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Spousal Labor Market Effects from Government Health Insurance: Evidence from a Veterans Affairs Expansion

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ABSTRACT

Measuring the overall impact of public health insurance receipt is important in an era of increased access to publicly-provided and subsidized insurance. Although government expansion of health insurance to older workers leads to labor supply reductions for recipients, there may be spillover effects on the labor supply of uncovered spouses. While theory predicts a decrease in overall household work hours, financial incentives such as credit constraints, target income levels, and the need for own health insurance suggest that spousal labor supply might increase. In contrast, complementarities of spousal leisure would predict a decrease in labor supply for both spouses. Utilizing a mid-1990s expansion of health insurance for U.S. veterans, we provide evidence on the effects of public insurance availability on the labor supply of spouses. Using data from the Current Population Survey and Health and Retirement Study, we employ a difference-in-differences strategy to compare the labor market behavior of the wives of older male veterans and non-veterans before and after the VA health benefits expansion. Our findings suggest that although household labor supply may decrease because of the income effect, wives' labor supply increases, suggesting that financial incentives dominate complementarities of spousal leisure. This effect is strongest for wives with lower education levels and lower levels of household wealth. Moreover, wives with employer-provided health insurance in the previous year remain on the job while those without increase their hours, suggesting incentives to retain or obtain health insurance. Finally, non-working wives enter the labor force, those who were working part-time increase their hours, and full-time "career" women are largely unaffected.

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I. Introduction

Government-provided benefits can significantly impact the work and retirement decisions of eligible individuals. Although measuring the effect of a benefit on a recipient is relatively straightforward, the measurement of a programôs total effect is complicated when other family members are not covered by the program. Specifically, a program may have positive or negative spillover effects on the labor supply of uncovered family members. When these spillover effects are not taken into account, the full effect of the benefit on labor supply may be mismeasured.

The potential effect of health insurance on work behavior has been of particular interest with the implementation of the Affordable Care Act (ACA) (e.g. Antwi et al. 2012; Baicker et al. 2014; Dague et al. 2014; Garthwaite et al. 2014; Kolstad & Kowalski 2014), especially in light of Congressional Budget Office projections of reductions in labor supply as a result of this legislation.[1] Going forward, it will be important to study not just the direct effects of health insurance availability on individuals, but also the effects on labor supply of the family as a unit. As previous literature demonstrates, both theory and empirical evidence suggest that publicly-provided health insurance not linked to employment decreases labor supply of recipients (Boyle and Lahey 2010, Dague et al. 2014, Garthwaite et al. 2014). Standard theory predicts that such a benefit will reduce the opportunity cost of leisure, particularly for workers who were previously reliant on employer-provided coverage. Thus, for these recipients, labor supply is predicted to fall.

However, the effect of this receipt on the spouseôs labor supply is not theoretically clear cut. On the one hand, husbands and wives who enjoy spending time together and who are not credit constrained may time their retirements close together. Thus, wives may reduce their hours

[1] See Garrett & Kaestner (2014) for a summary of recent research on public insurance and labor supply. See http://www.cbo.gov/sites/default/files/cbofiles/attachments/45010-breakout-AppendixC.pdf for CBO estimates of the impact of the ACA on labor supply (last accessed: 7/17/14).

or exit the labor force at the same time as their husbands, increasing the negative labor supply impact of the benefit. On the other hand, financial factors are also important to the spouseôs labor supply decision. For couples who are credit constrained, joint retirement may not be an option, and the spouse who does not receive the benefit may work more hours in order to reach a target household income once the covered spouse leaves the labor market. The non-covered spouse may also need to increase labor supply in order to receive own employer-provided health insurance, or to increase household income in order to self-insure. This effect would mitigate the labor supply impact of a benefit borne by one spouse.

These competing effects may vary by socioeconomic status (SES) and income. Lower SES couples are more likely to be credit constrained, and low SES men may be more likely to work in physically demanding occupations and to be in worse health. Lower SES women may work in jobs that allow for more flexible hours than career women of higher SES. We would therefore expect to see womenôs hours increase in low SES couples as husbands take advantage of the health insurance offer while wives increase their hours to make up for lost income or to receive their own insurance. High SES women in career-type jobs, on the other hand, may have little discretion over hours worked if they wish to remain employed, suggesting that any change must be on the extensive rather than intensive margin. Additionally, they may already have access to retiree coverage of their own or through their spouse. If these women are attached to their jobs, or they have not yet reached their target retirement incomes, their hours worked may not be affected by their spouseôs health insurance receipt. Differences in spousal spillovers by SES are understudied from a theoretical perspective, and to our knowledge this is one of the first papers to provide empirical evidence on how these effects vary with the spouseôs education level.

This paper uses a unique government health insurance expansion to examine the effect of health insurance receipt by men nearing retirement age on the labor supply of their wives. In the mid-1990s, the U.S. Department of Veterans Affairs expanded health insurance availability for U.S. veterans. Using data from the Current Population Survey and the Health and Retirement Study, we employ a difference-in-differences strategy to compare the labor market behavior of the wives of older veterans and non-veterans before and after the VA health benefits expansion to test the impact of public health insurance on these spouses. Studying the effect of health insurance on these older workers is especially important for mitigating demographic pressures on government programs such as Social Security. With the increasing labor force participation of women, these spillovers have the potential to have a sizeable impact on the economy and government programs.

Our findings, which are robust to a variety of specification checks, indicate that although household labor supply may decrease with the husbandôs offer of comprehensive health insurance, labor supply of wives increases, on average. This effect suggests that financial considerations dominate the propensity for a wife to retire at the same time as her husband. This outcome is stronger for wives with high school education or less and with lower levels of household wealth and no or low pension income. These women are both more likely than more educated women to be financially constrained and to be in occupations with flexible work hours and easier labor market entry and exit even at older ages. Wives with lower levels of education, low non-housing wealth, and low pension income are more likely to enter the labor force while women with more education, non-housing wealth, and pension income do not significantly increase their propensity to work on the extensive margin.

Health insurance receipt in the previous year also determines the effect on womenôs labor market outcomes. Women without health insurance coverage from their employers move from part-time to full-time work and increase both their hours and their earnings. Those with their own health insurance are more likely to remain employed.

Wivesô labor supply responses also vary by the type of job held in the previous year. Wives who did not work in the previous year have an increased probability of part-time work and self-employment. Wives who worked part-time are more likely to increase their hours to full-time. Women who worked full-time in the previous year are insensitive to their husbandsô receipt of insurance. These results provide further evidence that wives in career jobs are insensitive to the husbandôs insurance offer, while those in more flexible employment situations increase their labor supply, potentially for the purpose of providing their own insurance or to replace family income.

II. Theory and Related Literature

In the simplest model, health insurance on the job is paid for by lower pecuniary compensation on the job (e.g. Olson 2002). Receiving health insurance exogenous to employment is therefore akin to a positive income shock for the household. In this model, there is an income effect which dictates that household labor supply will drop. However, it is not clear within the household whether this decrease in overall labor supply will be borne by both spouses or by a specific spouse. In this section, we first discuss how in-kind benefits may differ from cash transfer benefits. Next, we detail two competing theories that could affect spousal labor supply in opposite directions: complementarities of spousal leisure that would encourage wives to retire with their husbands, and financial considerations that would encourage wives to increase

their labor to make up for the husbandôs lost income and benefits. Finally, we discuss how these theoretical predictions may vary by socioeconomic status.

In-kind Benefits

In-kind benefits such as health insurance differ from cash-transfer programs by design (Currie & Gahvari 2008; Moffitt 2002). One reason that in-kind benefits may be offered is because as a society, we may prefer that recipients allocate their consumption bundle in a way that favors the in-kind benefit over other goods.[2] However, such benefits may affect labor supply differently than equal value cash transfers because either they cause different distortions or they mitigate distortions caused by the tax code in a way that cash transfers do not (Currie & Gahvari 2008).

Specifically, in-kind benefits may have different labor market effects depending on whether labor and consumption are substitutes or complements (Currie & Gahvari 2008; Gahvari 1994; Leonesio 1988; Moffitt 2002). Both positive and negative effects of in-kind benefits on labor supply have been found empirically, with housing vouchers and food stamps decreasing labor supply (Currie 2003; Jacob & Ludwig 2012) and childcare (Gelbach 2002) increasing it.

Gahvari (1995) develops a theoretical model of the relationship between in-kind transfers and labor supply, and specifically examines the case of health care/health insurance. He notes that health care may increase labor supply if it improves health but may decrease labor supply if people were working in order to obtain health care. This hypothesis has been supported by recent empirical results (Boyle & Lahey 2010).

Recent studies on the labor supply effects of expanding state health insurance programs to childless adults generally find a resulting decrease in labor supply. Guy et al. (2012) show a

[2] Other potential reasons, including targeting and tax efficiency are detailed in Currie & Gahvari (2008).

modest decrease in the probability of employment for individuals who become eligible for public insurance as a result of the expansion of a number of different state programs in the 2000s. Garthwaite et al. (2014) and Dague et al. (2014) find substantial increases in employment as a result of states (TN and WI) rescinding an offer of Medicaid coverage for childless adults. On the other hand, Baicker et al. (2014) demonstrate no statistically significant employment effects of Medicaid enrollment for childless adults in Oregon, potentially because the OR program targeted a lower-income population than those in TN and WI. In related work, a recent paper on the Medicaid expansions in the late 1980s and early 1990s finds that pregnant women reduced their labor supply when offered health insurance (Dave et al. 2013). These studies examine the effect of health insurance on the recipient only and do not measure potential spillover effects of coverage to spouses.

Medicaid is one program for which family spillover effects on employment outcomes have been studied. Early research investigating the effects of childrenôs Medicaid receipt on welfare mothersô employment found that Medicaid access tied to AFDC receipt decreased labor supply (Ellwood and Adams 1990, Moffitt and Wolfe 1992, Winkler 1991). Similarly, Tomohara and Lee (2007) find that non-white, married women with low levels of education reduced their labor supply so that their children would qualify for SCHIP. A number of more recent studies following the decoupling of welfare and Medicaid eligibility find either no effect or labor supply increases (Yelowitz 1995; Montgomery and Navin 2000; Ham and Shore-Sheppard 2001 & 2005; Hamersma and Kim 2009; Hamersma 2013; Strumpf 2011). However, as children are, for the most part, ineligible to work in jobs that provide health insurance, the effects of spousal health insurance may be different from those for childrenôs Medicaid.

For the program we study, theory predicts that publicly provided health insurance is a substitute for labor for the recipient. Previously, the recipient needed to work to obtain the benefit, and with the government-provided benefit this is no longer necessary. Therefore the recipient may cut back on labor.

However, the predictions are not as clean-cut for the wife of the recipient. If the husband remains employed and receives family coverage (and does not increase his expected probability of leaving the labor force in the future), then she is not affected by the health insurance offer. If his receipt allows him to leave employment, losing family coverage, then his health insurance offer is a complement to her laborð the in-kind benefit increases (or has no effect on) her labor supply. At the same time, the health insurance coverage acts as an external income shock to the entire family, and increased income can decrease labor supply through the income effect. In addition, as we detail in the next section, complementarities of spousal leisure may increase a wifeôs incentive to retire once her husband has retired.

Complementarities of Spousal Leisure

Husbands and wives may make joint retirement decisions, which would increase the attractiveness of reducing hours for wives. In this model, leisure time spent with a spouse provides higher utility than leisure time without a spouse, so one spouseôs retirement raises the opportunity cost of labor for the other spouse. Empirically, husbands and wives who both work often time their retirements close together (e.g. Blau 1998; Coile 2004; Gustman & Steinmeier 2000; Ho and Raymo 2009; Hurd 1990; Weaver 1994).

Most work studying joint retirement decisions has focused on monetary shocks such as pension or social security rule changes and benefits that are fungible across spouses; that is, from

the perspective of the family unit, it does not matter which spouse gains the additional money. Both structural and empirical results in this literature are consistent with the hypothesis of complementarities of spousal leisure, although husbands seem more responsive to wivesô monetary shocks than vice versa (Baker 2002; Coile 2004; Gustman & Steinmeier 2000). In fact, Coile (2004) finds that while men respond to their wivesô financial incentives, there is a very small effect of husbandsô financial incentives on wivesô retirement. An exception to this asymmetry appears in the European literature, where recent work finds that husbands and wives are equally responsive in some cases (Stancanelli 2012) or wives are more responsive than husbands to the spouseôs shock in others (Hospido & Zamarro 2013).[3] If U.S. women do not retire because they are less likely than their husbands to be able to obtain affordable health insurance once they do so, or because they value health insurance more than their spouses do (as found by Honig & Dushi 2005), then that may explain some of the mystery behind this asymmetry.

Previous research that has examined the effect of health insurance receipt on spousal work behavior has generally found negative effects of husbandsô health insurance availability on wivesô labor supply (Buchmueller & Valletta 1999; Kapinos 2009; Murasko 2008; Olson 1998; Royalty & Abraham 2006). However, this research focuses on the effect of employer-provided health insurance availability that can cover the entire family and not just the plan participant. The theoretical implications of this type of policy change, similar to extending COBRA or providing universal healthcare, are different than for a policy which only covers one specific

[3] A unique exception to this European pattern is Goux et al. (2014), which examines the effect of a French workweek reduction, something which does not have an income effect but does directly reduce hours, on the spouseôs labor. This paper finds that wives are responsive to husbands, but not vice versa and suggests that women in France have more heavily constrained work-weeks than men in France. Similarly, papers on UI and DI in the United States tend to find that wives respond to husbandôs benefit receipt by working less (e.g. Cullen and Gruber 2000, Chen 2012), but this phenomenon is more likely to be a secondary-earner effect rather than a joint retirement effect given the ages of the cohorts involved.

member of the household. In these previously studied cases, the wife will have less of an incentive to increase labor supply (even when her husband previously provided the familyôs health insurance) because she will not need to provide health insurance for the family. Additionally, this literature tends to focus on younger age groups, who may be more attached to the labor force than those ages 55 and older. Some of this literature also has problems with positive marriage selectionð ñhigh qualityò husbands are more likely to have both health insurance and ñhigh qualityò wives with their own labor force attachment. However, the main findings still hold even when this endogeneity is corrected for in more recent work (Kapinos 2009).

Financial Incentives

In theory, household labor supply should decrease with the effective income shock from publicly-provided health insurance, but that labor supply reduction may not be borne equally by all members of the household. Because wives in these cohorts are more likely than their husbands to have jobs with flexible hours (Johnson 2004; Long & Jones 1981), it is possible that a wifeôs hours may rise when a husband leaves a traditional 40-50 hour a week job, although the income effect would dictate that total family labor supply would decrease.

Women are also less likely to have health insurance from their own employment than men (Kapur and Rogowski 2011). If a woman had been receiving health insurance through her husbandôs job but he has been offered public health insurance, it may make sense for the wife to seek employment options that enable her to obtain her own employer-provided insurance, such as by increasing her hours to full-time (Averett and Hotchkiss 1995) or by obtaining a new job

with health insurance coverage. Alternatively, she might increase her work hours or seek a higher-paying position in order to pay for her own health insurance out-of-pocket.

In essence, although the program results in a decrease in job-lock for husbands, it might create job-lock for wives. Therefore, we would expect to see a larger positive effect on labor market outcomes for women who did not have employer-provided health insurance of their own in the previous year. Since men in this cohort are likely to be older than their wives, and also more likely than their wives to work physically demanding jobs, it may be optimal for the husband to exit the work force while the wife increases her work hours in order to meet a target level of income for the household.

Differences by Socioeconomic Status

Note that these theories interact with the socioeconomic status (SES) of the couple. Gahvari (1995) notes that lower and higher SES recipients may prefer different benefits packages, with lower SES beneficiaries preferring additional income to a more generous in-kind benefit. VA health insurance might be preferable to no insurance or to expensive insurance for lower SES couples, but may not be preferable to employer-based insurance or retiree insurance for higher SES couples. Similarly, as noted above, lower SES couples may be too credit-constrained for both members of a couple to retire jointly when the husband is given health insurance. On the other hand, higher SES couples may have more enjoyable jobs, higher wealth targets, and access to retiree insurance. As a result they may have plans for joint retirement at older ages, and would thus not show up as jointly retiring in our sample. Finally, couples may react differently to financial incentives by their SES. Lower SES women may be less likely to be in a career job and have the option of working part-time or increasing their hours from part-time

to full-time, whereas higher SES women may have traditional 40-hour per week career jobs with less flexibility on the intensive margin.

III. Description of VA Program

The Department of Veterans Affairs (VA) health care system was established in the 1930s to treat veterans with conditions resulting from their military service, and later, low-income veterans. Prior to the time period we study, VA primarily provided inpatient care, and limited the availability of outpatient care for non-service-connected conditions to follow-up visits after an inpatient stay.

The U.S. government began a major overhaul of this health care system in the mid-1990s. The impetus was an effort to catch up with progress in technology and efficiency in private-sector medicine. During this time, VA health care was restructured as a comprehensive health care system that focused on primary care and preventive medicine rather than hospital-based specialty services. Following this change, VA experienced a 44 percent decline in the number of inpatients and a 66 percent increase in the total number of outpatient visits (Klein and Stockford 2001). At the same time, VA also changed its resource allocation system by distributing its health care budget using a capitated, patient-based formula, similar to the HMO model. VA expected that these changes would result in significant cost reductions. Based on this assumption, it relaxed its rules on eligibility for care and offered services to all veterans rather than limiting guaranteed access to low-income and service-connected disabled veterans (U.S.

GAO 1999). During our post period, VA care was consistently found to be of high quality (see, for example, Ross et al 2008).[4]

Veterans were required to fill out paperwork enrolling in the VA program before they could use health care services. However, it is important to note that veterans could enroll without utilizing VA health care, but enrollment guaranteed the ability to use VA services in the future. Additionally, during the time period of our study, not enrolling did not imply that veterans would not be able to fill out paperwork and enroll in the future should they need VA services. In that respect, VA functioned as insurance for veterans even in the absence of enrollment, similar to the way that COBRA serves as insurance for the first 60 days after job separation regardless of whether the job leaver chooses to pay a premium. Nevertheless, 6.6 million veterans had enrolled by 2002 and VAôs patient load had increased from 2.6 million veterans in 1995 to 4.3 million in 2002 (U.S. GAO 1996 & 2003).

During our study period, enrolled veterans were sorted into one of seven priority groups. Those with service-related conditions resulting in disability of 50 percent or higher were considered the highest priority for treatment and were placed in group one. Those with incomes above VA determined thresholds and no service-connected disabilities were considered the lowest priority and placed in group 7. Priority groups 1-6 consisted of previously-eligible veterans and care remained free for them. Group 7 veterans were newly-eligible and were charged modest copayments. The priority groups were used only for enrollment purposes and determination of copays during the time period of our study. For all enrollees, routine care appointments were provided on a first-come first-served basis regardless of group.

[4] The expansion in the eligible population combined with an increase in veterans seeking care as a result of the Iraq and Afghanistan wars, however, led to an eventual increase in wait times for care at VA facilities in certain regions which resulted in the current scandal which has been heavily reported on in the popular press (e.g., Cohn 2014).

The VA restructuring affected the availability of health care for all veterans. For those not previously eligible, the policy introduced a form of non-employer-provided health insurance. For the previously-eligible (i.e., low-income or disabled), it represented an increase in the scope of health care and health insurance, similar to what is available in the private sector. Therefore, this change provides an exogenous introduction of an outside health insurance option for all U.S. veterans but not for non-veterans. In order to estimate the spillover effect from publicly provided health insurance on spousal labor supply choices we compare the labor supply outcomes of wives of veterans to those of non-veterans before and after the change.

Previous research indicates that veterans used this health insurance to leave full-time employment. Between 35 and 70 percent of new VA health care users are individuals who drop private health insurance plans, potentially because they are leaving full-time work (Boyle 2009). In response to the policy change, Boyle and Lahey (2010) find a 3.3% increase in the probability that a veteran leaves the labor force and an 8.4% decrease in the probability that a veteran works full time although some disadvantaged groups appear to increase their labor supply.

IV. Data and Empirics

Data

The primary dataset for this paper is the Census Bureauôs March Current Population Survey (CPS) for the years 1992 through 2002. The CPS includes consistent information on employment and demographic controls, including veteran status, at an annual level for these years. Using a difference-in-differences (DD) estimation strategy, we compare the labor supply choices of wives of veterans and wives of non-veterans before and after the restructuring of VA

health care. We thus limit our sample to married couples.[5] To focus on households in which the husband is on the margin of not working (i.e. approaching retirement), we study couples in which the husband is between the ages of 55 and 64.[6] Additionally, because of the small number of female veterans in this age cohort we restrict our veteran sample to include only males. We delete from our sample couples for which the wife is a veteran, as these wives will be directly affected by the treatment.[7] With these restrictions, the treated population is therefore the wives of married male veterans ages 55 to 64, and the control group is the wives of married male non-veterans in the same age group. We define 1992-1995 as the pre-policy period and 1998-2002 as the post-policy period because changes in the VA health care were rolled out during 1996 and 1997.[8]

The CPS allows us to study labor market outcomes on the extensive margin such as labor force or employment exit, and on the intensive margin, such as hours worked, or movement into part-time work. It further allows us to examine earnings, although the universe for which we can study current earnings outcomes is limited during this time period, and type of labor force participation, such as self-employment. We are also able to examine the effects for different

[5] There may be a concern that the treatment causes selection into marriage or divorce. In our sample of men, marriage rates are almost identical in the pre- and post-periods for veterans and non-veterans once age is controlled for.

[6] Medicare eligibility at age 65 affects the impact of other public health insurance on the work decision, so we do not include older men. In general, we find that the significance of results is slightly stronger if we limit to those age 50-64 rather than 55-64, possibly because of a larger sample size.

[7] We also delete the two observations for which the wife is under the age of 19. The results are nearly identical when these are not deleted. We have also run regressions limiting wife ages to 45-64, 50-64, and 55-64. In general these results are qualitatively the same as our main results. Quantitatively, the Table 3 results on work outcomes are generally slightly larger in magnitude and significance for these subsets (Table 7, Panel I provides some results).

[8] We end our study period in 2002 because VA revised the rules for obtaining health care in January 2003. We have also estimated our regressions restricting our post-period to 1998-2001 because of a concern that particular Vietnam Era veterans are affected by a 2002 change that categorized diabetes as a war-related injury for veterans who may have been exposed to Agent Orange (Autor and Duggan 2007; Duggan et al. 2010). Results are qualitatively almost identical and significance increases in some regressions when we remove 2002 from our sample. Table 7, Panel III provides these results for Not Working and Hours Worked outcomes.

demographic groups, such as divisions by education and employer-provided health insurance coverage.

We also utilize the Health and Retirement Study (HRS) for the years 1992-2002 (survey conducted in even numbered years) as a supplement to our CPS results. In addition to demographic information and information on current labor supply, the HRS includes additional data on wealth and pension status. We use the same empirical strategy, sample definition, and the same definitions of pre- and post.[9]

Main Specification

We use a probit model to estimate the following equation:

$$(1) \qquad y_i = \beta_0 + \beta_1 \text{veteran} + \beta_2 \text{veteran*post} + \mathbf{X}'\beta_3 + \breve{u}_t + \mathring{u}_s + \epsilon_{st} + \mathring{U}$$

The dependent variables, y_i, include indicators for wivesô labor supply outcomes including not working, hours worked last week, weekly hours worked conditional on working any hours, weekly earnings, and ln(weekly earnings).[10] The variable *not working* is 0 if the wife is employed and 1 otherwise. The *part-time* variable reported is coded as 1 if the number of weekly hours worked is between 0 and 35 hours, and 0 if the individual works more than 35

[9] Replication of our main results using the HRS in place of the CPS are similar (generally showing the same sign, significance, and magnitude) and are available from the authors. There will be some differences because even with the weighting, the HRS sample is a panel that ages over time while the CPS sample is a repeated cross-section.

[10] Weekly earnings are earnings during a usual work week. This question is limited only to respondents in their fourth and eighth months of the survey, reducing sample size. For the weekly earnings outcomes we code respondents in these months who did not have positive earnings as having zero earnings. Hourly earnings are constructed from weekly earnings and are available from the authors. We present weekly earnings because the results for hourly wages are similar to those for weekly earnings but, as a created variable, hourly earnings introduces more measurement error and is more problematic dealing with top-coding. Non-imputed hourly earnings are available only for the subset of the sample that earns an hourly wage.

hours. *Self-employed* is an indicator that is equal to 1 if the class of worker is self-employed (either incorporated or not incorporated) and 0 otherwise.

Among the independent variables, *veteran* is a dummy equal to 1 if the husband has been honorably discharged from active military duty, *post* is a dummy equal to 1 in the post-policy period, $\boldsymbol{X}$ is a vector of the wife's individual characteristics including age, race, education, and indicators for employer-provided health insurance and pensions in the previous or current year (including codes of 0 for those not employed) and δ_t is a full set of year dummies while $\mathring{u}_s$ is a full set of state dummies and ϵ_{st} is a state-specific time trend. State dummies and year dummies account for heterogeneity in veteran take-up by state and time; this heterogeneity could be caused by local economic conditions making the program more attractive or variation in the degree to which the program was publicized to veterans in different regions. A state-specific time trend accounts for factors varying within states linearly over time in some specifications. Because the propensity for separating from the labor force will vary with benefits offered, we include indicators for employer-provided health insurance coverage and inclusion in a pension plan in the previous year in some specifications. Standard errors are adjusted for non-independence of the errors within the *veteran*year* group via clustering.

Identification Assumptions

In a difference-in-differences model, in order to interpret the results causally, specific assumptions must be satisfied. In our quasi-experimental setup, it must be true that: (1) wives of veterans and non-veterans are reasonably similar before the healthcare expansion, (2) only veterans are affected by the VA expansion, (3) no other shocks occur during this time period that differentially affect household labor supply choices, and (4) that the two populations would not trend differentially in the absence of a policy change due to unobservable factors.

Table 1 presents summary statistics demonstrating that the veteran and non-veteran samples are reasonably comparable in the pre-period in both the CPS and the HRS. The average veteran is more educated than the average non-veteran. As would be expected with assortative mating (Mare 1991; Pencavel 1998), wives of veterans are also somewhat more educated than wives of non-veterans. Because wives of veterans are slightly older than wives of non-veterans in the pre-period, and the age composition of veterans compared to non-veterans is changing over time, it is important to include controls for wifeôs age in all specifications. National Health Interview Survey calculations available in Boyle and Lahey (2010) demonstrate that there are no differences in health between veterans and non-veterans in the pre-period for the cohorts examined in this study.

Assumption (2) is valid because non-veterans and their spouses were not affected by the VA insurance expansion. Although some veterans already had access to VA health insurance, it was much less comprehensive than the coverage post-expansion, so those individuals are still substantially impacted by the change. Using textbook definitions of insurance, veterans were insured once VA coverage was offered (whether or not they formally enrolled) because they could sign up at any time if coverage was needed. Therefore even if they were not formally insured, they were insured in an economic sense, and thus were treated in the first stage. However, if some veterans were unaware of the insurance, our results will provide an underestimate of the behavioral effect of full government coverage. [11]

The third assumption would be violated if something else besides this expansion affects veterans and non-veterans or their wives differentially. Policy changes in 1996-1997 such as welfare reform are unlikely to affect older male veterans and their wives differently than older

[11] According to a 2001 survey, 22% of unenrolled veterans said they were unaware of the program (Department of Veterans Affairs, 2002).

male non-veterans and their wives. Finally, unobserved systematic differences between the treatment and control groups could cause the treatment and control to trend differently in the post-period. However, we find no evidence of pre-existing trends using pre-policy years as a falsification exercise in Table 2, Panel II. Additionally, results are very similar when the model is fully interacted with *veteran* as shown in Table 7, Panel III.

V. Results

First Stage Results

First, we demonstrate that the VA expansion had a direct negative effect on the labor supply of married men. Table 2, Panel I presents the marginal effects from estimating equation (1) on outcomes for married men only using the menôs characteristics as controls.[12] Veterans are less likely than the control group to be working after receiving VA health insurance, with a significant coefficient of 0.008 points once a full set of controls is added, a 2.3% increase relative to the pre-period veteran average of 0.35. Veterans also increase part-time work with significant coefficients of 0.015 points in both specifications, an increase of 14.7% relative to the pre-period value of 0.102. Table 2, Panel II, provides a robustness check for these results, demonstrating that there is not a pre-trend by cutting the universe to only include pre-period data and creating a ñfake postò variable that is 1 for 1994-1995 and 0 for 1992-1993. As would be

[12] These results differ slightly from those in Boyle and Lahey (2010) because the universe for that exercise included single men (who are shown to be more likely to leave the labor market than married men after receiving health insurance) and, in order to be consistent with the previous job-lock literature, limited to men who were working in the previous year. We do not condition on previous employment in order to examine the spillover effects on spouses. Additionally, in Boyle and Lahey (2010) we included industry and occupation controls in the set of full controls, but in our regressions with wife outcomes, the small size of some of these cells causes observations to drop out in the probit specifications, potentially resulting in selection biases. Results are nearly identical for the men and qualitatively similar for the women results with these controls included. Additionally these regressions include husbands who are not separated but whose wives are not in the household at the time of the survey. Results are nearly identical when these husbands are removed from Table 2.

expected if there was not a pre-trend, results are not significant, and indeed, are opposite-signed for the not working outcome.

Main Results

Having demonstrated that the VA expansion decreased married menôs labor supply, we turn to the spillover effects of this coverage on their wives who are not eligible to use VA health care. Figure 1 illustrates the different trends for wives of veterans and wives of non-veterans. Specifically, it shows changes over time in the raw probability means of not working for wives of veterans and non-veterans. As shown, in the pre-reform years veteran and non-veteran wives had very similar rates of non-participation. In the years following the reorganization, however, veteran wives have a distinct decrease in the probability of not working relative to non-veteran wives, suggesting that husbandsô access to public insurance does impact wivesô labor supply decisions.

We next confirm these extensive-margin trends by estimating equation (1) for wivesô outcomes. As shown in Table 3, Panel I, columns (1) and (2), we find that wives are between 1 and 2 ppt more likely to work once their husbands receive VA insurance. This implies a 3-4% increase in the probability of working relative to the pre-period average of 0.473, although once full controls are added this effect is only marginally significant.

Similarly, we find in Table 3, Panel I, columns (3) and (4) that average hours worked per week for all women increases by approximately half an hour (between 0.44 and 0.63 hours). Focusing on the intensive margin only, columns (5) and (6) report the effect of hours worked conditional on working at all. These are positive, with a magnitude between 0.22 and 0.24

minutes, but not significant. These smaller numbers suggest that the increase in hours is primarily on the extensive margin.

In Table 3, Panel I, columns (7)-(10) we examine the effect on womenôs weekly wages.[13] We construct this measure by dividing the annual income in the previous year by weeks worked in the previous year. Earnings overall increase by $8.70 to $13.75 (in 2002 dollars), although this result is not robust to the addition of the full set of controls. Log weekly earnings in Table 4, Panel I, columns (3) and (4) increase 3% to 4% for all women.

Overall, results indicate that for wives on average, financial incentives dominate effects from complementarities of spousal leisure in wivesô retirement decisions following husbandsô receipt of public insurance. Wives increase their labor supply according to several tested measures, with effects that appear to be driven by changes on the extensive margin. This behavior indicates that wives potentially enter the labor force in order to secure their own health insurance coverage or to reach a target level of income or retirement savings for the household, or potentially both. In the next section, we demonstrate that these results are primarily driven by lower SES families and we explore reasons for this behavior.

Differences by Socioeconomic Status: What and Why

As discussed above, we would potentially expect effects to vary for different socioeconomic groups. Women from lower SES households might be more likely to face household credit constraints and also potentially have more flexibility to increase their work hours. Our results appear to be driven by wives with high school or less education, as demonstrated in Table 3, Panel II, columns (1) and (2). Women with high school education or less are 3 ppt more likely (a 5.6% increase off a base of 0.53) to work when their husbands are

[13] Results trimming the top 5% of wages are very similar.

offered VA insurance.[14] For women with at least some college education, coefficients are smaller, insignificant, and change signs when full controls are added, as shown in Table 3, Panel III, columns (1) and (2).

Similarly, when hours worked are examined by womenôs education level, women with a high school education or less in Table 3, Panel II, columns (3) and (4), work 0.6 to 0.8 hours more per week when their husbands are offered health insurance. In contrast, results for women with some college or more in Table 3, Panel III, columns (3) and (4) are positive but insignificant. Results on hours on the intensive margin in columns (5) and (6) are again not significant when broken up by education.

As might be expected given the effects on work, weekly earnings increase for wives with high school or less education, with an increase between $23.80 and $27.38, as shown in Table 3, Panel II, columns (7) and (8). Results are still positive, but smaller and only significant with minimum controls for wives with some college or more and for all wives in Panel III. Log weekly earnings in Panel II, columns (9) and (10) show a 6% to 7% increase in weekly income for less educated wives, while no significant effect on ln(earnings) is shown for more educated wives.[15]

We next investigate whether the increase in labor supply for lower-education wives, who are more likely to face credit constraints, relates to the householdsô financial incentives. Using data from the HRS, we test for differential responses by the level of household wealth. Table 4

[14] Note that in these and all results separated by education, we have removed women with graduate degrees as they seem to behave differently than college graduates but sample sizes are not large enough to examine them separately. Results are robust but somewhat attenuated when these women are included.

[15] In results not shown, annual earnings follow a similar pattern with less educated women earning $982.25-$1293.48 more per year on average (in 2002 dollars). Similarly, hourly wages (also not shown), created by dividing weekly wages by usual hours worked, find a 2-4% increase for ln(hourly wages) for women with high school or less education, although the remaining outcomes do not yield significant results. These results on wage, taken as a whole, suggest that wage movements are primarily occurring on the extensive margin However, they are also consistent with increased measurement error introduced by greater levels of variable construction.

presents results for wives in households with low and high non-housing wealth and low and high pension income. We define ñlowò wealth as below the median level and ñhighò as above the median.[16] We define low and high pension income similarly, but cut at the median for all households with positive pension income.[17] Patterns by household wealth and pension levels are very similar to results by education level. As shown in Table 4, Panel I, wives in households with low levels of non-housing wealth have an 8.4 ppt decrease in the probability of not working and work an additional 3.25 hours per week, while the coefficients for wives in high-wealth households are smaller and not statistically significant. Wives in households with low levels of pension income also show a significant increase in the probability of work and hours worked, which rise by 0.06 and 2.53, respectively. Wives in households with high levels of pension income, however, do not have significant responses for either outcome. These results suggest that need to reach a target household income or amount of retirement savings may be part of what is driving womenôs increased labor force participation.

Another potential reason to increase labor force participation is for women to gain their own health insurance coverage. Women who had health insurance coverage from their employers prior to the policy implementation may be more likely to stay employed than those who did not in order to keep that coverage. However, women who did not have their own health insurance coverage may need to earn more money to self-insure if they lose their husbandsô coverage, or may seek jobs with employer-provided insurance. We test this idea utilizing information in the CPS on health insurance coverage in the previous year. Results in Table 5,

[16] Median household wealth is $187,495.92 in 2002 dollars, adjusted using the CPI. Results cutting at the 75th percentile for wealth show similar patterns. We also explore results for low and high total wealth, which includes housing wealth. Results are similar for total wealth, but smaller in magnitude, which makes sense given that housing wealth is less fungible than non-housing wealth. Results are nearly identical when wifeôs age is top and bottom-coded in order to increase cell sizes.

[17] Household pension income is the sum of the husband and wifeôs pension. The median for households with positive pension income is $15,043.24 in 2002 dollars.

Panel I demonstrate that women with health insurance in the previous year are 2.2 ppt less likely to be not working, a 4.6% decrease off the base of 0.47, but 1.8 ppt more likely to work part-time when their husbands get health insurance, a 6.4% increase off the base of 0.28 for all wives of veterans in the pre-period, and a 4% increase off the base of 0.43 for wives with prior health insurance. Women without health insurance in the previous year are less likely to be not working, but not significantly so and are 4.9 ppt less likely to be part-time, a 12% decrease off the base of 0.40 for wives without health insurance in the previous period. As shown in Table 5, Panel II, for women with employer-provided health insurance, hours do not change significantly overall but decrease significantly conditional on working at all with a coefficient of -0.59. For women without their own health insurance in the previous year, hours increase significantly overall, with a coefficient of 0.71, and increase conditional on working any hours with a coefficient of 0.96. Earnings increase significantly for women without employer-provided health insurance both conditional on having any earnings and unconditional, but there is no significant change for women with health insurance. These results suggest that women with health insurance are more likely to stay employed but are not as focused on additional earnings, whereas women without health insurance increase their hours and earnings, possibly to afford health costs.

As described above, women in full-time career jobs may respond differently to husbandsô public insurance receipt than those in more flexible employment positions. We therefore utilize a multinomial logit framework to investigate whether wivesô responses differ depending on their labor force activity in the previous year. Table 6 reports marginal effects from multinomial logit regressions that examine transitions into and out of not working, full- and part-time work and self-employment. Panel I replicates our main regression in a multinomial

logit framework for all wives in our sample (i.e. not conditioning on the wifeôs labor force experiences in the previous year).[18] Consistent with the main results, wives are about 1.95 ppt more likely to work, and much of this change appears to be women increasing their full-time labor force participation. However, these transitions are different for women who were unattached to the labor force in the previous period. Panel II limits our sample to women who were not working at all in the previous year. These individuals are 0.61 ppt more likely to enter the labor force upon the husbandsô receipt of VA insurance, and they appear to predominately enter part-time work for an employer (0.37 ppt) or self-employment (0.34 ppt). Women who worked part-time in the previous year, on the other hand, as shown in Panel III, do not change their labor force attachment, but instead work more hours, moving from part-time work into full-time work, with a decrease from part time work of 3.19 ppt and an increase in full-time work of 3.88 ppt. This transition potentially makes them eligible for employer-provided health insurance or provides the additional income needed to self-insure. Finally, in Panel IV, we see no effect on women who were working full-time in the previous year. They neither leave the labor market nor change their labor force participation. These results as a whole are highly consistent with the hypotheses that married women value health insurance and seek out their own employer-provided health insurance or seek greater income in order to pay for potential medical expenses once their husbands are offered publicly provided health insurance.

Robustness Checks

Table 7 provides various robustness checks. In our base specification, we included all wives over the age of 18 in our sample. However, women of younger ages may have

[18] With the exception of 992 women whose part-time vs. full-time status could not be determined because they did not work in the previous week. Robustness checks assuming these women are either full-time or part-time provide similar results.

different labor market attachment than older women. Panel I provides results limiting to middle-aged and older wives. When wife ages are limited to 45-64, the percentage point magnitude of the results for the not working and hours worked outcomes is very similar to that in the main specification in Table 3. Limiting women to the same ages as the men in the sample, ages 55-64 provides larger magnitude results than our earlier sample. In this case, women are 3.4 ppt more likely to work and increase hours worked by 1.12, about twice the magnitude of our base regressions.

In Panel II of Table 7, we explore outcomes for wives whose husbands are working part time or are not working. Our main results in Table 3 include all wives regardless of their husbandsô labor force attachment because the timing of labor supply changes within couples may vary upon the husbandsô public insurance receipt. Some husbands with employer-provided insurance may continue full-time work in spite of the availability of VA insurance, with the expectation that they will reduce their labor supply once their wives are able to find an alternate source of insurance (i.e. the wife might change her labor supply before or at the same time as the husband). Nevertheless, we may expect to see stronger results for couples in which the husband is either not working full-time or is not working at all, as these are couples for whom the offer is more likely to have had a direct effect (i.e. for whom the VA coverage potentially caused a decrease in the husbandôs labor supply). Panel II demonstrates results with larger magnitudes for these two groups. Wives of husbands who are not working full time are more likely to work and work about 1.37 more hours per week after public health insurance is offered to their husbands. Similarly, wives of husbands who are not working at all are even more likely to work (decrease of not working of 4.3 ppt) and increase their hours worked by 1.76 hours per week.

Panel III provides additional robustness checks. Columns (1) and (2) demonstrate that fully interacting the independent variables in the model with *veteran* provides results similar to the base regression. Columns (3) and (4) demonstrate the same for removing the year 2002 (when diabetic Vietnam veterans potentially exposed to Agent Orange were re-categorized as having work-related injuries).

VI. Discussion and Conclusion

When husbands approaching the age of retirement obtain public health insurance, the labor supply of their wives increases, on average. This result is predominantly driven by less-educated wives and wives in lower-wealth households, who are more likely to enter the work force when their husbands leave work. Wives with a high school education or less increase their labor supply 3 percentage points, a 6% increase. These less educated women also work more hours per week after the policy change and have higher weekly earnings. We find no statistically significant change in probability of work for wives with higher levels of education.

The results by education level are consistent with findings for women in households with low non-housing wealth and low total pension income. Wives in low-wealth or low pension income households have a statistically significant increase in the probability of work and in hours worked, while wives with high-wealth or high pension income have no significant change in the probability of work or number of work hours. This suggests that financial incentives, in particular credit constraints and a need to reach a target family income, are one important factor in wivesô work and retirement decisions.

As discussed above, wives may also adjust their labor supply in order to gain access to their own health insurance coverage. As anticipated, results differ by the wifeôs access to employer-provided health insurance in the previous year. Women without this health insurance

increase their hours to a greater extent than women with this insurance in the previous year once their husbands are offered public health insurance. Although all women on average increase full-time work and labor force participation, women who were not working in the previous year are more likely to enter the labor force to participate in part-time work or self-employment. Women who worked part-time in the previous year are more likely to increase their hours to full-time work. Women who previously worked full-time do not seem to be as affected by their husbandôs access to publicly-provided health insurance. These results suggest that women in ñcareerò jobs either cannot or will not adjust their own work behavior compared to women in more flexible employment.

We hypothesize that these changes occur because, as found in Boyle and Lahey (2010), when older men obtain health insurance not linked to their employment, they are more likely to leave or plan to leave the full-time for-an-employer labor force, and are thus less likely to be able to provide employer-based insurance to their families. In addition, older men in career jobs are more likely to have a choice between working full-time or not working, whereas women of the same cohort are more likely to be able to provide income from more flexible employment (Johnson 2004; Long & Jones 1981). Thus, in order to reach a target income or to provide family health insurance or to self-insure medical expenses, women with a high school education or less increase their labor supply. This effect comes from both women with less education increasing their labor force participation and from these women being less likely to leave the labor force.

We do not find any evidence of work reductions based on complementarity of spousal leisure. This finding is at odds with earlier literature in the U.S. that finds that wives are more likely to retire when husbands are given a positive income shock, such as pension or Social

Security changes. There are several possible explanations for these differences. First, unlike the majority of literature on spousal complementarities of leisure, we do not limit to husbands and wives who are both working, or who are both working full-time. As shown in our multinomial logit results, we find labor market entry by women who did not work in the previous year and increased hours for those who worked part-time in the previous year. Although none of our results are significant when limiting to women who worked full time in the previous year, the signs are suggestive of decreased full-time work, increased self-employment, and decreased labor-force participation, and thus not inconsistent with previous work. Additionally, the average age of the wives in our sample is lower than in much of the work on joint retirement. Thus, some of the couples in our sample may still be planning joint retirement, but at a later date. Finally, health insurance is different than a cash benefit. It is not fungible across couples, and the need to provide health insurance for the wife or to provide additional income to the household may dominate complementarities of spousal leisure for this specific in-kind benefit. Findings that European spouses in countries with universal health insurance both respond to each otherôs financial incentives (rather than only the husband responding to the wifeôs incentives as in the U.S.) support the idea that health insurance may be an important element of joint retirement decisions.

These results also differ from the results on retiree health insurance or COBRA, which demonstrate a joint retirement effect for these types of insurance coverage. However, the policy change is also different than that of coverage that includes the entire family rather than just one spouse.

Policy Implications

When examining the effects of a policy change on labor supply, it is important to keep in mind that direct effects of the policy may be exacerbated, or in this case, mitigated, by spillover effects on family members. Our research suggests that although menôs labor force participation would decrease as a result of increased public health insurance coverage, some of this decrease in participation would be made up for by an increase in the labor force participation and hours worked of their wives. In particular, if we assume that the value of the VA insurance coverage is equivalent to the average single-coverage health insurance premium for workers in 2002, then this benefit constitutes a 4.6% positive income shock to the average household in our sample.[19] Since our results indicate that husbands are between 1.5% and 2.3% less likely to work as a result of VA insurance receipt, this finding suggests a labor force participation elasticity of -0.33 to -0.5 for men. Wives, on the other hand are 3% to 4% more likely to work, implying an elasticity of 0.65 to 0.87. For wives with high school education or less, the suggested elasticity is approximately 1.[20]

Our results are directly applicable to any policy that provides public health insurance or other valued in-kind benefits to one family member but not another. In addition to potential future VA expansions, our findings provide information about potential effects of a Medicare expansion to earlier ages. Women, who are on average not yet eligible for Medicare when their spouses become eligible (because men are, on average, older than their wives), will likely need to continue working in order to be able to cover the costs for their own health insurance or health

[19] Similar to Boyle and Lahey (2010), we base the value of insurance coverage on data from the National Compensation Survey: Employee Benefits in Private Industry in the United States, 2002-2003 (U.S. Department of Labor and Bureau of Labor Statistics, 2003.) We take the total (employer +employee) single-coverage premium of $3270.60 multiplied by 102% (since COBRA allows employers to charge an extra 2% of the cost for administrative fees). The average income of households in our sample (in 2002 dollars) is $73,174. Thus, the insurance constitutes a 4.6% (3336/73174) income shock.

[20] Low education wives have average household income of $58,215.56 in 2002 dollars and are 5.6 to 5.7 percent more likely to work as a result of the policy change.

care even after the spouse has retired. This need will be especially true for less-educated women, who are less likely to have access to employer-based retiree coverage.

The magnitude of our results could change in the present context either positively or negatively, given the ACAôs impact on health care markets. On the one hand, the availability of affordable insurance on the free market suggests less of a need for women, especially higher SES women, to continue working to provide coverage for themselves. On the other hand, the individual mandate increases the cost of foregoing insurance coverage. To the extent that the mandate binds, we would expect to see increased labor supply among those who may have been willing to go without health insurance coverage before. Effects on lower SES women may vary by state, depending upon Medicaid availability. In states that took up Medicaid expansions, wives might be less likely to enter or remain in the labor force, in order to qualify for Medicaid, while wives in states not providing Medicaid access might increase their hours in order to qualify for health insurance subsidies. Finally, health insurance costs have gone up since the 1990s even absent the ACA, increasing the value of an offer of public insurance.

In the context of the ACA directly, our results suggest that when job lock is reduced for one member (or both members) of a couple, it allows for a potential reshuffling of household labor supply. In some instances, particularly in credit-constrained families, it might be optimal for one spouse to increase work while the other decreases labor force participation. This could be the case in households where the husband is older or in poorer health. Thus, this increase in flexibility in allocating work hours has the potential to enhance household welfare.

Table 1: *Summary Statistics, 1992-2002*

	CPS			
	Veterans		Non-Veterans	
	Pre	Post	Pre	Post
	Husbands			
Observations	10,272	9,596	8,292	12,964
Age	59.81	59.25	58.91	59.02
White	0.94	0.92	0.87	0.87
No HS	0.16	0.07	0.34	0.24
HS	0.36	0.36	0.30	0.29
Some College	0.23	0.28	0.14	0.16
College Grad	0.15	0.16	0.10	0.15
Northeast	0.23	0.21	0.25	0.22
Midwest	0.25	0.24	0.24	0.22
South	0.31	0.31	0.31	0.32
West	0.21	0.24	0.20	0.23
Not Working	0.35	0.31	0.32	0.30
Part Time (<35 hrs)	0.10	0.10	0.09	0.09
Self-Employed	0.16	0.15	0.18	0.17
Hours Worked	41.86	42.11	42.57	42.90
	Wives			
Observations	10,187	9,493	8,164	12,674
Age	56.08	55.42	55.08	55.27
White	0.94	0.92	0.87	0.87
No HS	0.14	0.09	0.26	0.19
HS	0.47	0.42	0.41	0.37
Some College	0.23	0.27	0.17	0.22
College Grad	0.10	0.14	0.09	0.14
Not Working	0.47	0.38	0.47	0.41
Hours Worked	17.37	20.92	17.54	19.87
	HRS			
	Husbands			
Observations	5,311	6,470	3,772	7,114
Age	58.60	59.19	57.87	59.01
White	0.93	0.92	0.85	0.86
No HS	0.15	0.08	0.32	0.26
HS	0.38	0.37	0.34	0.30
Some College	0.22	0.28	0.13	0.15
College Grad	0.25	0.27	0.21	0.29
	Wives			
Observations	4,963	5,396	3,189	6,040
Age	56.80	57.69	56.32	57.75
White	0.94	0.93	0.88	0.88
No HS	0.15	0.11	0.25	0.20
HS	0.50	0.43	0.42	0.38
Some College	0.20	0.28	0.19	0.21
College Grad	0.15	0.19	0.14	0.21
Not Working	0.45	0.41	0.41	0.43
Hours Worked	18.45	19.88	20.94	19.99

Note: Universe is limited to married couples with husbands between the ages of 55 and 64 whose wives are not veterans. In the CPS, two observations with wives under the age of 18 have been deleted from the universe. In the HRS, means are weighted using person weights to match the CPS. The pre-period includes years 1992-1995 and the post period includes years 1998-2002. The number of observations was assessed by taking the mode among the listed variables; HRS observations are different between husbands and wives because some weights are 0.

Table 2

Effect of Insurance Receipt on Labor Supply Outcomes for Veterans

	Not Working		Part Time		Self Employed	
	(1)	(2)	(3)	(4)	(5)	(6)
	Panel I: Effects of Insurance Receipt					
veteran*post	0.0053	0.0077*	0.0153**	0.0147**	-0.0017	-0.0012
	(0.0049)	(0.0034)	(0.0054)	(0.0053)	(0.0042)	(0.0044)
veteran	0.0174**	0.0321**	-0.0014	0.0042	-0.0350**	-0.0241**
	(0.0037)	(0.0027)	(0.0041)	(0.0040)	(0.0039)	(0.0044)
Observations	41,124	41,124	26,404	26,404	41,124	41,124
	Panel II: Falsification exercise: 1992-1993 = pre, 1994-1995 = post					
veteran*fakepost	-0.0129	-0.0051	0.0100	0.0068	0.0081	0.0056
	(0.0079)	(0.0047)	(0.0083)	(0.0072)	(0.0071)	(0.0085)
veteran	0.0258**	0.0361**	-0.0057+	0.0014	-0.0387**	-0.0267**
	(0.0070)	(0.0044)	(0.0034)	(0.0039)	(0.0049)	(0.0060)
Full controls?	No	Yes	No	Yes	No	Yes
State time trend?	No	Yes	No	Yes	No	Yes
Observations	18,564	18,564	11,486	11,486	18,564	18,564

Notes: Data from Current Population Survey. Coefficient estimates are taken from a probit regression as described in eq. (1). Marginal effects are reported. Regressions include age, race, state, year and education dummies and a constant. Full controls include health insurance receipt in the previous year and pension in the previous year for columns (1) and (2) and current year in columns (3)-(4) and a state-specific time trend. The universe in Panel I includes the years 1992-2002 with 1996 and 1997 omitted. The universe in Panel II includes years 1992-1995, with fakepost indicating the years 1994-1995. Men whose wives are veterans or under age 18 are removed from the universe. Robust standard errors in parentheses are clustered on veteran and year.

+ significant at 10%; * significant at 5%; ** significant at 1%

Table 3

Effect of Husband's Insurance on Wife's outcomes

	Not Working		Hours Worked		Hours Worked|hrs>0		Earnings		ln(Earnings)	
	Min Controls	Full Controls	Min Controls	Full Controls	Min Controls	Full Controls	Min Controls	Full Controls	Min Controls	Full Controls
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
					I. All Wives					
veteran*post	-0.0180*	-0.0136+	0.6336**	0.4365+	0.2207	0.2403	13.7453*	8.7002	0.0404*	0.0275*
	(0.0071)	(0.0081)	(0.2146)	(0.2071)	(0.2308)	(0.2230)	(6.2424)	(5.8110)	(0.0144)	(0.0128)
veteran	0.0160**	0.0243**	-0.4422**	-0.6665**	0.0262	-0.1534	1.1798	-3.6154	0.0147	0.0115
	(0.0045)	(0.0046)	(0.1186)	(0.1295)	(0.1616)	(0.1626)	(5.8692)	(4.6083)	(0.0138)	(0.0128)
Observations	40,495	40,495	40,518	40,518	21,802	21,802	35,600	35,600	20,576	20,576
					II. Wives with High School Education or Less Education					
veteran*post	-0.0302**	-0.0298**	0.7967**	0.6303*	-0.0251	0.0708	27.3798**	23.8000**	0.0664*	0.0547*
	(0.0092)	(0.0113)	(0.2413)	(0.2663)	(0.1825)	(0.1949)	(5.2599)	(6.0277)	(0.0222)	(0.0183)
veteran	0.0218**	0.0330**	-0.6943**	-0.9350**	-0.0921	-0.2837	4.2230	-.4951	0.0062	0.0031
	(0.0072)	(0.0088)	(0.1620)	(0.1841)	(0.1403)	(0.1735)	(5.4615)	(4.7111)	(0.0212)	(0.0180)
Observations	23,768	23,768	23,827	23,827	11,311	11,311	20,318	20,318	10,321	10,321
					III. Wives with Some College or College Education					
veteran*post	-0.0035	0.0076	0.4789	0.1495	0.5698	0.4861	16.3277**	6.3861	0.0277+	-0.0009
	(0.0085)	(0.0092)	(0.5074)	(0.4371)	(0.5091)	(0.5123)	(2.7659)	(4.3967)	(0.0132)	(0.0142)
veteran	0.0046	0.0086+	-0.2125	-0.3957	-0.2841	-0.3889	-6.4426**	-9.7987*	0.0163	0.0204
	(0.0057)	(0.0050)	(0.3385)	(0.2740)	(0.3856)	(0.3982)	(1.6834)	(3.4784)	(0.0122)	(0.0122)
Observations	13,837	13,837	13,881	13,881	8,464	8,464	12,726	12,726	8,308	8,308

Notes: Data from Current Population Survey. Coefficients from estimating equation (1). Universe years for columns (1)-(6) are 1992-2002, omitting 1996 & 1997. Universe years for columns (7)-(10) are 1992-2001, omitting 1996 & 1997. Columns (1) and (2) report the marginal effects from a probit regression. Columns (3)-(10) report OLS results. Weekly earnings are created from previous year variables in 2002 dollars using the BLS CPI inflator. Regressions include age, race, state, year and education dummies and a constant. Full controls include pension and health insurance receipt in the previous year and a state-specific time trend. Robust standard errors in parentheses are clustered on veteran and year. Men whose wives are veterans or under age 18 are removed from the universe. Wives with graduate education are not included in Panel III. In columns (1) and (2), some wife ages predict wife not working perfectly and 23 obs are dropped. + significant at 10%; * significant at 5%; ** significant at 1%

Table 4

Results by Household Wealth and Pension Income

	Not Working	Hours Worked	Hours Worked|hrs>0	Not Working	Hours Worked	Hours Worked|hrs>0
	(1)	(2)	(3)	(4)	(5)	(6)
	Panel I: By Non-Housing Wealth					
	Low Non-Housing Wealth			High Non-Housing Wealth		
veteran*post	-0.0837**	3.2565**	0.7024	-0.0200	0.9175	-0.0333
	(0.0236)	(0.9142)	(0.7712)	(0.0225)	(0.9121)	(0.8568)
veteran	0.0223	-1.4696*	-1.1788*	0.0639**	-2.8605**	-1.2102+
	(0.0181)	(0.7042)	(0.5949)	(0.0171)	(0.7009)	(0.6573)
Sig different?				Yes	Yes	No
Observations	9,372	9,450	5,029	10,082	10,119	5,751
	Panel II: By Pension Income					
	Low Pension Income			High Pension Income		
veteran*post	-0.0578**	2.5284**	0.5932	0.0011	-0.8491	0.8541
	(0.0174)	(0.6855)	(0.6166)	(0.0484)	(1.7874)	(2.3256)
veteran	0.0599**	-2.7219**	-1.0951*	0.0479	-2.2591	-2.8526
	(0.0133)	(0.5223)	(0.4678)	(0.0396)	(1.5363)	(2.0115)
Sig different?				Yes	Yes	No
Observations	16,693	16,779	9,629	2,737	2,768	1,147

Note: Data from the Health and Retirement Study. Universe is even years from 1992-2002, omitting 1996. Coefficients from estimating equation (1). Panel I reports the marginal effects from a probit regression. Panels II and II report results from an OLS regression. Wealth and income measured in constant-year dollars using the BLS CPI inflator. Low wealth and income are defined as below the median; high wealth and income are above the median. Regressions include race, and a full set of state, year, age, and education dummies and a constant. Robust standard errors in parentheses are clustered on veteran and year.

+ significant at 10%; * significant at 5%; ** significant at 1%

Table 5

Results by Wife's Health Insurance Receipt in Prior Year

	Wife Had Employer-Provided Health Insurance		Wife Without Employer-Provided Health Insurance	
	(1)	(2)	(3)	(4)
	Panel I: Work outcomes			
	Not Working	Part Time	Not Working	Part Time
veteran*post	-0.0216**	0.0181*	-0.0137	-0.0486**
	(0.0062)	(0.0076)	(0.0092)	(0.0147)
veteran	0.0249**	-0.0147*	0.0143*	0.0141
	(0.0035)	(0.0058)	(0.0065)	(0.0100)
Sig different?			Yes	Yes
Observations	14,063	11,044	26,339	10,693
	Panel II: Hours Outcomes			
	Hrs Worked	Hrs Worked|hrs>0	Hrs Worked	Hrs Worked|hrs>0
veteran*post	0.3765	-0.5850*	0.7112*	0.9644+
	(0.3853)	(0.2279)	(0.2702)	(0.4737)
veteran	-0.5319+	0.4188*	-0.5303**	-0.4239
	(0.2922)	(0.1811)	(0.1319)	(0.3621)
Sig different?			Yes	Yes
Observations	14,129	11,083	26,389	10,719
	Panel III: Earnings Outcomes			
	Earnings	ln(Earnings)	Earnings	ln(Earnings)
veteran*post	-4.0686	-0.0185	19.6172**	0.0907**
	(14.4155)	(0.0120)	(6.6130)	(0.0203)
veteran	12.2665	0.0384**	-4.5797	0.0032
	(10.5492)	(0.0083)	(6.1298)	(0.0154)
Sig different?			No	Yes
Observations	12,664	10,877	22,936	9,699

Note: Data from the Current Population Survey. Coefficients from estimating equation (1). Universe for Panels I & II is 1992-2002, omitting 1996 & 1997. Universe for Panel III is 1992-2001, omitting 1996 & 1997. Panel I reports the marginal effects from a probit regression. Panels II and III report results from an OLS regression. Earnings are in 2002 dollars using the BLS CPI inflator. Regressions include race, and a full set of state, year, age, and education dummies and a constant. Robust standard errors in parentheses are clustered on veteran and year.

+ significant at 10%; * significant at 5%; ** significant at 1%

Table 6

Pathways: Multinomial Logits

	(1) Full-Time	(2) Part-Time	(3) Self-Employed	(4) Not Working
	I. All Wives			
veteran*post	0.0184**	-0.0009	0.0020	-0.0195**
	(0.0069)	(0.0036)	(0.0040)	(0.0068)
veteran	-0.0003	-0.0027	-0.0144**	0.0174**
	(0.0042)	(0.0033)	(0.0030)	(0.0046)
Observations	39,526	39,526	39,526	39,526
	II. Wives who Worked 0 Weeks Last Year			
veteran*post	-0.0009+	0.0037*	0.0034*	-0.0061**
	(0.0005)	(0.0017)	(0.0014)	(0.0022)
veteran	-0.00002	-0.0026*	-0.0034**	0.0061**
	(0.0006)	(0.0011)	(0.0007)	(0.0015)
Observations	15,028	15,028	15,028	15,028
	III. Wives who Worked Part-Time Last Year			
veteran*post	0.0388*	-0.0319*	-0.0074	0.0006
	(0.0153)	(0.0200)	(0.0184)	(0.0102)
veteran	-0.0369**	0.0391**	-0.0066	0.0044
	(0.0045)	(0.0070)	(0.0172)	(0.0097)
Observations	5,081	5,081	5,081	5,081
	IV. Wives who Worked Full-Time Last Year			
veteran*post	-0.0060	-0.0036	0.0057	0.0038
	(0.0046)	(0.0028)	(0.0038)	(0.0038)
veteran	0.0244**	0.0005	-0.0228**	-0.0022
	(0.0025)	(0.0023)	(0.0025)	(0.0029)
Observations	15,490	15,490	15,490	15,490

Notes: Data from Current Population Survey. Universe is 1992-2002, omitting 1996 & 1997. Coefficient estimates are marginal effects from a multinomial logit regression. Regressions include age, race, state, year and education dummies and a constant. Part-time in the previous year is defined as working more than 0 and less than 35 hours/week and at least 40 weeks in the previous year. Full-time in the previous year is defined as 35 or more hours/week and at least 40 weeks in the previous year. Robust standard errors in parentheses are clustered on veteran and year.

+ significant at 10%; * significant at 5%; ** significant at 1%

Table 7

Robustness Checks

	(1)	(2)	(3)	(4)
	Not Working	Hours Worked	Not Working	Hours Worked
	Panel I: Different Wife Ages			
	Ages 45-64		Ages 55-64	
veteran*post	-0.0160*	0.7803**	-0.0337**	1.1243*
	(0.0074)	(0.2506)	(0.0082)	(0.4260)
veteran	0.0164**	-0.5570**	0.0310**	-0.9898*
	(0.0053)	(0.1329)	(0.0073)	(0.3626)
Observations	36,762	36,762	23,314	23,314
	Panel II: Limiting Husbands			
	Husband Not Working Full-Time		Husband Not Working	
veteran*post	-0.0353**	1.3721**	-0.0430**	1.7639**
	(0.0057)	(0.2106)	(0.0095)	(0.2712)
veteran	0.0159**	-0.3735**	0.0055	-0.5967**
	(0.0048)	(0.1142)	(0.0080)	(0.1939)
Observations	23,732	23,774	12,751	12,827
	Panel III: Additional Checks			
	Full veteran interaction		No 2002	
veteran*post	-0.0200**	0.6017*	-0.0263**	0.9216**
	(0.0070)	(0.2296)	(0.0059)	(0.1562)
veteran	0.9947**	1.7228	0.0155**	-0.4478**
	(.0082)	(1.5180)	(0.0046)	(0.1287)
Observations	40,477	40,518	34,537	34,587

Note: Data from the Current Population Survey. Universe is 1992-2002, omitting 1996 & 1997. Coefficients from estimating equation (1). Columns (1) and (3) report the marginal effects from a probit regression. The remaining columns report results from an OLS regression. Regressions include race, and a full set of state, year, age, and education dummies and a constant. Robust standard errors in parentheses are clustered on veteran and year.

+ significant at 10%; * significant at 5%; ** significant at 1%

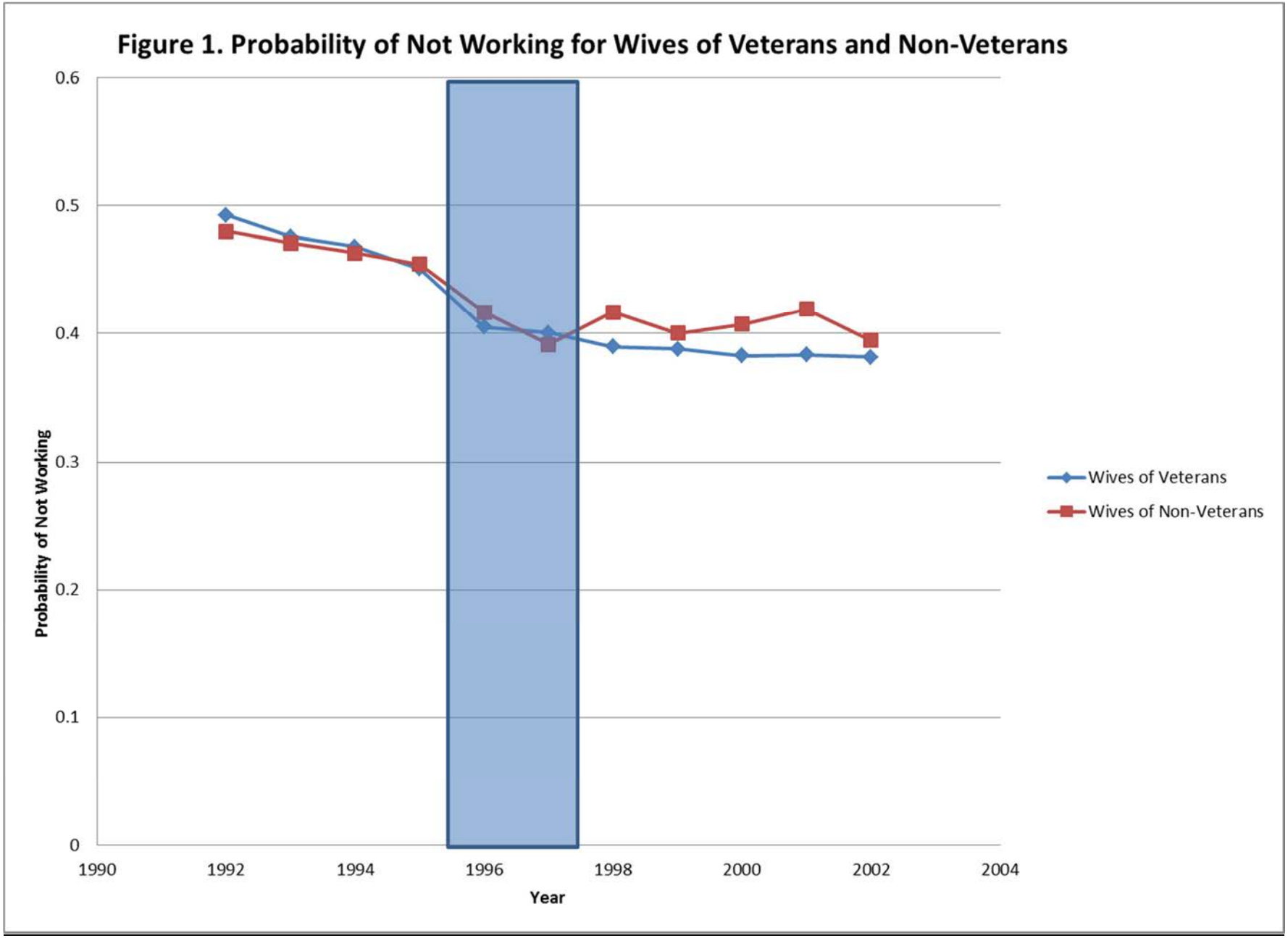
Figure 1. Probability of Not Working for Wives of Veterans and Non-Veterans
Probability of Not Working
0.6
0.5
0.4
0.3
0.2
0.1
0
1990
1992
1994
1996
1998
2000
2002
2004
Year
Wives of Veterans
Wives of Non-Veterans

Works Cited

Antwi, Ya Akosa, Asako S. Moriya, and Kosali Simon. 2012. ñEffects of Federal Policy to Insure Young Adults: Evidence from the 2010 Affordable Care Act Dependent Coverage Mandate.ò National Bureau of Economic Research Working Paper #18200.

Autor, David H. and Mark G. Duggan. 2007. "Distinguishing Income from Substitution Effects in Disability Insurance." *American Economic Review* 97(2): 119-24.

Averett, Susan L. and Julie L. Hotchkiss. 1995. "The Probability Of Receiving Benefits At Different Hours Of Work." *American Economic Review* 85(2): 276-280.

Baicker, Katherine, Finkelstein, Amy, Song, Jae and Sarah Taubman. 2014. "The Impact of Medicaid on Labor Market Activity and Program Participation: Evidence from the Oregon Health Insurance Experiment." *American Economic Review* 104(5): 322-328.

Baker, Michael. 2002. "The Retirement Behavior of Married Couples: Evidence from the Spouseôs Allowance.ò *Journal of Human Resources* 37(1): 1-34.

Blau, David. 1998. ñLabor force dynamics of older married couples.ò *Journal of Labor Economics* 16(3): 595-629.

Boyle, Melissa. 2009. ñHealth and Utilization Effects of Increased Access to Publicly Provided Health Care: Evidence from the U.S. Department of Veterans Affairs.ò Holy Cross Working Paper No. 09-02.

Boyle, Melissa and Joanna Lahey. 2010. ñHealth Insurance and the Labor Supply Decisions of Older Workers: Evidence from U.S. Department of Veterans Affairs Expansion.ò *Journal of Public Economics* 94(7-8): 467-478.

Buchmueller, Thomas C. and Robert G. Valletta. 1999. "The Effect of Health Insurance on Married Female Labor Supply." *Journal of Human Resources* 34(1): 42-70.

Chen, Susan E. 2012. ñSpousal Labor Supply Responses to Government Programs: Evidence from the Disability Insurance Program.ò University of Michigan Retirement Research Center Working Paper #2012-261.

Cohn, Jonathan. May 21, 2014. ñThe Veterans Affairs Scandal Was Decades in the Making.ò *New Republic*. http://www.newrepublic.com/article/117855/veterans-affairs-scandal-

was-decades-making. Last accessed: (7/25/14).

Coile, Courtney. 2004. "Retirement Incentives and Couples' Retirement Decisions." *The B.E. Journal of Economic Analysis and Policy* 4(1): 1-28.

Currie, Janet. 2003. "U.S. Food and Nutrition Programs" in *Means-Tested Transfer Programs in the United States,* ed. Robert Moffitt, 199-289. Chicago, IL: University of Chicago Press.

Currie, Janet and Firouz Gahvari. 2008. ñTransfers in Cash and In-kind: Theory Meets the Data.ò *Journal of Economic Literature* 46(2): 333-383.

Cullen, Julie B. and Jonathan Gruber. 2000. ñDoes Unemployment Insurance Crowd out Spousal Labor Supply?ò *Journal of Labor Economics* 18(3): 546-572.

Dave, Dhaval M., Sandra L. Decker, Robert Kaestner and Kosali Ilayperuma Simon. 2013. ñThe Effect of Medicaid Expansions in the Late 1980s and Early 1990s on the Labor Supply of Pregnant Women.ò National Bureau of Economic Research Working Paper #19161.

Dague, Laura, Thomas DeLeire, and Lindsey Leininger, 2014. "The Effect of Public Insurance Coverage for Childless Adults on Labor Supply," National Bureau of Economic Research Working Paper #20111.

Department of Veterans Affairs. 2002. *2001 National Survey of Veterans: Final Report*. http://www1.va.gov/VETDATA/docs/SurveysAndStudies/NSV_Final_Report.pdf. Last accessed: (7/30/14).

Duggan, Mark G., Rosenheck, Robert and Perry Singleton. 2010. ñFederal Policy and the Rise in Disability Enrollment: Evidence for the VAôs Disability Compensation Program.ò *Journal of Law and Economics* 53(2): 379-398.

Ellwood, David and E. Kathleen Adams. 1990. ñMedicaid Mysteries. Medicaid and Welfare Dynamics.ò *Health Care Financing Review (Annual Supplement)* 119ï 31.

Gahvari, Firouz. 1994. ñIn-Kind Transfers, Cash Grants and Labor Supplyò *Journal of Public Economics* 55(3): 495-504.

Gahvari, Firouz. 1995. ñIn-Kind versus Cash Transfers in the Presence of Distortionary Taxes.ò *Economic Inquiry* 33(1): 45-53.

Garrett, Bowen and Robert Kaestner. 2014. ñThe Best Evidence Suggests the Effects of the ACA on Employment Will Be Small.ò *Timely Analysis of Immediate Health Policy Issues.* Urban Institute.

Garthwaite, Craig, Gross, Tal and Matthew J. Notowidigdo. 2014. ñPublic Health Insurance, Labor Supply, and Employment Lock.ò *Quarterly Journal of Economics* 129(2): 653-696.

Gelbach, Jonah B. 2002. "Public Schooling for Young Children and Maternal Labor Supply." *American Economic Review* 92(1): 307-322.

Goux, Dominique, Maurin Eric, and Barbara Petrongolo. 2014. ñWorktime Regulations and Spousal Labor Supply.ò *American Economic Review* 104(1): 252-76.

Gustman, Alan and Thomas Steinmeier. 2000. ñRetirement in Dual-Career Families: A Structural Model.ò *Journal of Labor Economics* 18(3) 503-545.

Guy, Gery P. Jr., E. Kathleen Adams, and Adam Atherly. 2012. "Public and Private Health Insurance Premiums: How Do They Affect the Health Insurance Status of Low-Income Childless Adults?" *Inquiry* 49(1): 52-64.

Ham, John C. and Lara D. Shore-Sheppard. 2001. ñThe Impact of Public Health Insurance on Labor Market Transitions.ò Williams College Working Paper 2001-02.

Ham, John C. And Lara D. Shore-Sheppard. 2005. ñDid Expanding Medicaid Affect Welfare Participation?ò *Industrial and Labor Relations Review.* 58(3): 452-470.

Hamersma, Sarah. 2013. ñThe Effects of Medicaid Earnings Limits on Earnings Growth Among Poor Workers.ò *The B.E. Journal of Economic Analysis & Policy.* 13(2): 887-919.

Hamersma, Sarah and Matthew Kim. 2009. ñThe Effect of Parental Medicaid Expansions on Job Mobility.ò *Journal of Health Economics* 28(4):761-70.

Ho, Jeong-Hwa and James M. Raymo. 2009. ñExpectations and Realization of Joint Retirement Among Dual-Worker Couplesò *Research on Aging* 31(2): 153-179.

Honig, Marjorie and Irena Dushi. 2005. ñHousehold Demand for Health Insurance: Price and Spouseôs Coverageò SSRN working paper: http://ssrn.com/abstract=801787.

Hospido, Laura and Gema Zamarro. 2013. ñRetirement Patterns of Couples in Europe.ò

Documentos de Trabajo. N 1317. Banco de Espana.

Hurd, Michael D. 1990. ñThe Joint Retirement Decision of Husbands and Wives.ò In *Issues in the Economics of Aging,* ed. David Wise, 231-258. Chicago, IL: University of Chicago Press.

Jacob, Brian and Jens Ludwig. 2012. ñThe Effects of Housing Assistance on Labor Supply: Evidence from a Voucher Lottery.ò *American Economic Review* 102(1): 272-304.

Johnson, Richard W. 2004. ñDo Spouses Coordinate Their Retirement Decisionsò *Boston College Center for Retirement Research Issue in Brief* (19): 1-8.

Kapinos, Kandice A. 2009. "Changes in Spousal Health Insurance Coverage and Female Labor Supply Decisions." *Forum of Health Economics and Policy* 12(2): 1-24.

Kapur, Kanika and Jeannette Rogowski. 2011. "How Does Health Insurance Affect the Retirement Behavior of Women?" *Inquiry* 48(1): 51-67.

Klein, Robert E. and Donald D. Stockford. 2001. *Data on the Socioeconomic Status of Veterans and on VA Program Usage* www1.va.gov/VETDATA/docs/SpecialReports/sesprogramnet5-31-01.ppt. Last accessed: July 29, 2014.

Kolstad, Jonathan T. and Amanda E. Kowalski. 2012. ñMandate-Based Health Reform and the Labor Market: Evidence from the Massachusetts Reform.ò National Bureau of Economic Research Working Paper #17933.

Leonesio, Michael. 1988. In-kind transfers and work incentives. *Journal of Labor Economics.* 6(4): 515-529.

Long, James E. and Ethel B. Jones. 1981. "Married Women in Part-Time Employment," *Industrial and Labor Relations Review.* 34(3): 413-425.

Mare, Robert D. 1991. "Five Decades of Educational Assortative Mating." *American Sociological Review* 56(1): 15-32.

Moffitt, Robert A. 2002. ñWelfare Programs and Labor Supply,ò In *Handbook of Public Economics vol. 4,* ed. Alan J. Auerbach and Martin Feldstein, 2393-2430. Amsterdam: New Holland.

Moffitt, Robert A. and Barbara Wolfe. 1992. ñThe Effect of the Medicaid Program on Welfare Participation and Labor Supply.ò *Review of Economics and Statistics* 74(4): 615-626.

Montgomery, Edward and John C. Navin. 2000. ñCross-State Variation in Medicaid Programs and Female Labor Supply.ò *Economic Inquiry* 38(3): 402-418.

Murasko, Jason E. 2008. "Married Women's Labor Supply and Spousal Health Insurance Coverage in the United States: Results from Panel Data." *Journal of Family and Economic Issues* 29(3): 391-406.

Nelson, Charles T. and Robert J. Mills. 2001. ñThe March CPS Health Insurance Verification Question and its Effect on Estimates of the Uninsured.ò *U.S. Census Bureau*. http://www.census.gov/hhes/www/hlthins/publications/verification.html. Last Accessed 6/28/11.

Olson, Craig A. 1998. "A Comparison of Parametric and Semiparametric Estimates of the Effect of Spousal Health Insurance Coverage on Weekly Hours Worked by Wives." *Journal of Applied Econometrics* 3(5): 543-65.

Olson, Craig A. 2002. ñDo Workers Accept Lower Wages in Exchange for Health Benefits?ò *Journal of Labor Economics*. 20(2): S91-S114.

Pencavel, John. 1998. "Assortative Mating by Schooling and the Work Behavior of Wives and Husbands." *American Economic Review* 88(2): 326-329.

Ross, Joseph S., Salomeh Keyhani, Patricia S. Keenan, Susannah M. Bernheim, Joan D. Penrod, Kenneth S. Boockvar, Alex D. Federman, Harlan M. Krumholz, and Albert L. Siu. 2008. ñUse of Recommended Ambulatory Care Services: Is the Veterans Affairs Quality Gap Narrowing?ò *Archives of Internal Medicine.* 168(9): 950-958.

Royalty, Anne Beeson and Jean Abraham. 2006. "Health Insurance and Labor Market Outcomes: Joint Decision-Making within Households." *Journal of Public Economics* 90(8-9): 1561-1577.

Stancanelli, Elena. 2012. "Spouses' Retirement and Hours of Work Outcomes: Evidence from Twofold Regression Discontinuity," *Documents de travail du Centre d'Economie de la Sorbonne* 12074.

Strumpf, Erin. 2011. ñMedicaidôs Effect on Single Womenôs Labor Supply: Evidence from the Introduction of Medicaid.ò *Journal of Health Economics* 30(3): 531-548.

Tomohara, Akinori and Ho Jin Lee. 2007. ñDid State Childrenôs Health Insurance Program Affect Married Womenôs Labor Supply? *Journal of Family and Economic Issues* 28(4): 668-683.

U.S. General Accounting Office. 1996. *VA Health Care: Efforts to Improve Veterans' Access to Primary Care Services.* GAO/T-HEHS-96-134. Washington, D.C.: U.S. Government Printing Office.

U.S. General Accounting Office. 1999. *Veterans' Affairs: Progress and Challenges in Transforming Health Care*. GAO/T-HEHS-99-109. Washington, D.C: U.S. Government Printing Office.

U.S. General Accounting Office. 2003. *VA Health Care: Framework for Analyzing Capital Asset Realignment for Enhanced Services Decisions*. GAO-03-1103R. Washington, D.C.: U.S. Government Printing Office.

Weaver, David A. 1994. ñThe Work and Retirement Decisions of Older Women: A Literature Review.ò *Social Security Bulletin* 57(1): 3-24.

Winkler, Anne E. 1991. ñThe Incentive Effects of Medicaid on Womenôs Labor Supply.ò *The Journal of Human Resources* 26(2): 308-337.

Yelowitz, Aaron S. 1995. ñThe Medicaid Notch, Labor Supply, and Welfare Participation: Evidence from Eligibility Expansions.ò *The Quarterly Journal of Economics* 110(4): 909-939.