the fact that the near-elderly are more likely to experience illnesses and high medical expenses than younger cohorts (Brennan (2000); Holahan (2004); McWilliams et al. (2004)).

The purpose of this paper is to study how older spouses becoming eligible for Medicare changes the health insurance and health care access of younger spouses. The paper draws on two data sets that are suited to different empirical strategies to estimate the effect of Medicare on younger spouses. The Health and Retirement Study (HRS) provides panel data on health insurance and health care access, which allows us to estimate models that control for individual fixed effects. The National Health Interview Surveys (NHIS) do not track people over time, but they interview more people than the HRS. With NHIS data, we identify health insurance variables at the spouse’s age in quarters and implement a regression discontinuity strategy.

The two approaches and data sets yield similar results. We do not find strong evidence that older spouses becoming eligible for Medicare results in a decrease in overall health insurance coverage for younger spouses. However, older spouses becoming eligible for Medicare results in a decrease in employers paying for the insurance of younger spouses, a decrease in younger spouses having insurance through a spouse’s employer, and an increase in younger spouses having insurance purchased directly from an insurance company. Prior to the Affordable Care Act (ACA), privately purchased insurance tended to be more expensive and provide worse coverage than employer-based insurance. As our paper draws on pre-ACA data, we find evidence that the coverage that people in our sample switch to provides fewer benefits. Specifically, we find strong evidence that older spouses turning 65 is associated with less dental coverage for younger spouses and suggestive evidence that it is associated
with less prescription drug coverage. We also find some evidence that suggests that younger
spouses who had insurance through their spouses’ employers before their spouses became
eligible for Medicare go to the doctor less often and that women are less likely to have mam-
mograms or Pap smears. We find that turning 65 is not associated with major changes in
retirement decisions, which is consistent with previous research. We also find no evidence of
differential effects for people whose spouses did and did not retire before Medicare, which
suggests that choices made by older spouses are not the main driving force in this reduction
in coverage. Instead, the reduction in coverage appears to come from employer policies.

Recent research suggests that the ACA will be successful in helping the formerly unin-
sured and underinsured by improving the individual market.\(^1\) Our research suggests that the
ACA may help people who lose coverage when their spouses become eligible for Medicare.
However, a number of issues remain. We conclude the paper by discussing the implications
of the ACA.

This paper contributes to the literature by being one of the first papers to study the effect
of Medicare on the insurance and health care access of younger spouses. Although much
research has focused on the positive benefits of Medicare on the eligible population, the
results from this paper suggest that switching from an insurance system that allows people
to provide coverage for their spouses to a system that does not is not always a smooth
process. In the case of Medicare, it disrupts health insurance coverage and has the potential
to leave younger spouses with inferior coverage because younger spouses tend to lose access
to insurance through an employer.

To our knowledge, only one other paper has studied the effect of Medicare on younger
spouses. Witman (2013) has a current working paper that uses NHIS data from 1993 to 2011
and focuses on heterogeneity of the effects of spouses becoming eligible for Medicare between
men and women. She finds evidence that men are more likely to be uninsured when their older

\(^{1}\)For example, Schoen et al. (2011) calculate that 81 million adults were uninsured or underinsured in
2010. They estimate that the ACA will reduce the number of underinsured by 70 percent. Hill (2012)
simulates what people’s medical costs from 2001 to 2008 would have been under the ACA and finds that the
ACA would have reduced the probability that people would have incurred very high out-of-pocket spending.
wives become eligible for Medicare. Our paper differs from Witman’s in a number of ways. First, we focus on a more recent sample from the NHIS (2005 to 2011). Focusing on more recent data is important since the health insurance and health care landscapes have changed drastically over the last two decades. Using more recent data allows us to pinpoint the most current issues that arise from spousal eligibility for Medicare and to provide discussion of our results within the context of the recently implemented ACA. While our smaller NHIS sample precludes estimating heterogeneous effects by gender, we are able to take advantage of insurance richness variables, such as prescription drug coverage and dental coverage, that were recently added to the NHIS. Unlike Witman, we also use HRS data. Not only do these data allow us to include an individual fixed effect in our estimation strategy, they also allow us to examine the impact of Medicare eligibility on younger spouses’ health care utilization and to better explore whether older spouses’ retirement decisions drive the results.

The rest of the paper unfolds as follows. The next section discusses how the older spouse becoming eligible for Medicare could affect the younger spouse and what options are available to younger spouses. Section 2 discusses the HRS and the NHIS. Section 3 discusses the estimation strategy and presents the results. Section 4 considers how retirement may factor into the health insurance changes. Section 5 discusses the results in the context of the ACA, and Section 6 concludes.

1 Conceptual Framework and Institutional Background

A majority of working-age Americans have health insurance through either their employers or their spouses’ employers. When people become eligible for Medicare, firms may stop providing them and their spouses with health insurance (Medicare.gov). Older spouses can

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2According to Kaiser’s 2013 Employer Benefit Survey, 33 percent of firms offering health insurance benefits to retirees stop offering these benefits once the retirees become eligible for Medicare (Kaiser Family Foundation (2013a)).
access high-quality health insurance through Medicare at a fairly low monthly premium. Younger spouses, however, will not have this option yet.

If firms are no longer willing to pay for health insurance when the older spouse is eligible for Medicare, younger spouses have several options available to them. One is that they may choose to remain on their spouses’ employers’ plans and pay the full premium of the plan themselves under the Consolidated Omnibus Budget Reconciliation Act (COBRA) of 1985. The federal COBRA law allows family members who lose access to employer-sponsored health insurance as a result of an older spouse’s Medicare eligibility to remain on the employers’ plans for up to 36 months (Employee Benefits Security Administration). Two issues with COBRA are that this coverage is only temporary and that the premiums may be high. Likely due in large part to the financial burden, less than 10 percent of eligible people enrolled in COBRA in 2006 (Doty et al. (2009)).

Younger spouses may also choose to purchase health insurance from the individual market. Prior to the ACA, the individual market had several disadvantages compared to employer-sponsored coverage. One was that employer-sponsored coverage tended to be cheaper than coverage available in the individual market.\(^3\) Another issue was that insurers in the individual market were not required to accept all individuals who applied in most states.\(^4\) Thus, during the time period studied, individual insurance was not guaranteed, could be expensive, and did not always provide rich coverage. Beginning in 2014, the ACA mandated that insurers in the individual market accept all who apply and provide certain benefits. The ACA also implemented measures aimed at making individual policies cheaper. We discuss the implications of these changes as well as other changes instituted by the ACA.

\(^3\)As Currie and Madrian (1999) argue, employers have been able to provide health insurance at a cheaper rate than health insurance could be purchased on the private market because of a tax structure that favors employers providing insurance and because risk-pooling is typically easier for employers than for individuals. Employer-sponsored health insurance also tends to have lower administrative costs and benefit from economies of scale. Furthermore, as Buntin et al. (2004) argue, concerns over adverse selection have been a major driving force in the supply side of the individual market. Since people in the individual market only make voluntary purchases, health insurance companies are less likely to offer health insurance for elective services since only people planning on using these services would purchase the policies.

\(^4\)Only six states required insurers to accept anyone applying for coverage as of 2013 (Kaiser Family Foundation (2014)).
in Section 5.

In addition to the individual market, younger spouses who are employed can switch to insurance through their own employers. Whether this insurance will be better or worse than their previous coverage is unclear. If dual-working couples decide to obtain insurance jointly on one spouse’s plan, it makes sense to assume they choose the plan that either provides better benefits or provides similar benefits but at a lower cost. To the extent that firms have similar family and individual coverage, when younger spouses switch from their spouses’ insurance to their own employers’ insurance, we expect coverage to decline, costs to increase, or both. However, some firms may provide poor coverage for families and excellent coverage for individuals, meaning some younger spouses may see the quality of their insurance rise.

Another option for younger spouses is to seek insurance through a non-employer group plan, such as one offered by the American Association of Retired Persons. These plans allow for risk-pooling but are not tax advantaged and do not have firms paying any part of the premiums. Younger spouses who lose insurance can also turn to Medicaid if they qualify.\textsuperscript{5} Younger spouses switching to Medicaid means the government will have to pay for their insurance. Finally, younger spouses can become uninsured. Doing so would increase out-of-pocket risk and may make accessing health care difficult.

Despite having multiple options to choose from to remain insured, younger spouses may have to pay higher premiums for health insurance, receive lower benefits, or both. Younger spouses receiving lower benefits or those without health insurance would have to pay more for health care, and as a result their usage of health care services may fall. Moreover, lower benefits also increase out-of-pocket risk.\textsuperscript{6} Regardless of the quality of coverage people find, younger spouses will have their coverage disrupted if they switch from insurance through their spouse’s employer. Switching insurance is associated with being less likely to have a

\textsuperscript{5}In states not expanding Medicaid, it is possible for people to make too much money to qualify for Medicaid but not enough to qualify for a subsidy, meaning some low-income younger spouses may not qualify for Medicaid or the subsidies.

\textsuperscript{6}Out-of-pocket risk increasing is notable since Finkelstein and McKnight (2005) find that reducing out-of-pocket risk has been found to be one of the major effects of Medicare.
regular doctor and being more likely to delay necessary care (Lavarreda et al. (2008)).

While losing access to insurance through an employer may lead to worse coverage for younger spouses, couples may also experience a wealth effect from Medicare if they were paying a lot of money to insure the older spouse in the absence of Medicare. The possibility of a wealth effect is especially large if the family did not have access to employer-sponsored health insurance before the older spouse became eligible for Medicare. Having to pay less for the health care of older spouses could allow couples to spend more money on the health insurance and health care of younger spouses.

2 Data

2.1 Health and Retirement Study

This paper draws on data from the 2002, 2004, 2006, 2008, and 2010 waves of the HRS. The HRS asks about insurance coverage and health care usage over the previous two years for individuals 50 and older as well as for their spouses if they are married. We consider whether the individual has health insurance, the source of that coverage, the quality of the coverage, and whether or not the individual visits the doctor or dentist. We also consider the use of preventive services, even though only a subsample of the HRS is asked about them. Preventive service measures include flu shots and cholesterol tests for men and women and mammograms and Pap smears for women only.

The HRS sample weights allow us to estimate the number of older spouses becoming eligible for Medicare whose employers cover their younger spouses. As of 2010, around 16 million people in the United States were going to turn 65 within the next five years. Of these people, 1.6 million had a spouse who reported being at least one year younger and receiving insurance through the older spouse’s employer. Thus, around 10 percent of people becoming eligible for Medicare in the next five years were providing a younger spouse with insurance through an employer and have had to deal with a possible disruption to that coverage upon
turning 65.\footnote{Note that this number is a slight underestimate of the true number of people receiving insurance through their older spouses’ employers since the HRS only provides age in years, meaning we cannot identify age differences smaller than one year.}

For the analysis, we restrict the sample to include younger spouses who are 64 or younger and whose older spouses are ages 55 to 75. The HRS asking about health insurance and health care usage over the past two years means that people with spouses ages 65 and 66 may be reporting these variables for when their spouses were not eligible for Medicare. This noise in the timing of the coverage and services has the potential to bias the estimates towards zero but is only an issue for a relatively small part of the sample.\footnote{Alternatively, we could drop people with spouses ages 65 and 66 from the sample. We lose some precision when we do so, but the estimates are similar to the estimates presented in the paper, suggesting that this bias is not a major concern.} The sample has two noteworthy characteristics. First, 84 percent of the sample is female. The majority of the sample is female because the paper focuses on younger spouses, who tend to be female. A second implication of the sample selection rule is that the sample size decreases with the older spouse’s age. The sample size decreases with the older spouse’s age because for people to be much older than 65 and still have a spouse not eligible for Medicare, the age difference must be large. The decreased sample size results in more noise for higher spousal ages.

We take advantage of the panel structure of the data in a variety of ways. First, we include an individual fixed effect in the estimation, which means the effect of a spouse becoming eligible for Medicare is identified by within-person variation in spousal Medicare eligibility. Second, we exclude from the sample individuals who were on Medicare before turning 65 and those who were still ineligible for Medicare even after turning 65. This sample restriction allows us to focus more narrowly on the affected population. Finally, in addition to showing results for the full sample with everyone regardless of their initial health insurance coverage, we also show results focusing only on younger spouses who had insurance through their spouses’ employer before the older spouses became eligible for Medicare.

The means of the key outcome variables are shown in Table 1. The vast majority of people in the sample have health insurance, and most people with health insurance obtain it
through an employer. The likelihood of having health insurance through a spouse’s employer is lower for people with spouses eligible for Medicare.

2.2 National Health Interview Survey

The paper also uses data from the 2005 to 2011 NHIS. The NHIS is a survey of a stratified random sample of the U.S. population that asks respondents detailed questions about health insurance. As with the HRS, the NHIS has information on all individuals in the household, which we use to calculate the spouse’s age in quarters.

With the NHIS, we focus on three outcomes—whether the employer pays for health insurance, whether the individual has health insurance, and the source of insurance coverage—but we do not drop any couples from the sample based on insurance status. We will also consider the richness of the coverage by examining the individual’s prescription and dental coverage and whether or not that person reports having a high deductible plan. As with the HRS, we focus on married couples and exclude from the sample older spouses and anyone over the age of 64. Since we implement a regression discontinuity strategy with NHIS data and cannot include an individual fixed effect, we restrict the sample to be only younger spouses with older spouses ages 59 to 71.

The means of the key variables for the full sample as well as for people with spouses at ages 64 and 66 are shown in Table 2. Individuals with spouses eligible for Medicare are less likely to have insurance through an employer than individuals with spouses younger than 65. Figure 1 displays histograms of age differences between couples. The first histogram is the age differences for all couples where at least one member is older than 50, while the second histogram is the age differences for all couples in our sample. The distributions are fairly similar, except our sample includes no couples the same age by definition. Among couples with at least one member older than 50, 94 percent have an age difference of at least one

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9The sample sizes are smaller for dental coverage because the NHIS only began asking about dental coverage in 2007.

10The NHIS asks about the health care usage of a randomly selected adult in the sample. Unfortunately, the sample sizes are too small for meaningful analysis.
quarter, while 83 percent have an age difference of at least one year. Slightly more than one-third of couples have an age difference of at least five years. These numbers illustrate that sizable age differences among couples are common.

3 Empirical Strategy and Results

3.1 Health and Retirement Study

With the HRS data, we estimate fixed effects models of the following form:

\[ y_{it} = \gamma_t + X_{it}\alpha + f(a_{it}) + D_{it}\beta + \alpha_i + u_{it}, \]

where \( i \) indexes the individual, \( t \) indexes the year, \( y \) represents the various dependent variables, \( \gamma \) is a full vector of year indicator variables, \( X \) is a vector of demographic controls, \( f(a) \) is a quartic polynomial in the older spouse’s age, \( D \) is an indicator variable equal to 1 if the individual’s spouse is 65 or older, \( \alpha \) is an individual fixed effect, and \( u \) is an unobserved error component. Note that coefficients on fixed demographic characteristics are not identifiable, meaning \( X_i \) consists only of a full vector of indicator variables for age in quarters. The \( \beta \) coefficient is the effect of an older spouse becoming eligible for Medicare and is identified by within-person variation in spousal eligibility for Medicare after controlling for a trend in spouse’s age, the individual’s age, and a time trend.

The results from estimating Equation (1) are shown in Table 3. The likelihood of having health insurance through a spouse’s employer falls by 4.2 percentage points after the older spouse becomes eligible for Medicare, which equals a 10.8 percent fall in the likelihood of having insurance through a spouse’s employer. The likelihood that younger spouses have insurance through their own employers does not change. The decrease in insurance through a spouse’s employer is offset by an increase in privately purchased health insurance, which increases by 3.6 percentage points, or 72 percent.
The switch to privately purchased health insurance is important. If people had preferred privately purchased insurance to insurance through an employer, they would have already purchased their insurance directly from an insurance company instead of through their spouse’s employer before their spouse became eligible for Medicare. Additionally, much research prior to the ACA has documented disparities in the quality of coverage and in health care access between people with insurance through an employer and those who purchased insurance directly from an insurance company.\textsuperscript{11}

Although we lack data on coinsurance rates and deductibles, we consider dental coverage, health care utilization, and prescription drug coverage. It is important to remember that the HRS interviewed individuals in our sample prior to the ACA making important reforms to the individual market. For our sample, we find that a spouse becoming eligible for Medicare results in a fall in dental insurance of 5.4 percentage points, which equals a 9.2 percent decrease in having dental coverage. Younger spouses do not appear to go to the doctor less often. The coefficient for the log of doctor visits is negative but insignificant, as is the coefficient on having a mammogram or Pap smear. The coefficient for having prescription drug coverage is not statistically different from zero.

Next, we estimate Equation (1) with health insurance richness and health care usage variables while restricting the sample to individuals who had insurance through their older spouses’ employers before the older spouse became eligible for Medicare. We would expect any decreases in health insurance richness and health care usage to be driven by individuals who had insurance through their spouses’ employers before the older spouse became eligible for Medicare. The results are shown in Table 4. As we would expect, most of the changes appear to be happening for people who previously had insurance through their spouses’ employers. The coefficient on the log of doctor visits is now significant at the 10 percent

\textsuperscript{11}Pauly and Lieberthal (2008) find that people with privately purchased insurance are more likely to transition into being uninsured than people with group coverage. McDevitt et al. (2010) find that while employer-sponsored coverage pays for 80 percent of all charges, individual plans only cover 64 percent of medical costs. Simantov et al. (2001) study the near-elderly on non-group plans and find that they are more likely to go without care and to experience high medical bills relative to their incomes than people with insurance through their employers.
level, suggesting that a spouse becoming eligible for Medicare may result in fewer medical visits at the intensive margin. The negative coefficient on having a mammogram or Pap smear is now significant at the 10 percent level. Although we should be cautious with these estimates since the sample sizes are small and we did not find significant effects with the full population, these results provide suggestive evidence that younger spouses in our sample receive less medical care after their spouses become eligible for Medicare. It is notable that the female-specific preventive care is what suffers since the majority of younger spouses are female. This finding is also important, as some guidelines recommend annual screening for women over the age of 40 (American Cancer Society).

### 3.2 National Health Interview Surveys

With the NHIS data, we identify the effect of Medicare on younger spouses by implementing a regression discontinuity design. The equation we estimate is of the following form:

$$y_i = \gamma_t + X_i \alpha + f(a_i) + D_i \beta + \eta_i.$$  

(2)

All variables are defined as before except that $X$ now includes controls for sex, race, and education in addition to the full vector of indicator variables for age in quarters and $f(a)$ is modeled as a cubic polynomial because of the reduced age ranges.

The key identifying assumption of Equation (2) is that individuals on either side of the cutoff are the same except that individuals with a spouse 65 or older have spouses eligible for Medicare. This assumption that people on either side of the Medicare cutoff are similar is a common assumption in the Medicare literature. Our assumption is even less restrictive since we can include indicators for each possible age of the individual. The only slight difference is the age of the spouse, which is the main determinant of Medicare eligibility.

Figure 2 shows the spouse’s age profiles for various outcomes of interest. Figure 2 reveals a sharp and large discontinuity in having a spouse on Medicare as the spouse turns
There appears to be a smaller but similarly sharp decrease in the likelihood that an employer pays for the younger spouse’s insurance. Although these variables show an immediate, discontinuous jump at age 65, we might not expect an immediate effect on the health insurance variables because people often sign up for annual plans. Thus, we may expect the age of 65 to be a transition year. The slopes of both insurance through an employer and privately purchased health insurance appear to change at age 65 for one year before returning to the original slopes. Therefore, we estimate two specifications of Equation (2). One includes people with spouses age 65, while the other excludes them. The profiles with respect to spouse’s age for having any health insurance and public health insurance appear to be relatively flat around a spousal age of 65 for both variables. The bottom right corner of Figure 2 focuses on insurance richness variables. Having prescription drug coverage appears to fall at age 66, while having dental coverage appears to experience a discontinuity at age 65.

The \( \beta \) coefficients from estimating Equation (2) for various dependent variables are shown in Table 5 and generally corroborate the results found in Section 3.1. The probability of having a spouse on Medicare increases by about 70 percentage points once older spouses turn 65. The older spouse’s employer is between 7 and 8 percentage points less likely to pay for the health insurance of the younger spouse, representing approximately an 11 percent decline in employers paying for coverage. The older spouse becoming eligible for Medicare results in a fall in employer-sponsored health insurance of between 3.1 and 4.7 percentage points. The difference in these numbers is suggestive that some younger spouses may stay on

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12 As can be seen in Figure 2, we do not drop people with spouses on Medicare due to disability before the spouse turned 65 with the NHIS data. The reason for including these people is that since the NHIS is cross-sectional, we can only observe them before they turn 65, and we want people on either side of the threshold to be as comparable as possible.

13 An alternate modeling approach would be to model the change happening at age 65 separately. We have chosen not to model 65 separately because the slope appears to return to similar levels as before the spouse was age 65 by the time the spouse is age 66. Thus, we would not have many observations to estimate the change of slope. Furthermore, we are mainly interested in the effect of spousal eligibility for Medicare once people have fully transitioned from their pre-Medicare insurance.

14 One thing to note from Figure 2 is how flat the profiles generally are leading up to spouses turning 65. The profiles falling before spouses became eligible for Medicare would imply that couples were shuffling insurance coverage in anticipation of Medicare, which would bias all of the results toward zero.
plans from their older spouses’ employers and pay the full premium under COBRA. As with the HRS data, the decrease in insurance through an employer is mostly offset by increases in health insurance purchased directly from an insurance company, as there appears to be no evidence of a decrease in the likelihood of having insurance.

As in Section 3.1, we find evidence that a spouse turning 65 results in younger spouses being less likely to have dental coverage for our sample. The 5.2 to 7.2 percentage point drop is approximately a 7 to 10 percent decline in dental coverage. The main difference between the NHIS results and the HRS results is that the $\beta$ coefficient with prescription drug coverage is marginally significant in the specification that excludes people age 65, suggesting that younger spouses may experience a decline in prescription coverage when their older spouses become eligible for Medicare. The coefficients on high deductible coverage are insignificant. Overall, these results provide evidence that spousal eligibility for Medicare resulted in younger spouses having less comprehensive coverage prior to the ACA.

It is worth comparing our NHIS results to those found in Witman (2013). Our findings that younger spouses are on average not less likely to be insured when older spouses become eligible for Medicare are consistent with Witman’s findings for younger female spouses, which is not surprising since women make up the vast majority of younger spouses in our sample and the vast majority of younger spouses in general. Unlike the current paper, Witman is able to consider heterogeneity by gender and finds that younger male spouses experience an increase in the likelihood of being uninsured.\footnote{Witman (2013) examines utilization in the NHIS but finds no evidence that spousal Medicare eligibility affects usage. She runs into power issues, though, because the NHIS only asks a subsample about health utilization.} Unlike Witman, we also show that employers are less likely to pay for health insurance, meaning families are more likely to be responsible for paying for all of their insurance. The more recent data also allow us to show that dental
and prescription drug coverage fell once the older spouse turned 65 prior to the ACA.¹⁶ ¹⁷

4 Medicare and Retirement Decisions

We have shown that a spouse becoming eligible for Medicare results in younger spouses having less access to insurance through an employer. This decreased access could be driven by employer practices or by decisions made by couples. We now consider two possible decisions of couples to see if they can account for the health insurance changes we observe. The first is that younger spouses stop working when older spouses become eligible for Medicare. The second is that older spouses stop working upon turning 65. Large changes in employment as the older spouse turns 65 could suggest that retirement decisions made by couples are responsible for the insurance effects documented earlier.¹⁸

To test for retirement changes when older spouses turn 65, we first use HRS data and estimate Equation (1) with employment variables as the dependent variables. In column 1 of the top panel of Table 6, the dependent variable is an indicator equal to one if the individual is working. The coefficient on the older spouse turning 65 is -0.003 and statistically indistinguishable from zero. In column 2 of the top panel, the dependent variable is one if the older spouse is working and zero otherwise. The coefficient of 0.009 suggests that older spouses are not timing their retirement with their Medicare eligibility.

The bottom panel of Table 6 uses NHIS data to test for changes in employment associated with the older spouse turning 65. The first two columns of the bottom panel of Table 6 display estimates of Equation (2) with the dependent variable being an indicator for the individual’s

¹⁶These differences illustrate the trade-off between Witman using data since 1993 and us using data since 2005. She has the ability to test for heterogeneous effects for a relatively small subpopulation, while we are able to consider a wider set of variables.

¹⁷It is also worth noting that we use a slightly different empirical specification and different sample selection rules as well. The results we obtain from applying her exact estimating equation to our sample are very similar to what we present in the paper.

¹⁸Other papers have considered how Medicare affects retirement and tend to find little or weak evidence of an effect of Medicare on retirement decisions. Lumsdaine et al. (1996) report some evidence of a spike in retirement at age 65. Card et al. (2008) estimate no effect or a small effect of Medicare on retirement, depending on the specification. People generally find more of an effect at age 62, since that is the first year people can qualify for Social Security.
employment status. The coefficients are -0.021 and -0.018 when individuals with 65-year-old spouses are and are not included, respectively. In columns 3 and 4, the dependent variable is an indicator for whether or not the older spouse is working. The coefficients on the spouse becoming eligible for Medicare are -0.032 and -0.022 when individuals with 65-year-old spouses are and are not included, respectively. Although we cannot rule out the possibility that spouses reduce their labor force participation when they turn 65, these numbers are still relatively small when compared to the reduction in the likelihood of having a spouse’s employer contribute to health insurance.

To further explore whether or not retirement decisions are responsible for the effects of spousal eligibility for Medicare, we use the panel aspect of the HRS to test for differential effects of the older spouse’s retirement status prior to becoming eligible for Medicare. If individuals whose older spouses had retired prior to becoming eligible for Medicare experience no effect on having insurance through their spouses’ employers, we might suspect that retirement decisions are driving insurance changes. However, individuals whose older spouses had already retired prior to Medicare eligibility experiencing a change in insurance status suggests that employers are providing health insurance to their former employees and the employees’ families until the employee turns 65 but not after that. The results are shown in columns 3 and 4 of the top panel of Table 6. Although the estimates become noisier when the sample sizes are reduced, the two point-estimates are very similar to each other. Thus, we find no evidence of a differential effect based on the spouses’ retirement decisions prior to Medicare. Finally, in column 5 of the top panel of Table 6, we control for whether or not the older spouse is working. We would suspect that retirement decisions—and not employer policies—were driving the results if the estimate fell to zero after controlling for the older spouse’s employment status. However, the estimate of -0.044 is very close to the original estimate of -0.042 presented in the previous section. These results suggest that labor force participation changes are not the main impetus behind the health insurance and health care access changes identified earlier.
5 The Implications of the Affordable Care Act

One reason that the disruption in employer-sponsored health insurance has been so critical is that obtaining affordable, quality coverage through the individual market has been difficult, especially for the near-elderly. Improving the individual market through the exchanges and by new rules for insurers is one of the main goals of the ACA. As such, the ACA will likely increase the quality of health insurance available through the individual market for the near-elderly because it requires that all insurance plans have certain benefits, such as prescription drug and mental health coverage. The ACA also mandates that the out-of-pocket maximum be $6,350 for individuals in 2014. Under the ACA, insurers must cover various preventive health care services (Health and Human Services; Coventry Health Care). Whereas in the past many near-elderly have had to go without prescription drug coverage and access to preventive care after older spouses become eligible for Medicare, younger spouses under the ACA will not have to worry about their insurance covering these services. Since the ACA makes insurers accept everyone who applies, the near-elderly will not be rejected.

The ACA will also likely lower costs in a variety of ways for near-elderly individuals receiving insurance through the individual market. First, the ACA provides premium tax credits and subsidies to families with incomes that are at or below 400 percent of the federal poverty level (Kaiser Family Foundation (2013b)). Second, the ACA prohibits using health status to price health insurance or determine the type of coverage offered to individuals. Third, the ACA restricts pricing based on age such that older individuals can only be charged three times more than their younger counterparts. Finally, a goal of the ACA marketplaces is to increase competition, which also has the potential to lower prices.

Despite the improvements that the ACA will bring, several concerns about Medicare’s disruption to spousal coverage remain. First, many younger spouses will still have to change their source of health insurance coverage once their older spouse becomes eligible for Medicare. By potentially disrupting provider networks or resetting deductibles, this disruption
could be costly for couples and affect continuity of health services for younger spouses. A second issue for younger spouses is that the ACA does not require dental coverage for adults (American Dental Association (2013)). As a result, the near-elderly losing employer-sponsored coverage because of Medicare will still be without dental coverage, which may result in expensive dental bills or some near-elderly going without dental care. Studies have shown that not having dental insurance is associated with less preventive dental care (Meyerhoefer et al. (2014)), worse oral health (Bloom (2012)), and increased dental-related emergency department visits (Wallace et al. (2011)). Third, although younger spouses will likely have more options after the ACA, they may still have to pay more for health insurance than they would have had they not lost employer-sponsored health insurance since employers typically contribute part of the premium. People making above 400 percent of the poverty line are at heightened risk for increased costs because they will not receive subsidies and tax credits from the federal government.

For younger spouses earning below 400 percent of the federal poverty level, an older spouse turning 65 means that some of the cost of insurance for younger spouses shifts from the employer to the government after the ACA. This cost shifting is notable since subsidies make up a large part of the cost of the ACA to the government.

6 Conclusion

In this paper, we study what happens to younger spouses when their older spouses become eligible for Medicare. We find evidence that younger spouses are less likely to have employers pay for their insurance, less likely to have insurance through an employer, and more likely to have privately purchased insurance. Previous research has documented that insurance from the individual market tended to be worse than coverage that can be obtained through an employer before the ACA. As we draw on data from before the ACA was enacted, we find

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19 Access to dental care is a problem for the Medicare-eligible population as well since Medicare does not cover dental services. For examples of papers discussing dental access issues for elderly people more generally, see Berkey and Berg (2001), Guay (2005), Lamster (2004), and Rubinstein (2005).
evidence that suggests younger spouses had less comprehensive coverage after switching to insurance through the individual market and suggestive evidence that they used fewer health care services, particularly preventive health for women.

Older spouses retiring cannot account for the large decreases we observed in the likelihood that an employer pays for health insurance. Instead, it appears many employers have used Medicare eligibility as an opportunity to stop offering health insurance coverage to their employees’ spouses. These results could help explain why previous research has found that the near-elderly are underinsured. Additionally, since the majority of younger spouses are female, the loss of spousal coverage from Medicare creates equity concerns.

Although the ACA improves the options for obtaining insurance outside of employment, it will not fix all the issues associated with losing employer-sponsored coverage because of Medicare. Not only will many younger spouses continue to experience a disruption in their insurance, younger spouses will also still have reduced access to dental care even after the ACA. Furthermore, younger spouses not having employers make contributions on their behalves means that either the couples or the government will be paying for health insurance coverage that firms were paying for previously.
References


[34] Pauly, Mark V., and Robert D. Lieberthal. “How risky is individual health insurance?.” Health Affairs 27.3 (2008): w242-w249.


<table>
<thead>
<tr>
<th></th>
<th>Full Sample</th>
<th>Individuals with 63- and 64-Year-Old Spouses</th>
<th>Individuals with 67- and 68-Year-Old Spouses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insurance through Spouse’s Employer</td>
<td>0.37</td>
<td>0.39</td>
<td>0.28</td>
</tr>
<tr>
<td>Insurance through Own Employer</td>
<td>0.44</td>
<td>0.45</td>
<td>0.41</td>
</tr>
<tr>
<td>Privately Purchased Insurance</td>
<td>0.07</td>
<td>0.05</td>
<td>0.11</td>
</tr>
<tr>
<td>Public Insurance</td>
<td>0.06</td>
<td>0.06</td>
<td>0.09</td>
</tr>
<tr>
<td>Other Private Insurance</td>
<td>0.02</td>
<td>0.03</td>
<td>0.03</td>
</tr>
<tr>
<td>Any Health Insurance</td>
<td>0.91</td>
<td>0.92</td>
<td>0.88</td>
</tr>
<tr>
<td>Multiple Sources of Coverage</td>
<td>0.06</td>
<td>0.06</td>
<td>0.05</td>
</tr>
<tr>
<td>Visit the Doctor</td>
<td>0.94</td>
<td>0.95</td>
<td>0.94</td>
</tr>
<tr>
<td>Number of Doctor Visits</td>
<td>8.49</td>
<td>8.96</td>
<td>7.98</td>
</tr>
<tr>
<td>Dental Coverage</td>
<td>0.60</td>
<td>0.59</td>
<td>0.50</td>
</tr>
<tr>
<td>Visit the Dentist</td>
<td>0.78</td>
<td>0.76</td>
<td>0.77</td>
</tr>
<tr>
<td>Any Prescription Coverage</td>
<td>0.83</td>
<td>0.85</td>
<td>0.75</td>
</tr>
<tr>
<td>Mammogram or Pap Smear</td>
<td>0.87</td>
<td>0.87</td>
<td>0.82</td>
</tr>
<tr>
<td>Flu Shot</td>
<td>0.53</td>
<td>0.57</td>
<td>0.52</td>
</tr>
<tr>
<td>Cholesterol Test</td>
<td>0.83</td>
<td>0.85</td>
<td>0.84</td>
</tr>
<tr>
<td>n</td>
<td>7,658</td>
<td>1,082</td>
<td>753</td>
</tr>
</tbody>
</table>

Notes: The sample consists of younger spouses who are younger than 65 and whose older spouses are ages 55 to 75.
<table>
<thead>
<tr>
<th></th>
<th>Full Sample</th>
<th>64-Year-Old Spouses</th>
<th>66-Year-Old Spouses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>0.20</td>
<td>0.20</td>
<td>0.17</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.13</td>
<td>0.12</td>
<td>0.13</td>
</tr>
<tr>
<td>White</td>
<td>0.84</td>
<td>0.86</td>
<td>0.80</td>
</tr>
<tr>
<td>Black</td>
<td>0.10</td>
<td>0.08</td>
<td>0.11</td>
</tr>
<tr>
<td>Asian</td>
<td>0.06</td>
<td>0.05</td>
<td>0.07</td>
</tr>
<tr>
<td>Age</td>
<td>57.67</td>
<td>59.25</td>
<td>59.76</td>
</tr>
<tr>
<td>Spouse on Medicare</td>
<td>0.31</td>
<td>0.12</td>
<td>0.87</td>
</tr>
<tr>
<td>Employer Pays for Insurance</td>
<td>0.66</td>
<td>0.68</td>
<td>0.58</td>
</tr>
<tr>
<td>Insurance through Employer</td>
<td>0.78</td>
<td>0.78</td>
<td>0.69</td>
</tr>
<tr>
<td>Privately Purchased Insurance</td>
<td>0.08</td>
<td>0.08</td>
<td>0.11</td>
</tr>
<tr>
<td>Public Insurance</td>
<td>0.06</td>
<td>0.06</td>
<td>0.06</td>
</tr>
<tr>
<td>Any Health Insurance</td>
<td>0.87</td>
<td>0.87</td>
<td>0.84</td>
</tr>
<tr>
<td>Dental Coverage</td>
<td>0.72</td>
<td>0.71</td>
<td>0.66</td>
</tr>
<tr>
<td>Prescription Coverage</td>
<td>0.79</td>
<td>0.80</td>
<td>0.73</td>
</tr>
<tr>
<td>High Deductible Coverage</td>
<td>0.19</td>
<td>0.19</td>
<td>0.17</td>
</tr>
<tr>
<td>n</td>
<td>15,958</td>
<td>1,660</td>
<td>1,140</td>
</tr>
</tbody>
</table>

Notes: The sample consists of younger spouses who are younger than 65 and whose older spouses are ages 59 to 71.
Table 3: The Effect of a Spouse Becoming Eligible for Medicare Using HRS

<table>
<thead>
<tr>
<th></th>
<th>Spouse Eligible for Medicare</th>
<th>Standard Error</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insurance through Spouse’s Employer</td>
<td>-0.042**</td>
<td>(0.020)</td>
<td>7,658</td>
</tr>
<tr>
<td>Insurance through Own Employer</td>
<td>0.003</td>
<td>(0.020)</td>
<td>7,658</td>
</tr>
<tr>
<td>Privately Purchased Insurance</td>
<td>0.036**</td>
<td>(0.015)</td>
<td>7,658</td>
</tr>
<tr>
<td>Public Insurance</td>
<td>-0.011</td>
<td>(0.008)</td>
<td>7,648</td>
</tr>
<tr>
<td>Other Private Insurance</td>
<td>0.000</td>
<td>(0.012)</td>
<td>7,658</td>
</tr>
<tr>
<td>Any Health Insurance</td>
<td>0.003</td>
<td>(0.014)</td>
<td>7,654</td>
</tr>
<tr>
<td>Multiple Sources of Coverage</td>
<td>-0.008</td>
<td>(0.013)</td>
<td>7,654</td>
</tr>
<tr>
<td>Visit the Doctor</td>
<td>0.010</td>
<td>(0.014)</td>
<td>7,654</td>
</tr>
<tr>
<td>Log of Doctor Visits</td>
<td>-0.057</td>
<td>(0.056)</td>
<td>7,049</td>
</tr>
<tr>
<td>Dental Coverage</td>
<td>-0.054**</td>
<td>(0.024)</td>
<td>7,627</td>
</tr>
<tr>
<td>Visit the Dentist</td>
<td>0.004</td>
<td>(0.023)</td>
<td>7,654</td>
</tr>
<tr>
<td>Prescription Coverage</td>
<td>-0.004</td>
<td>(0.021)</td>
<td>7,290</td>
</tr>
<tr>
<td>Mammamogram or Pap Smear</td>
<td>-0.084</td>
<td>(0.060)</td>
<td>2,690</td>
</tr>
<tr>
<td>Flu Shot</td>
<td>-0.012</td>
<td>(0.082)</td>
<td>3,207</td>
</tr>
<tr>
<td>Cholesterol Test</td>
<td>-0.002</td>
<td>(0.073)</td>
<td>3,198</td>
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</table>

Notes: *, **, and *** indicate significance at 10%, 5%, and 1%, respectively. Standard errors are clustered by individual and are shown in parentheses. Each cell is the $\beta$ coefficient from separate regressions of Equation (1) that control for an individual fixed effect, a full vector of indicator variables for age, a full vector of year indicator variables, and a quartic in spouse’s age.
Table 4: The Effect of a Spouse Becoming Eligible for Medicare on People Previously Insured through Spouse Using HRS

<table>
<thead>
<tr>
<th></th>
<th>Spouse Eligible for Medicare</th>
<th>Standard Error</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visit the Doctor</td>
<td>-0.001</td>
<td>(0.019)</td>
<td>3,081</td>
</tr>
<tr>
<td>Log of Doctor Visits</td>
<td>-0.146*</td>
<td>(0.087)</td>
<td>2,882</td>
</tr>
<tr>
<td>Dental Coverage</td>
<td>-0.053</td>
<td>(0.038)</td>
<td>3,072</td>
</tr>
<tr>
<td>Visit the Dentist</td>
<td>-0.015</td>
<td>(0.030)</td>
<td>3,081</td>
</tr>
<tr>
<td>Prescription Coverage</td>
<td>-0.023</td>
<td>(0.030)</td>
<td>3,007</td>
</tr>
<tr>
<td>Mammogram or Pap Smear</td>
<td>-0.168*</td>
<td>(0.092)</td>
<td>1,216</td>
</tr>
<tr>
<td>Flu Shot</td>
<td>-0.020</td>
<td>(0.114)</td>
<td>1,320</td>
</tr>
<tr>
<td>Cholesterol Test</td>
<td>0.030</td>
<td>(0.102)</td>
<td>1,316</td>
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Notes: *, **, and *** indicate significance at 10%, 5%, and 1%, respectively. Standard errors are clustered by individual and are shown in parentheses. Each cell is the $\beta$ coefficient from separate regressions of Equation (1) that control for an individual fixed effect, a full vector of indicator variables for age, a full vector of year indicator variables, and a quartic in spouse’s age.
Table 5: The Effect of a Spouse Becoming Eligible for Medicare Using NHIS

<table>
<thead>
<tr>
<th>Spouse Eligible for Medicare</th>
<th>Standard Error</th>
<th>n</th>
<th>Spouse Eligible for Medicare</th>
<th>Standard Error</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spouse on Medicare</td>
<td>0.690***</td>
<td>(0.014)</td>
<td>15,799</td>
<td>0.722***</td>
<td>(0.017)</td>
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<tr>
<td>Employer Pays for Insurance</td>
<td>-0.068***</td>
<td>(0.021)</td>
<td>13,737</td>
<td>-0.079***</td>
<td>(0.028)</td>
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<tr>
<td>Insurance through Employer</td>
<td>-0.031*</td>
<td>(0.018)</td>
<td>13,856</td>
<td>-0.047*</td>
<td>(0.025)</td>
</tr>
<tr>
<td>Privately Purchased Insurance</td>
<td>0.020*</td>
<td>(0.012)</td>
<td>15,572</td>
<td>0.034**</td>
<td>(0.016)</td>
</tr>
<tr>
<td>Public Insurance</td>
<td>0.000</td>
<td>(0.010)</td>
<td>15,798</td>
<td>-0.007</td>
<td>(0.013)</td>
</tr>
<tr>
<td>Any Health Insurance</td>
<td>-0.005</td>
<td>(0.014)</td>
<td>13,854</td>
<td>-0.004*</td>
<td>(0.020)</td>
</tr>
<tr>
<td>Dental Coverage</td>
<td>-0.052**</td>
<td>(0.024)</td>
<td>8,968</td>
<td>-0.072**</td>
<td>(0.033)</td>
</tr>
<tr>
<td>Prescription Coverage</td>
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<td>(0.017)</td>
<td>13,699</td>
<td>-0.044*</td>
<td>(0.024)</td>
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<tr>
<td>High Deductible Coverage</td>
<td>-0.012</td>
<td>(0.021)</td>
<td>9,468</td>
<td>-0.016</td>
<td>(0.028)</td>
</tr>
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Notes: *, **, and *** indicate significance at 10%, 5%, and 1%, respectively. Robust standard errors are shown in parentheses. Each cell is the β coefficient from separate regressions of Equation (2) that control for sex, race, education, a full vector of indicator variables for age, a full vector of year indicator variables, and a cubic in spouse’s age.
Table 6: Medicare and the Decision to Retire

<table>
<thead>
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<th>NHIS</th>
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<tr>
<td></td>
<td>Employed</td>
<td>Spouse Employed</td>
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<tr>
<td>Spouse Eligible for Medicare</td>
<td>-0.003</td>
<td>0.009</td>
</tr>
<tr>
<td></td>
<td>(0.025)</td>
<td>(0.027)</td>
</tr>
<tr>
<td>n</td>
<td>7,568</td>
<td>7,602</td>
</tr>
<tr>
<td>Exclude People with Non-Working</td>
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<td>No</td>
</tr>
<tr>
<td>Spouses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exclude People with Working</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Spouses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control for Spouse’s Work Status</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Notes: *, **, and *** indicate significance at 10%, 5%, and 1%, respectively.

Top Panel: Standard errors are clustered by individual and are shown in parentheses. Each cell is the β coefficient from separate regressions of Equation (1) that control for an individual fixed effect, a full vector of indicator variables for age, a full vector of year indicator variables, and a quartic in spouse’s age.

Bottom Panel: Robust standard errors are shown in parentheses. Each cell is the β coefficient from separate regressions of Equation (2) that control for sex, race, education, a full vector of indicator variables for age in quarters, a full vector of year indicator variables, and a cubic in spouse’s age.
Figure 1: Distribution of Age Differences between Spouses from the NHIS
Figure 2: Means for Key Health Insurance Variables in NHIS, by Spouse’s Age