

Marriage Lock? An Examination of the Relationship between Health Insurance Coverage and Marital Dissolution

By

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ABSTRACT

Marriage conveys a host of legal, social, and economic benefits upon those who enter it. Among these is access to dependent health insurance coverage. For those who depend on this coverage, divorce means the loss of that coverage and the financial stability that it provides. This paper uses data from the 1999-2009 waves of the Panel Survey of Income Dynamics (PSID) to determine whether health insurance coverage is associated with lower rates of marriage dissolution. Using a sample of 2,078 new marriages and discrete-time survival analysis, I examine whether couples who have continuous health insurance coverage are less likely to end their marriage than couples who have unstable or no coverage. Results suggest that stable health insurance coverage is significantly associated with lower marital dissolution rates and this effect cannot be explained by differences in demographic and human capital characteristics between those with continuous coverage and those without.

LITERATURE REVIEW

Marriage conveys a host of legal, social, and economic benefits upon those who enter into it. Among these is access to dependent health insurance coverage through one's spouse's employment. The U.S. healthcare system relies primarily on employer-provided insurance coverage (EPIC) to deliver healthcare-related services. Prior to the passage of the Patient Protection and Affordable Care Act of 2010 (PPACA), public healthcare provision was limited to low-income families with children, the disabled, and the elderly. The high cost and extensive cost-sharing of insurance plans purchased on the private individual market, as well as their failure to cover pre-existing conditions, often made these plans unaffordable to all but those at the high end of the income distribution. In many states the income restrictions for access to public coverage through programs such as Medicaid could be so restrictive that only those with family income that remained significantly below the federal poverty line were able to qualify. For those who do not receive an offer for coverage through their own employer, coverage through their spouse's employment was an important alternate source for coverage. In addition, the increase in family income associated with marriage could make health insurance through the private individual health insurance market more affordable.

In addition to offering greater access to private health insurance coverage, marriage can improve the level of coverage a spouse receives by providing a wider array of coverage options. The degree and quality of health care coverage can vary widely across employers. Dual-earner households in which both spouses have access to employer-provided coverage have a wider array of choices in coverage available to them, allowing them to choose higher quality and/or more extensive coverage plans than those with a single-earner (Monheit, Schone, and Taylor 1999; Abraham and Royalty 2005). Moreover, because they have greater access to coverage through multiple plans, dual-earner households are better able to double-cover household members in order to ensure comprehensive coverage, particularly when out-of-pocket premiums are low (Monheit, Schone, and Taylor 1999).

Access to and level of health insurance coverage may also affect the employment decisions of married men and women. Historically, married women's employment has been responsive to the employment outcomes of their husbands, though this relationship may have weakened over time (Blau and Kahn 2007; Heim 2007). Similarly, there is evidence that when making decisions regarding employment and work hours, spouses take into account the availability of health insurance coverage through their partner's employer (Lyonette, Kaufman, and Crompton 2011). Individuals whose spouse's employer offers coverage are less likely to work full-time or for an employer that offers coverage (Royalty and Abraham 2006; Buchmueller and Valletta 1999; Olson 1998; Wellington and Cobb-Clark 2000). These findings apply to both men and women, but are weaker for husbands than for wives (Wellington and Cobb-Clark 2000). Due to the lower availability of health insurance to those who are engaged in part-time employment, there is little relationship between access to health insurance through one's spouse and part-time employment (Buchmueller and Valletta 1999; Olson 1998).

This joint decision-making regarding employment and work hours suggests that within marriage, access to health insurance can create or increase economic interdependency between spouses. To the extent that one or both spouses are dependent on the marriage to receive this benefit, the loss of this coverage may serve as a barrier to separation or divorce. However, like many forms of marital interdependence, particularly those that are related to employment, this form is asymmetric with respect to gender. Men are more likely to have coverage through their own employer and less likely to have dependent coverage than women. This difference is due not only to whether wives are offered EPIC through their own employment, but also to differences in the generosity of coverage that they are offered. Married women are more likely to decline coverage through their own employer and accept dependent coverage through their husband's employer (Buchmueller 1996; Keene and Prokos 2010), because, on average, the plans offered through wives'

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employers are likely to have higher cost-sharing and cover fewer healthcare costs (Keene and Prokos 2010) than those of their husbands.

These gender differences in dependent health insurance coverage suggest that wives will be more dependent on the marriage for their own health insurance coverage and potentially for that of their children. If the wife has denied an offer of coverage through her employer in favor of accepting more comprehensive coverage through her spouse, receiving dependent health insurance coverage may have less of an effect, though she may still face an increase in healthcare costs relative to those she faces within marriage. However, for those who receive dependent coverage through their spouse because they do not have an offer of their own, the longer she spends out of the labor force or in a position that does not offer health insurance coverage, the more difficult it may be to later obtain a position that does offer such coverage.

In fact, recent research has suggested that wives (Lavelle and Smock 2012) and children (Hill and Schaefer 2011) are more likely to experience a loss in coverage following a divorce than husbands. Women with college degrees and who receive health insurance from their own employment are unlikely to experience a change in their coverage status following a divorce. However, women who depend on their spouse's health insurance for coverage, have other private coverage, or government-provided health insurance coverage are more likely to lose coverage (Lavelle and Smock 2012). This change in coverage status may persist for more than two years after the end of the marriage (Lavelle and Smock 2012). Moreover, this loss of health insurance is likely to be coupled with more significant economic losses that compound the effects of the lack of coverage. The fear of a loss or interruption in coverage may discourage an individual from seeking a divorce. Due to this barrier effect, we would expect those with health insurance coverage through marriage to have lower dissolution rates than those without such insurance.

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In addition to serving as a barrier to marital dissolution, health insurance may also play a role in improving marital stability through its effects on financial stability and overall health. Health insurance coverage helps to reduce, though not eliminate, both the out-of-pocket and overall costs of medical care for individuals and families. Lack of health insurance can lead to greater variability and unpredictability in medical expenses (Miller, Vigdor, and Manning 2004). This unpredictability can leave individuals and families unprepared to meet the financial obligations brought on by a medical event. Medical debt is a contributing factor in a majority of bankruptcies in the United States (Sullivan, Warren, and Westbrook 2001). Though those without health insurance are less likely to seek medical care, and thus have lower overall medical expenses (Ward and Franks 2007), they are more likely to report having difficulty paying medical bills due to higher out-of-pocket costs (Schoen and DesRoches 2000). Financial instability and distress is associated with a higher probability of marital dissolution (Nunley and Seals 2010), which would lead us to expect those with health insurance coverage to have a lower probability of marital dissolution.

Health insurance may also help to improve the health of those who possess it, leading to lower physical, emotional, and financial stress in the relationship. Those who lack continuous health insurance coverage are less likely to receive preventative care services than those who do not (Sudano and Baker 2003). They are less likely to seek medical care when they experience a medical event (Ward and Franks 2007). The failure to seek preventive and other medical care can lead to declines in overall health. Those who lack health insurance coverage have poorer overall health and higher mortality than those who have coverage (Schoen and DesRoches 2000; Baker et al 2001; Sudano and Baker 2003), which is associated with loss of income, lower economic productivity, and time spent off of work (Miller, Vigdor, Manning 2004). These factors may then reduce financial stability and decrease the probability of obtaining coverage in the future. This set of stressors may increase the probability of marital dissolution.

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One complicating factor in measuring the relationship between health insurance coverage and marital dissolution is the fact that access to health insurance coverage is associated with a variety of factors that are also associated with the probability of marital dissolution. The probability that an individual worker will be offered health insurance coverage through their own employer differs by age, race, education, and gender with younger, less educated and/or affluent, non-white, and female workers less likely to have an offer of health insurance coverage from an employer (Janicki 2013). Similarly, the probability of separation or divorce is higher for those who are young, less educated and/or affluent, and African-American (White 1990; Amato 2010; Clarkwest 2006). This suggests that differences in access to health insurance may partially offset any relationship between health insurance and marital dissolution.

Because the primary source of health insurance coverage in the U.S. is an employer, labor market inequalities are reinforced through access to health insurance coverage. Public provision of health insurance to families with children and the disabled partially mitigate this disparity, but these programs leave much of the adult uninsured population ineligible for assistance (Koch 2009). This means that those who experience difficulties in the labor market will also have increased difficulty in obtaining and maintaining health insurance coverage. Because both marriage and marital stability are related to labor market outcomes, particularly for men, if there is a relationship between health insurance and marital dissolution, this relationship may be capturing the effects of labor market success rather than an independent effect of having health insurance coverage. There may be unobserved characteristics that are related to both labor market and marital success, such as attractiveness, dedication, and emotional stability that drive the observed relationship between health insurance coverage and marital dissolution. Employer-provision of health insurance is often combined with other job characteristics and benefits such as coverage by a union contract, paid sick leave, a pension or retirement plan, or life insurance coverage (Budd 2004; Marshall 2003; Wunnava

and Ewing 1999). Controlling for other forms of non-wage compensation that are included in employee benefit packages along with health insurance may provide evidence for the existence of this type of unobserved heterogeneity.

Due to the public provision of health insurance through public programs such as Medicaid, access to health insurance is not simply related to one's own or one's spouse's labor market characteristics and benefits offered through employment. These programs generally target low-income families with children and married couples are less able to receive benefits. In fact, despite the fact that married women are more likely to have private health insurance coverage and any coverage overall, married women in low-income families are less likely to have coverage than unmarried women in low-income families because the former are less likely to qualify for and receive Medicaid coverage (Bernstein et al 2008). In fact, following a divorce, low-income women are more likely to obtain health insurance than moderate- or higher-income women, because the latter are not eligible for public coverage, such as Medicaid and are thus more likely to remain uninsured (Lavelle and Smock 2012). This suggests that in contrast to women with higher education and personal income, women in low-income families may have health insurance options outside of marriage that they do not have access to within marriage, mediating the relationship between health insurance and marital dissolution.

RESEARCH HYPOTHESES AND ANALYTIC FRAMEWORK

To my knowledge, this is the first paper to examine whether there is a relationship between health insurance coverage and marital dissolution. I use data from the 1999-2009 biennial waves of the Panel Survey of Income Dynamics (PSID) and event history survival analysis to model the hazard of marital dissolution among couples who married after the 1994 wave and before the 2007 waves of the survey. I chose this period of observation both because it precedes any changes to the U.S. healthcare system that might have been introduced by the passage of the Patient Protection and

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Affordable Care Act of 2010 (PPACA) and because the PSID introduced new health- and health insurance-related measures to the survey in 1999. This analysis will provide a baseline measure of the relationship between health insurance coverage and marital dissolution against which future research can compare after the PPACA has been fully implemented. I restrict my sample to recently married couples in order to avoid the selection problems that arise from using samples that contain a high proportion of stable, long-term marriages who are less likely to separate or divorce.

The PSID contains detailed information regarding the stability of health insurance coverage by providing information regarding the number of months in each calendar year that an individual was covered by a health insurance plan. This allows me to divide couples into categories based on their access to stable, or continuous, health insurance coverage rather than simply their current health insurance coverage status. In order to assess whether the effect of health insurance is driven primarily by heterogeneity in access to stable health insurance coverage, I separate couples into three groups: those in which both partners have stable coverage, those in which one spouse has stable coverage, and those in which both have unstable or no coverage. This allows me to test my first hypothesis:

Hypothesis 1:

Couples with health insurance are less likely to separate or divorce than couples without health insurance or those in which only one spouse has coverage.

If only one spouse has stable health insurance coverage, marital dissolution is unlikely to affect either spouse's coverage status. We might expect that those who have access to stable coverage for themselves, but do not or are unable to extend this coverage to their spouse are less likely to have a job that offers family (dependent) coverage and are thus less economically advantaged as compared to those who have such coverage, but more advantaged relative to those who have no or unstable coverage.

Because health insurance coverage is associated with many demographic and human capital characteristics that are also associated with the probability of marital dissolution, we would expect that controlling for these factors would partially explain this relationship. Moreover, because individuals are sorted into jobs based on both these observed human capital characteristics and personal characteristics that are likely to remain unobserved by the researcher, we would expect that adjusting for access to other job characteristics that are related to the provision of EPIC would further explain the relationship between health insurance coverage and marital dissolution.

Hypothesis 2A:

The relationship between health insurance and marital dissolution can be partially explained by differences in demographic and human capital characteristics that are related to the probability of having health insurance, but will remain after these differences have been controlled.

Hypothesis 2B:

Controlling for other job characteristics or benefits that are associated with the provision of health insurance will reduce, but not explain the relationship between health insurance and marital dissolution.

The preceding hypotheses focused on the role that health insurance plays in the likelihood of marital dissolution, regardless of the type of coverage. However, we would expect the effect of health insurance to be largest for couples in which one spouse has dependent, or family, health insurance coverage than for those in which each spouse has coverage through their own source. The PSID collects data about the type of coverage that each family unit member has at the time of the biennial interview, which can be used to compare couples in which both partners are covered by EPIC with other couples.

Hypothesis 3:

The effect of health insurance coverage on marital dissolution will be larger for couples in which both partners have employer-provided health insurance coverage.

A final direct measure of joint coverage that it is possible to construct using the PSID data alone is whether or not each spouse has the same type of health insurance coverage. The PSID asks what type of coverage each individual in the household has at the time of each biennial interview. This allows me to compare the type of insurance coverage reported for each spouse and construct a measure indicating whether one spouse has a different type of coverage than the other. If this is true, it indicates that at least one spouse has access to non-shared coverage, which means that it is not dependent on the marital relationship.

Hypothesis 4:

Couples in which both spouses report having a similar type of health insurance coverage are less likely to separate or divorce than couples in which at least one spouses reports having access to a type of health insurance coverage that the other does not.

The PSID has two weaknesses that limit its ability to thoroughly examine the relationship between marital dissolution and health insurance coverage. The first is that the PSID includes only a limited number of job characteristics that are associated with employer-provision of coverage. The second weakness of the PSID is that the measures of insurance type do not include the source of this coverage. This means that for couples in which both spouses have EPIC, it is not possible to distinguish whether each partner has coverage through their own employer or through dependent coverage. To assess the importance of these weaknesses and find an alternative method of obtaining this information, I drew information from an alternative data source that includes more detailed information regarding the relationship between health insurance coverage and demographic, human capital, and job characteristics.

The Medical Expenditures Panel Survey household component (MEPS-HC) contains more detailed information about individual health insurance coverage, including the type and source of coverage, as well as information about a wide-variety of job characteristics that are associated with

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the provision of EPIC. Using MEPS-HC, it is possible to determine whether an individual has an offer for EPIC through their own employer even if that individual declined that coverage. In addition, within MEPS-HC it is possible to determine whether those who are covered by EPIC receive coverage through their own employer or through dependent coverage. Unfortunately, MEPS-HC has two weaknesses that make it unsuitable for studying marital dissolution on its own. First, MEPS-HC households are only followed for a period of two years. The relative rarity of divorce means that few dissolutions are observed within this population. Second, MEPS-HC does not collect information regarding marriage duration, so it is not possible to determine which marriages are recent and which are long-term, stable marriages. This leads to a selection problem in which couples who have a higher risk of dissolution are not observed because they ended their marriage prior to the observation period.

Using the detailed information available about the source of health insurance coverage in the 1999-2008 annual consolidated household component files of the MEPS-HC, I am able to model the probability of having health insurance coverage, based on the wide variety of individual, family, and job characteristics that are available within this survey. I can then limit these models to the characteristics that are also available in the PSID in order to compare the quality of the individual predicted probabilities of having health insurance coverage when these characteristics are excluded. In results that are not presented here¹ I show that the predicted probabilities from the more restricted PSID-based model are similar to and strongly correlated with those from the more detailed models. I then use the model coefficients from the MEPS-HC analyses to construct the predicted probability that individuals or couples in the PSID will have health insurance coverage in each year, as well as the probability of having an offer for EPIC from one's own employer and the probability of having employer-provided dependent coverage.

¹ The results are presented in a separate paper that focuses on the quality of the predicted probabilities.

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I construct three measures for each spouse: the probability of having health insurance from any source, the probability of having an offer of EPIC through one's own employer, and the probability of being covered through dependent health insurance coverage. The first two are based on an analysis of all working-age individuals, ages 18-64 and are created separately by gender. The final measure is restricted to married couples, and was also conducted separately by gender. Constructing separate measures for husbands and wives allows me to test whether they have similar or different effects on the probability of marital dissolution. In addition to these individual measures, I construct a joint measure for the probability that either spouse is covered by employer-provided dependent health insurance. While these measures are likely less efficient than a direct measure of whether or not an individual will have each type of coverage, they may provide some initial indication of whether a relationship between these types of coverage and marital dissolution exists.

The overall probability of having any type of insurance can be used to simultaneously capture the effects of demographic, human capital, and job characteristics on the probability of having health insurance. In addition, by including additional measures associated with having coverage that are not included in the marital dissolution model, this probability can help capture the degree to which characteristics that are strongly associated with having coverage predict the likelihood of marital dissolution after controlling for actual health insurance coverage. This may provide additional evidence for or against the possibility that other characteristics are driving the relationship between health insurance and marital dissolution.

Hypothesis 5A:

The probability of marital dissolution will decrease as the probability of having health insurance coverage increases, but couples with health insurance coverage will remain less likely to separate or divorce.

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Similarly, the probability of having an offer of EPIC can help to capture the additional effects of labor market characteristics that are associated with being in jobs that offer health insurance coverage. Moreover, if the effect of health insurance is driven by characteristics associated with labor market success rather than the coverage itself, we would expect that the probability of being offered EPIC will be larger than that for probability of having any coverage. This is because the probability of having insurance is related not only to labor market success, but also to coverage through public insurance programs, such as Medicaid. Individuals are selected into Medicaid based on characteristics that are not associated with labor market success, such as low-income and low levels of education.

Hypothesis 5B:

The probability of marital dissolution will decrease as the probability of having health insurance coverage increases, but this effect will be smaller than that of the probability of having any health insurance coverage, and couples with health insurance coverage will remain less likely to separate or divorce.

Health insurance may not have the same effect on marital stability for all couples. It may vary by the source of coverage or the probability of having coverage through another source. It may be restricted to those who have dependent coverage through their partner. In the final portion of the paper, I examine whether health insurance reduces the likelihood of dissolution for all couples or only a subset. To do so, I introduce the interaction of health insurance coverage status with factors such as the probability of having insurance from any source, the probability of having an offer of EPIC, and the probability of having dependent coverage. In general, I expect that those who have a high probability of having coverage outside of the marriage will find coverage that is based on the marriage to be less valuable than those who are dependent on the marriage for their coverage.

Hypothesis 6:

As the probability of having any health insurance or an offer of employer-based insurance rises, the stabilizing effect of having health insurance on the likelihood of

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marital dissolution will decrease; however as the probability of having dependent health insurance coverage increases, the stabilizing effect of health insurance on the likelihood of dissolution will also increase.

DATA AND SAMPLE SELECTION

The Panel Survey of Income Dynamics (PSID)

The analytic data come from the 1999-2009 waves of the PSID, a longitudinal survey of a representative sample of U.S. individuals and the households in which they reside, conducted by the Survey Research Center of the Institute for Social Research, at the University of Michigan (Hill 1992). In 1968, approximately 4,800 U.S. households were interviewed. The survey was conducted annually between 1968 and 1997 and biannually thereafter. The PSID tracks all members of original 1968 sample households, even if they no longer coreside, and also follows the children of original sample members born after the initial 1968 interview and their coresidents when they leave the original 1968 interview households. The PSID's method of following children of the original sample members as they form their own households allows the sample to remain representative of the nation's non-immigrant population over time (Hill 1992), though the sample underrepresents new immigrants who entered the United States after 1968. To remedy this, in 1997 and 1999 the PSID began interviewing a new sample of immigrants whose families had entered the United States after 1968.

Beginning with the 1999 wave, the PSID has consistently included detailed information on health insurance coverage, health status, and diagnosis of a number of common medical conditions of individual family unit members. The sample consists of couples who married between the 1994 and 2007 waves of the PSID, and whose marriages were intact during at least one interview during the 1999 and 2007 waves of the survey. It is restricted to couples in which both partners were under age 55 at the time of marriage in order to exclude those who might gain access to Social Security. In total, a sample of 2,128 couples met the sample selection criteria, but only 2,078 were provided non-

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zero weights by the PSID². The results presented here rely only on the couples with non-zero weights.

The Medical Expenditures Panel Survey, Household Component (MEPS-HC)

The predicted probabilities of insurance coverage are based on population estimates created using the 1999-2008 Medical Expenditures Panel Survey – Household Component (MEPS-HC) annual consolidated files. MEPS-HC is a nationally-representative sample of households drawn from the sample of respondents to the National Health Information Survey (NHIS) conducted annually by the National Center for Health Statistics. Respondents are interviewed five times over a period of about two years. A new panel sample is drawn every year, which means that at any given time there are two panels of respondents who are currently participating in the survey. Participants are asked to provide detailed information regarding their health insurance coverage, medical problems, and healthcare utilization and costs. MEPS constructs two types of files from this information: annual consolidated files that contain information about a single calendar year and longitudinal files that contain complete information from each panel. Each annual file is made up of respondents from two overlapping panels.

To create the predicted probabilities used in this paper, two samples were drawn from each of the 1999-2008 annual files. The first consisted of all adults age 18 to 64, while the second consisted of all married couples in which both spouses were ages 18 to 64 and were continuously insured throughout the year. The second sample was used to model the probability that one spouse has employer-provided dependent health insurance coverage when both spouses were continuously insured.

ANALYSIS

Analytic Method

² The PSID assigned sampling weights of zero to individuals who were members of PSID sample families that left the PSID for one or more interview periods, and then were later recontacted and agreed to resume being followed.

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The time to marital dissolution was analyzed using proportional-hazards survival analysis that takes into account the discrete-time observation of events and the left-truncation of observations of couples who married prior to the 1999 wave. The unit of time for the analysis was years, and was based on the biennial PSID interview dates. No PSID interviews were conducted in even years, so pseudo-interview dates were imputed as the mid-point between two PSID interview dates. Couples were followed from either the 1999 wave (for couples who married prior to that interview) or the first year of marriage (for those who married after the 1999 interview) until one of the following events occurred: 1) the couple separated or divorced, 2) one spouse was widowed, 3) the couple was lost to follow-up, or 4) the 2009 PSID interview. The dependent variable was an indicator for whether the couple had separated or divorced during the previous year. Couples who had ended their marriage were coded as 1. Couples who remained married, or were widowed or lost to follow-up were coded as 0. During the observation period, 479 couples, or 23% experienced marriage dissolution. Couples were followed for a median time period of 7 years.

The MEPS-HC data was analyzed using logistic regression. In each model the dependent variable was an indicator coded 1 if the individual or couple possessed that type of insurance and 0 otherwise. The models predicting whether each spouse had any health insurance coverage or an offer for EPIC through their own employer included the following covariates: age, race/ethnicity, education, marital status, work status, employer type, labor union status, whether employer offered a retirement plan, and family income as a percent of the poverty level³. These models were conducted separately by gender. The models predicting whether either spouse was covered by dependent health insurance coverage included: husband's age, the age difference between spouses, couple's race, each spouse's education, work status, employer type, labor union status, whether employer offered a

³ These analyses were restricted to job characteristics that could also be found in the PSID.

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retirement plan, family income as a percent of the federal poverty level, and the wife's labor income as a percent of the couple's labor income.

Missing data in both the MEPS and PSID was multiply-imputed using the multiple imputation using chained equations (MICE) method.

Variables Predicting Marital Dissolution

The analytic survival models included three types of measures: time-invariant covariates, annually-measured time-varying covariates, and biennially-measured time-varying covariates. Time-invariant covariates consisted of variables whose values were fixed and did not change during the period of observation. They included characteristics such as age at marriage, race/ethnicity, or marriage order. There were two types of time-varying covariates because of the biennial structure of the PSID interviews. Annually-measured time-varying covariates were measures that referred to each calendar year, including retrospective reports for years during which no PSID interview took place. Biennially-measured time-varying covariates were those variables for which the PSID only collected information that referred to either the individual's status at the time of the interview or to the calendar year immediately preceding the interview.

The values of biennial measures are carried forward to the subsequent year. The one exception to this is when couples marry during the off-year in which there is no PSID interview. For these couples, there is no prior year information to carry forward, thus the values from their second year of marriage are imputed back to the first year of marriage. All time-varying covariates are lagged by one year, so that characteristics in the previous year predict outcomes in the subsequent year.

Health Insurance Coverage

The primary independent measure of interest was the couple's health insurance coverage status. This measure was an annually-measured time-varying variable. Two indicator variables were included in each model. The first indicated whether both spouses had continuous health insurance

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coverage in the previous calendar year. The second indicated that only one spouse had continuous health insurance coverage throughout the year.

Probability of Having Any Health Insurance Coverage. The probability that each spouse would have health insurance coverage was generated based on the coefficient estimates from logistic regression analyses of the MEPS sample of all adults under age 65. These models predicted the probability of being continuously insured throughout the year. In addition to these continuous measures, which could range from 0 to 100%, I create a categorical measure based on the distribution of probabilities. This measure categorizes couples who have continuous health insurance coverage into three groups based on the probability that the wife will have health insurance coverage: *Low probability* (probability is less than 67%), *Moderate probability* (probability is between 67% and 90%), and *High probability* (probability is 90% or higher). The cutoffs for this measure were made based on the distribution of probabilities among married couples.

Type of Coverage. In this paper, the importance of the type of coverage is assessed in three ways. First, I examine the relationship between the probability of holding employer-provided coverage and marital dissolution. The second measure is the probability that one spouse is covered through dependent coverage. Both of these measures were constructed using the married couple MEPS-HC sample. The final measure of the type of coverage is an indicator for whether or not the couple shares the same health insurance coverage.

Children

The presence of children was measured in two ways, both of which were measured annually. The first was an indicator for whether the couple had experienced a birth in the year. The second was an indicator for whether there was at least one child under age 17 living with the couple. I initially tested whether the effect of having a child under the age of six years old in the household

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differed from that of older children, but the results suggested no difference by child age beyond the occurrence of a birth.

Demographic Characteristics

The demographic characteristics controlled for in the model were time-invariant covariates and included wife's age at marriage, the couple's race, and whether it was a higher order marriage for either spouse. The wife's age at marriage was coded in years. The couple's race was coded as a categorical variable with four categories: both spouses non-Hispanic white, both spouses non-Hispanic black, both spouses Hispanic, and other. Marriage order was an indicator variable for whether the current marriage is both spouses' first marriage.

Human Capital Characteristics

The human capital characteristics included in the model included the husband's and the wife's education, employment status, and labor income. The functional form of these variables was model-driven. Education was included as a time-invariant covariate. Wife's education was an indicator for whether the wife had a college or graduate degree. The husband's education was coded into three categories: less than a high school degree, high school degree, and more than a high school degree. Employment status and labor income were included as biennial time-varying covariates. Both spouses' employment statuses were classified based on the total number of hours worked in the previous calendar year. Each spouse's employment status was coded as full-time if s/he worked 1500 hours or more, part-time if s/he worked 1-1,499 hours, and not employed if /she did not work at all. Preliminary results showed no difference between couples in which the husband did not work and husbands who worked full-time, so only an indicator for part-time work was included in the model. The husband's and the wife's combined labor income were included in the model because they were each found to have a similar effect on marital dissolution. Labor income was included as the \log_2 of income measured in \$10,000s.

Job Characteristics

There were two job characteristics that were selected because they were associated with the probability of a job offering health insurance coverage to employees. Both were measured at the time of the interview and were included as biennially-measured time-varying covariates. The first was an indicator for whether either spouse's employment was covered by a labor union contract. The second characteristic was an indicator for whether either spouse was offered a retirement plan through their job (regardless of enrollment).

RESULTS

The weighted sample descriptive statistics can be found in Table 1. The mean age at marriage was 30.1 (± 8.4) years old for wives and 31.8 (± 8.5) years old for husbands. Just over 3/5 of the couples (61%) were non-Hispanic white, while 7% were non-Hispanic black, 4% were Hispanic and 26% were interracial or another race. More than half (52%) of husbands had a high school degree or less, while more than one-quarter (29%) of wives had a college or graduate degree. Fifty-nine percent of marriages were first marriages for both spouses. Seventy-two percent of couples were continuously insured during either the first year of marriage or the first year they were followed during the observation period for those who married prior to 1998. This number is lower than national insurance coverage rates because health insurance coverage rates are lower among young adults.

To test the quality of the predicted probabilities of having health insurance coverage from the MEPS-HC sample, I categorized these probabilities into ten groups and then examined the proportions of men and women who had stable insurance coverage within each group. The results of this analysis can be found in Figure 1. They show that for men, generally, the predicted probabilities closely follow the observed proportions of men who have any type of health insurance coverage. For women, the predicted probabilities tend to be lower than the actual proportion who

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have coverage, particularly among those with a low probability of coverage, perhaps because married women have greater access to coverage through marriage dependent coverage. Though the MEPS-HC models include marital status as a covariate, this categorical measure may not adequately capture the effect of marriage because it does not also take into account the husband's characteristics.

However, the degree to which the observed rates of coverage exceed the predicted probabilities is reasonably uniform – except at the lowest probabilities of coverage (below 50%) where they exceed the predictions by significantly larger margins. Descriptive statistics for selected variables by the probability of having insurance can be found in Appendix A.

The results of the discrete-time survival analysis models that examine the baseline relationship between continuous health insurance coverage and marital dissolution can be found in Table 2. The results show that couples who have continuous health insurance coverage are less likely to separate or divorce than couples who have unstable or no coverage, but couples in which only one partner has continuous coverage are *more* likely to do so than other couples. The baseline hazard ratio shows that the hazard of marital dissolution is 63% lower (HR=0.37, 95% CI: 0.28, 0.47) for couples in which both have continuous health insurance coverage than it is for those who have unstable or no coverage, but 56% higher (HR=1.56, 95% CI: 1.14, 2.13) for couples in which only one spouse has continuous health insurance coverage.

Though we would expect a reduced effect of health insurance among couples who do not share coverage, because the coverage status of either partner is unlikely to be reliant on the couple's marital status, this finding of a statistically significant effect in the opposite direction is unexpected. We would expect those who have continuous health insurance coverage to have more advantageous human capital characteristics than those who do not have such coverage because they would be more likely to sort into the types of jobs that offer health insurance coverage. It is possible that those who do not extend their coverage to their partner do not do so because they receive coverage

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from a source other than an employer and eligibility is restricted based on other characteristics (e.g., care through the Veteran's Administration); however, an examination of these cases shows that in the vast majority of them (more than two-thirds) the source of coverage is an employer. It could be that these employers offer health insurance plans to their employees, but do not offer employees the option to cover their dependents or this coverage is too expensive for the employee to afford. If this were the case, we would expect these couples to have higher dissolution rates than those couples in which both partners have continuous coverage, because we would expect that, on average, they are more economically disadvantaged. However, this would not explain why they have higher dissolution rates than couples who have unstable or no insurance coverage.

Demographic characteristics (Model 2) and the presence of children (Model 3) explain about 20% of the lower probability of marital dissolution experienced by couples with continuous coverage; however these couples remain 56% (HR=0.44, 95% CI: 0.34, 0.57) less likely to end their marriage than those who have unstable or no coverage. Controlling for these factors had no effect on couples in which one partner had continuous health insurance coverage, who remained more likely to separate or divorce than those with unstable or no coverage (HR=1.69, 95% CI: 1.23, 2.31). Differences in human capital characteristics explain about one-third of the difference between those with continuous coverage and those with unstable or no coverage (Model 4), but couples who have continuous coverage remain 41% less likely to end their marriage than those who have unstable or no coverage (HR=0.59, 95% CI: 0.45, 0.78). In contrast, controlling for differences in human capital characteristics had no effect on the difference between couples in which one spouse had coverage and couples with unstable or no coverage (HR=1.72, 95% CI: 1.26, 2.36), suggesting that this effect may not be related to economic concerns, such as lack of income or relative disadvantage. A closer examination of the couples shows that this effect is driven almost entirely by couples in which the wife has stable health insurance, but the husband does not (results not shown). These couples are

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2.4 times more likely to separate or divorce (HR=2.36, 95% CI: 1.69, 3.29) than couples with no or unstable coverage. In contrast, couples in which the husband has stable coverage but the wife does not are no more likely to end their marriage than couples with unstable or no coverage (HR=1.15, 95% CI: 0.72, 1.85).

After controlling for differences in demographic, childbearing, and human capital characteristics, couple health insurance coverage continues to be associated with significantly lower dissolution rates. This could be due to selection into “good jobs” – individuals who receive health insurance coverage through their employment are more likely to possess unobserved characteristics that are associated with both maintaining a stable marriage and being employed in a job that offers health insurance. To test this, I add two measures of job characteristics related to the probability that an employer will offer health insurance to the model: coverage by a labor union contract, and whether the employee is offered a retirement plan through their job (Table 3). The results (Model 5) provide no support for the hypothesis that the effect of health insurance on marital dissolution can be explained by the selection of employees into “good jobs” that offer better employee compensation packages. Neither coverage by a labor union contract nor being offered a retirement plan was significantly related to the probability that a couple will end their marriage and their inclusion in the model left the effect of health insurance coverage unchanged (HR=0.62, 95% CI: 0.46, 0.82).

To more directly test whether the lower marital dissolution rates for couples who have continuous health insurance coverage are related to unobserved characteristics associated with having health insurance coverage, I introduce to the model the predicted probability of having insurance based on the MEPS-HC coefficient estimates. Because the model already includes actual health insurance coverage, these new measures capture the additional effects of characteristics associated with having health insurance beyond the provision of health insurance coverage itself. To

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explore whether the effect is restricted to employer-provided health insurance coverage or to health insurance coverage more generally, I introduce two different measures. The first is the probability of the wife having any type of coverage (Model 6)⁴. Though the effect is in the expected direction, i.e., couples in which the wife has a higher probability of having health insurance are less likely to separate or divorce, it does not reach statistical significance. Moreover, the inclusion of this probability has little effect on the estimate for continuously insured couples; couples in which both spouses are continuously insured remain 38% less likely (HR: 0.62, 95% CI: 0.47, 0.82) to separate or divorce than couples with unstable or no coverage. It also does not explain the higher dissolution rates of couples in which one partner has stable coverage who remain 75% more likely (HR=1.75, 95 CI: 1.28, 2.39) to end their marriages than couples with unstable or no coverage.

The second measure is the probability of holding non-dependent employer-provided health insurance coverage (Model 7). If the selection of individuals with unobserved characteristics that enhance marital stability into “good jobs” that offer health insurance coverage explains the relationship between health insurance and marital dissolution, we might expect that the inclusion of this measure will reduce the effect of continuous health insurance coverage. Moreover, if the probability of holding own employer-provided coverage is a better predictor of marital dissolution and explains a larger portion of the relationship between continuous health insurance coverage and marital dissolution, this would suggest that it may not be health insurance coverage per se, but instead labor market success that is related to the likelihood of marital dissolution. However, the results show that the probability of holding employer-provided insurance coverage performs worse than the probability of having any type of coverage, and does not reduce the effect of continuous health insurance coverage on marital dissolution. The better performance of the overall probability

⁴ In preliminary analyses not presented here, I tested both the husband’s and the wife’s probability of having health insurance coverage and probability of holding non-dependent employer-provided coverage. The results for the husband’s probabilities showed that the husband measures were not related to the probability of marital dissolution. The coefficient estimates were near zero and in a counter-intuitive direction.

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of having health insurance coverage from any source rather than through an employer may suggest that selection by human capital characteristics and labor market success may not explain the relationship between health insurance coverage and marital dissolution.

It may not be surprising that these probability estimates are not significantly related to the probability of marital dissolution. Many of the factors that are included in the models to construct these predicted probabilities are also included as covariates in the model to predict marital dissolution and the job characteristics that were tested in the model also did not reach statistical significance. There may remain unobserved characteristics that are not accounted for by either the dissolution model covariates or the predicted probabilities. While these unobserved characteristics by their very nature cannot be controlled for in these models, we can instead investigate whether the size of the effect of continuous health insurance coverage varies in ways that are consistent with the hypothesis that health insurance coverage acts as a barrier to marital dissolution.

Having health insurance coverage may be more valuable to those who have a lower probability of accessing this coverage outside of the marriage. Table 4 introduces interaction effects between couples with continuous health insurance coverage and different measures of access to coverage. The first four models introduce interactions with the predicted probability of having different types of insurance. The first (Model 8) examines whether the effect of having stable health insurance coverage within marriage differs for those with employer-provided coverage than for couples with another type of coverage. The results show that most of the effect of continuous health insurance coverage occurs among couples in which both partners have employer-provided coverage (HR=0.54, 95% CI: 0.40, 0.71). Those with another form of coverage or one partner with employer-provided coverage are not significantly less likely to end their marriages than couples with unstable or no coverage (HR=0.77, 95% CI: 0.54, 1.10). The difference between these two groups is statistically significant ($p=0.0231$).

The next model examines whether the effect of continuous health insurance coverage is smaller for couples in which one partner has access to a form of coverage that the other does not. Though I cannot directly measure whether a husband and wife receive coverage from the same provider (e.g., the husband's (or wife's) employer), the PSID does provide information about the type of coverage that is available to each spouse. If one spouse reports having a form of coverage that the other does not, this would suggest that his/her health insurance coverage is not dependent on the marital relationship. In fact, when continuously insured couples are broken down into those with the same coverage and those with different coverage (Model 9), we can see that only those with the same type of coverage are significantly less likely to end their marriage (HR: 0.58, 95% CI: 0.44, 0.76). Though those with different coverage remain less likely to separate or divorce than couples with unstable or no coverage, this difference is no longer statistically significant (HR: 0.74, 95% CI: 0.44, 1.24). Despite being in the expected direction, the difference between this group and those with the same coverage is also not statistically significant (HR: 1.29, 95% CI: 0.80, 2.08).

The next model (Model 10) tests whether the effect of having stable health insurance coverage is stronger when the wife has a low probability of having insurance from any source. The coefficient estimate for the interaction is negative suggesting that as the probability that the wife will have insurance coverage decreases, the likelihood that the couple will separate or divorce increases – the opposite of what was expected. This effect did not reach statistical significance (HR=0.01, 95% CI: 0.98, 1.00), but the main effect of the couple having continuous health insurance coverage is reduced such that it implies that couples in which the wife has zero probability of having health insurance are no less likely to separate or divorce than couples who have unstable or no coverage⁵, while those in which the wife has a 90% probability of having health insurance coverage are less than half as likely to do so as couples that have unstable or no insurance.

⁵ This, however, falls outside of the value range in the sample so should be taken with a grain of salt. The lowest observed probability of the wife having any health insurance was 22%.

Though the interaction effect in Model 10 did not reach statistical significance, the provocative nature of the results bears closer examination. I categorized the wife's probability of having health insurance coverage into three categories based on the sample distribution of these probabilities: Low [22-67%), Medium [67-90%), and High [90-100%). Just over one-quarter of the sample had less than a 67% probability of having health insurance coverage and just over one-quarter had a 90% or higher probability. When couples in which both spouses had continuous coverage were divided into these three groups (Model 11), we can see the differences across the spectrum of probabilities more clearly. There is little difference in the effect of health insurance coverage on the probability of marital dissolution between those with a Medium or High probability of the wife having coverage. However, when the couples in which the wife has a Low probability of coverage are compared to the combined Medium and High couples, the difference is statistically significant (HR=1.38, 95% CI: 1.01, 1.90).

The two subsequent models introduce interactions with the probability the wife holds non-dependent employer-provided coverage (Model 12) and the probability that either spouse has employer-provided dependent coverage (Model 13). The results are generally consistent with the findings for the wife's probability of any coverage, but are much weaker and do not approach statistical significance. Moreover, the main effect for the couple's continuous health insurance coverage remains statistically significant throughout the entire 0-100% range of probabilities these can take on, suggesting that they cannot explain the full effect of the relationship between continuous health insurance coverage and marital dissolution. This finding is interesting given the previous finding that the effect of continuous health insurance is concentrated within couples who have employer-provided coverage.

These findings pose some interesting questions. First, the results from Model 8 suggest that the lower risk of marital dissolution primarily occurs in couples in which both partners have

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employer-provided health insurance coverage. Second, preliminary results indicate that only the wife's health insurance probability is related to the probability of marital dissolution (after controlling for actual health insurance coverage status). Third, this relationship exists only for the wife's overall probability of having health insurance and not for her probability of holding either employer-provided coverage or dependent coverage, and only for wives who have a medium or high probability of having coverage. The smaller effect among wives with a lower probability of coverage may be related to the fact that many of these women would be eligible for public coverage if the marriage were to end. This is consistent with the findings of Lavelle and Smock (2012) who showed that middle- and high-income women were more likely to lose coverage following a divorce than low-income women. It is also consistent with the fact that among low-income women, single women were more likely to have health insurance coverage than married women (Bernstein et al 2008).

DISCUSSION AND CONCLUSIONS

The high cost of healthcare and the reliance on private health insurance coverage to provide access to care in the United States may have unintended consequences for individual behavior. The effect of health insurance on labor market decisions has been well-documented (Gruber and Madrian 2002). However, to date no previous research has examined whether health insurance coverage is related to family decisions such as the probability of marital dissolution. The results presented here show that couples in which both spouses have health insurance coverage are less likely to separate or divorce than couples with unstable or no coverage, even after taking into account differences in a variety of demographic, family, human capital, and job characteristics between those who have health insurance coverage and those who do not. In addition, this effect appears only among couples in which 1) both spouses share the same type of insurance, 2) both

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spouses are covered by employer-provided health insurance and 3) the wife has a medium-to-high probability of having health insurance.

There are several limitations of the PSID data. One limitation is the biennial nature of some of the measures. Though health insurance coverage is assessed for each calendar year including those in which there was no interview, many of the human capital and job characteristics only refer to the time of the interview or the calendar year preceding the survey interview. This may make them imperfect measures of these characteristics; however, the fact that these factors are likely correlated across years and explained only about one-half of the effect of health insurance coverage provides some assurance that the effect would persist even if annual measures could be included.

There are several other reasons to suspect that the results are not simply due to weaknesses in the human capital and job characteristics control measures. First, when job characteristics that are related to the provision of health insurance coverage were included directly in the models, they had no effect of the relationship between health insurance and marital dissolution, which suggests that the effect is not due simply to selection into jobs that offer more comprehensive employee benefits. Second, because health insurance coverage is more often provided through the husband's employment than the wife's, we would expect that if the relationship between health insurance coverage and marital dissolution was the result of labor market outcomes alone, the husband's probability of coverage would play a larger role than that of the wife. Instead, we see the opposite.

In fact, the greater importance of the wife's characteristics and the finding that those with a high probability of having health insurance coverage are consistent with previous research documenting the effects of the wife's employment on the likelihood of divorce (Amato et al 2007), as well as research that indicates that wives are more likely to initiate divorce proceedings. They may indicate the availability of options outside the marriage. In addition, there is evidence that women place a greater value on health insurance coverage than do men (Daneshvary and Claurterie 2007).

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They are more willing than men to accept lower wages in return for insurance coverage (Daneshvary and Claurterie 2007), and have higher utilization rates for medical care than men (Bertakis and Azari 2010).

Health insurance coverage within marriage is much less relevant to the stability of marriage for women who have a low probability of having health insurance coverage. Though unexpected, it is consistent with previous findings that low-income women are less likely to have health insurance coverage within marriage than outside of it (Bernstein et al 2008) and that they are less likely to remain uninsured following a divorce (Lavelle and Smock 2012). In contrast, for those who might have a high probability or expectation of having health insurance coverage, the lack of coverage has a significant negative effect. Despite this, it is neither the wife's probability of having employer-provided health insurance through her own employer, nor her probability of having dependent coverage that drives this effect. Perhaps the lack of such coverage when the wife has a high probability of having such coverage increases tension within the marriage and makes alternatives to the marriage more attractive. Alternatively, health insurance may not play a role at all, but instead, the lack of health insurance may serve an indicator for a poor marital match.

Another limitation of the PSID is that though we know whether each individual in the household has health insurance coverage and the type of coverage they have, we do not know whose employment is providing each spouse's employer-provided coverage. It is not possible to distinguish between dual-earner couples in which only one partner has employer-provided health insurance coverage through their own employment and those in which both partners have access to employer-provided coverage through their own employment. For this reason, it is not possible to assess whether the effects of health insurance differ when both partners have independent access to coverage or depending on whether this insurance is provided through the husband's or the wife's employment. The results of the analyses using MEPS-HC did not suggest such a relationship, but

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this could indicate that these measures did not adequately capture this potential relationship. For example, these measures are based on current characteristics, but current employment status and job characteristics may not reflect the wife's capacity to find a position that offers health insurance coverage should it become necessary in the future.

It is possible that the causal direction of the relationship between health insurance and marital dissolution may be reversed when the wife has health insurance through sources outside the marriage. In effect, women may seek employment or increase their work hours in anticipation of marital dissolution. Similarly, women in unhappy marriages may be more likely to seek employment in jobs that include health insurance coverage in order to mitigate the negative effects of losing dependent coverage through their spouse's job. This effect may help to explain why those couples in which the wife has health insurance coverage but the husband does not are more likely to end their marriages than those with unstable or no coverage. These wives may have sought out coverage in anticipation of the end of the marriage.

The implications of these results for future marital dissolution rates as the PPACA is enacted are unclear. On the one hand, it is possible that by making health insurance more accessible outside of marriage, individuals will become less dependent on the marriage for healthcare, allowing those who would prefer to end their marriage to do so. If health insurance access no longer depends on the marital relationship then we might expect marital dissolution rates to increase for those couples who remain married solely to maintain one spouse's health insurance coverage. However, the cost of health insurance premiums, deductibles, and copayments might become more important because these costs may mitigate the effect of access if insurance plans available on the private market are more expensive or have higher cost-sharing than the couple's current plan. This means that the effects of the Affordable Care Act may mitigate the "marriage lock" effects of health insurance without eradicating them completely.

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On the other hand, marriage dissolution rates could decrease if expanded health insurance provision leads to declines in economic insecurity by reducing out-of-pocket costs and the monetary effects of serious health events. Moreover, after implementation of the Affordable Care Act, individuals will be required to purchase health insurance or pay a penalty; therefore the cost of marital dissolution for individuals who would leave their marriage without seeking replacement health insurance coverage will increase. Though possible, the minimal penalty for lack of insurance in the ACA may not be large enough to have such an effect.

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Figure 1. Predicted Probability of Stable Health Insurance Coverage by Observed Stable Health Insurance Coverage

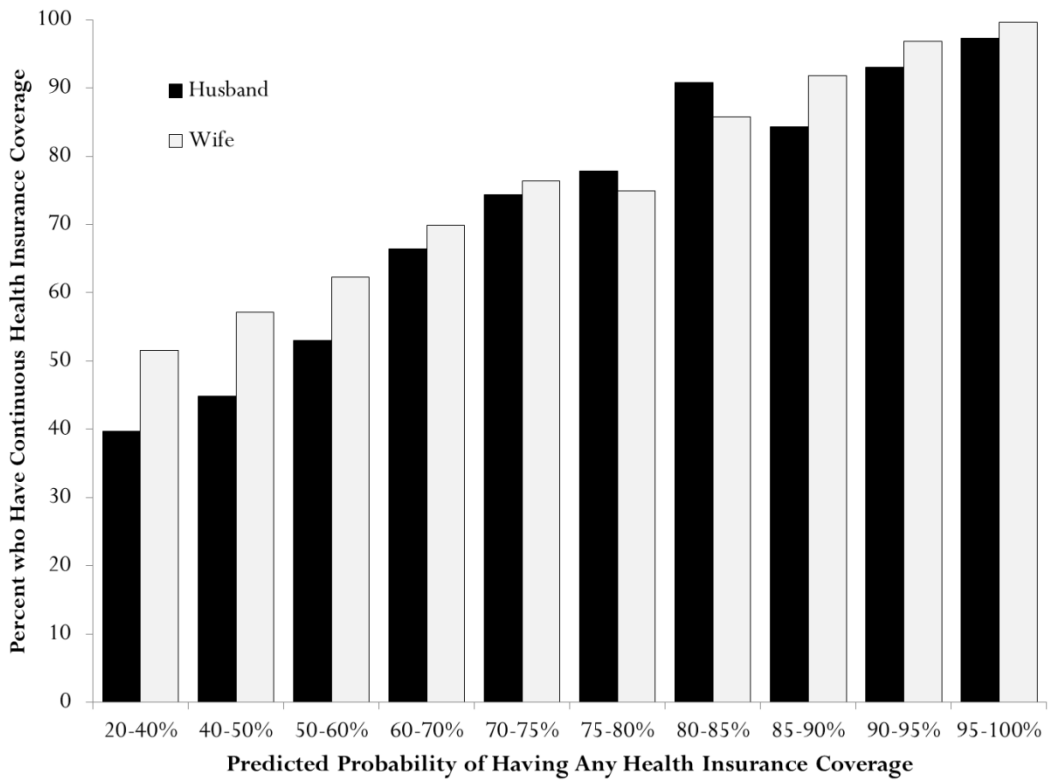


Table 1. Descriptive Statistics

	Husband			Wife			Couple		
	%	Mean	SD	%	Mean	SD	%	Mean	SD
Age		31.81	4.43		30.06	4.39			
Race/ Ethnicity									
Non-Hispanic White							61.8%		
Non-Hispanic Black							7.2%		
Hispanic							4.4%		
Other							26.6%		
First Marriage							58.6%		
Education at Time of Marriage									
Less than High School	24.3%			21.8%					
High School	27.6%			23.1%					
Some College	24.4%			26.2%					
College Degree	23.6%			28.8%					
Children First Year of Marriage									
Birth Past Year							14.1%		
Child under Age 6							26.0%		
Child Ages 6-17							24.6%		
Employment Status in Previous Year, First Year of Marriage									
Not Working	4.5%			9.8%					
Worked Part-Time	8.9%			25.1%					
Worked Full-Time	86.7%			65.0%					
Job Characteristics, First Year of Marriage									
Labor Union Contract	13.5%			8.8%			19.2%		
Retirement Plan	46.1%			32.9%			59.9%		
Health Insurance Coverage, First Year of Marriage									
Both Spouses Stable Coverage							72.2%		
One Spouse Stable Coverage							15.2%		
Unstable or No Coverage							12.7%		
Probability of Having Health Insurance Coverage, First Year of Marriage									
Any Coverage		77.39	9.68		76.54	8.98			
Own Employer-Provided		47.94	14.96		26.33	12.86			
Employer-Provided Dependent		58.92	11.91		27.40	10.72		74.23	6.53

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Table 2. Survival Analysis Results: Effect of Health Insurance Coverage on Marital Dissolution

	Model 1				Model 2				Model 3				Model 4			
	exp(β)	β	SE	p-val	exp(β)	β	SE	p-val	exp(β)	β	SE	p-val	exp(β)	β	SE	p-val
Continuously Insured (Omitted: Unstable or No Insurance)																
Both Spouses	0.37	-1.01	0.13	<.0001	0.42	-0.86	0.13	<.0001	0.44	-0.81	0.13	<.0001	0.59	-0.53	0.14	0.0002
One Spouse	1.56	0.44	0.16	0.0052	1.58	0.46	0.16	0.0042	1.69	0.52	0.16	0.0011	1.72	0.54	0.16	0.0007
Demographic Characteristics																
Wife's Age at Marriage					0.97	-0.03	0.01	<.0001	0.96	-0.04	0.01	<.0001	0.97	-0.03	0.01	<.0001
Couple Race (Omitted: Both Non-Hisp White)																
Both Non-Hisp Black					2.14	0.76	0.16	<.0001	2.24	0.81	0.16	<.0001	2.00	0.69	0.16	<.0001
Both Hispanic					1.49	0.40	0.21	0.0626	1.59	0.46	0.21	0.0306	1.53	0.43	0.21	0.0463
Other					1.39	0.33	0.11	0.0034	1.45	0.37	0.11	0.0010	1.42	0.35	0.12	0.0023
First Marriage					0.49	-0.70	0.12	<.0001	0.47	-0.75	0.12	<.0001	0.56	-0.57	0.13	<.0001
Children																
Birth in Past Year									0.41	-0.90	0.22	<.0001	0.43	-0.85	0.22	<.0001
Children in Family									0.80	-0.22	0.11	0.0414	0.82	-0.20	0.11	0.0740
Human Capital Characteristics																
Education																
Husband (Omitted: More than High School Degree)																
Less than HS													1.14	0.13	0.14	0.3421
High School Degree													1.42	0.35	0.13	0.0071
Wife (Omitted: Less than College Degree)																
College Degree													0.53	-0.63	0.17	0.0002
Employment Status																
Husband																
Part-Time													0.72	-0.32	0.18	0.0748
Wife																
Part-Time													1.40	0.33	0.16	0.0416
Full-Time													1.52	0.42	0.16	0.0092
Couple Labor Inc (\log_2)													0.76	-0.28	0.07	0.0002

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Table 3. Survival Analysis Results: Effect of Health Insurance Coverage on Marital Dissolution, Adjusting for Likelihood of Health Insurance Coverage

	Model 5				Model 6				Model 7			
	exp(β)	β	SE	p-val	exp(β)	β	SE	p-val	exp(β)	β	SE	p-val
Continuously Insured (Omitted: Unstable or No Insurance)												
Both Spouses	0.62	-0.48	0.15	0.0009	0.62	-0.48	0.14	0.0007	0.61	-0.50	0.14	0.0005
One Spouse	1.76	0.57	0.16	0.0004	1.75	0.56	0.16	0.0005	1.75	0.56	0.16	0.0005
Demographic Characteristics												
Wife's Age at Marriage	0.97	-0.03	0.01	<.0001	0.97	-0.03	0.01	0.0003	0.97	-0.03	0.01	0.0002
Couple Race (Omitted: Both Non-Hisp White)												
Both Non-Hisp Black	1.98	0.69	0.17	<.0001	1.99	0.69	0.16	<.0001	2.07	0.73	0.17	<.0001
Both Hispanic	1.51	0.41	0.22	0.0573	1.42	0.35	0.22	0.1138	1.57	0.45	0.22	0.0366
Other	1.41	0.34	0.12	0.0029	1.36	0.31	0.12	0.0099	1.42	0.35	0.12	0.0024
First Marriage	0.56	-0.58	0.13	<.0001	0.56	-0.57	0.13	<.0001	0.56	-0.58	0.13	<.0001
Children												
Birth in Past Year	0.43	-0.85	0.22	<.0001	0.43	-0.84	0.22	<.0001	0.43	-0.85	0.22	<.0001
Children in Family	0.82	-0.20	0.11	0.0746	0.79	-0.24	0.11	0.0378	0.81	-0.21	0.11	0.0646
Human Capital Characteristics												
Education												
Husband (Omitted: More than High School Degree)												
Less than HS	1.14	0.13	0.14	0.3688	1.13	0.12	0.14	0.3806	1.15	0.14	0.14	0.3325
High School Degree	1.42	0.35	0.13	0.0076	1.42	0.35	0.13	0.0071	1.44	0.36	0.13	0.0059
Wife (Omitted: Less than College Degree)												
College Degree	0.54	-0.61	0.17	0.0003	0.55	-0.59	0.17	0.0004	0.56	-0.58	0.17	0.0006
Employment Status												
Husband												
Part-Time	0.71	-0.34	0.18	0.0633	0.72	-0.32	0.18	0.0751	0.73	-0.32	0.18	0.0805
Wife												
Part-Time	1.39	0.33	0.16	0.0423	1.30	0.27	0.17	0.1175	1.41	0.34	0.16	0.0351
Full-Time	1.53	0.43	0.16	0.0083	1.50	0.41	0.16	0.0115	1.74	0.55	0.19	0.0040
Couple Labor Inc (log ₂)	0.77	-0.27	0.08	0.0006	0.81	-0.21	0.09	0.0145	0.77	-0.27	0.07	0.0004
Job Characteristics (either spouse)												
Labor Union Contract	1.28	0.24	0.13	0.0683								
Retirement Plan	0.82	-0.19	0.12	0.1025								
Probability of Health Insurance Coverage												
Any Coverage					0.994	-0.006	0.004	0.1338				
Employer-Provided Coverage									0.996	-0.004	0.003	0.2153

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Table 4: Survival Model Results: Health Insurance Coverage on Marital Dissolution, Interaction Effects†

	Model 8				Model 9				Model 10				Model 11			
	exp(β)	β	SE	p-val	exp(β)	β	SE	p-val	exp(β)	β	SE	p-val	exp(β)	β	SE	p-val
Continuously Insured (Omitted: Unstable or No Insurance)																
Both Spouses									1.09	0.09	0.36	0.8101				
Type of Insurance Coverage																
Employer-Provided (EPIC)	0.54	-0.62	0.15	<.0001												
Non-EPIC	0.77	-0.26	0.18	0.1530												
Wife Probability Any Insurance																
Low (<67%)													0.70	-0.36	0.16	0.0211
Medium (67-90%)													0.51	-0.67	0.17	<.0001
High (90%+)													0.47	-0.75	0.24	0.0018
Coverage Similarity																
Same Type of Coverage					0.58	-0.55	0.14	0.0001								
Different Coverage					0.74	-0.30	0.26	0.2538								
One Spouse	1.72	0.54	0.16	0.0007	1.73	0.55	0.16	0.0007	1.70	0.53	0.16	0.0010	1.71	0.54	0.16	0.0009
Interactions with Both Spouses Continuously Insured																
Wife Prob Any Insurance									0.991	-0.009	0.005	0.0871				
Wife Prob EPIC																
Prob Either Dependent Ins																

	Model 12				Model 13			
	exp(β)	β	SE	p-val	exp(β)	β	SE	p-val
Continuously Insured (Omitted: Unstable or No Insurance)								
Both Spouses	0.64	-0.45	0.17	0.0084	0.51	-0.67	0.24	0.0044
Wife Probability Any Insurance								
Low (<67%)								
Medium (67-90%)								
High (90%+)								
Coverage Similarity								
Same Type of Coverage								
Different Coverage								
One Spouse	1.72	0.54	0.16	0.0008	1.72	0.54	0.16	0.0007
Interactions with Both Spouses Continuously Insured								
Wife Probability Any Insurance								
Wife Probability EPIC	0.997	-0.003	0.005	0.5731				
Probability Either Dependent					1.002	0.002	0.003	0.4471

† All models include controls for demographic characteristics, children, and human capital characteristics.

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Appendix A.1. Selected Wife Characteristics by Probability of Wife Having Any Health Insurance

	Low		Moderate		High	
	Mean	SD	Mean	SD	Mean	SD
Age at Marriage	26.39	3.59	30.46	4.39	32.96	4.56
Race/ Ethnicity						
White	49.9%		80.2%		80.0%	
Black	10.0%		6.1%		11.6%	
Hispanic	30.4%		9.4%		6.2%	
Other	9.6%		4.3%		2.2%	
Education						
< High School	38.3%		17.6%		12.9%	
High School	32.1%		21.7%		16.7%	
Some College	24.0%		30.8%		20.9%	
College Degree	5.6%		29.9%		49.5%	
Employment						
None	15.4%		11.5%		1.7%	
Part-Time	43.7%		23.8%		9.3%	
Full-Time	40.9%		64.6%		89.1%	
Income as % of Federal Poverty Level						
0-125%	20.2%		0.3%		0.0%	
126-200%	26.4%		2.3%		0.5%	
201-400%	46.7%		35.9%		7.4%	
400%+	6.6%		61.5%		92.1%	
Job Characteristics						
Labor Union	0.4%		2.6%		27.2%	
Retirement Plan	1.1%		13.7%		95.5%	

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Appendix A.2. Selected Husband Characteristics by Probability of Husband Having Any Health Insurance

	Low		Moderate		High	
	Mean	SD	Mean	SD	Mean	SD
Age	29.03	3.81	32.24	4.56	33.45	4.56
Race/ Ethnicity						
White	55.9%		76.6%		81.0%	
Black	12.9%		8.1%		8.1%	
Hispanic	22.5%		10.6%		6.4%	
Other	8.8%		4.8%		4.5%	
Education						
< High School	38.5%		22.5%		15.5%	
High School	36.3%		26.3%		22.6%	
Some College	18.9%		28.0%		24.7%	
College Degree	6.3%		23.1%		37.3%	
Employment						
None	4.9%		6.9%		1.5%	
Part-Time	20.0%		7.3%		2.2%	
Full-Time	75.1%		85.8%		96.3%	
Income as % of Federal Poverty Level						
0-125%	16.8%		2.9%		0.0%	
126-200%	22.6%		5.1%		0.8%	
201-400%	52.3%		33.0%		12.6%	
400%+	8.3%		59.0%		86.6%	
Job Characteristics						
Labor Union	1.5%		5.9%		30.7%	
Retirement Plan	1.9%		30.3%		96.7%	