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Widowhood, Divorce, and Loss of Health  
Insurance Among Near Elderly Women:  
Evidence from the Health and Retirement Study

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# **Widowhood, Divorce, and Loss of Health Insurance Among Near Elderly Women: Evidence from the Health and Retirement Study**

David R. Weir and Robert J. Willis

## **Abstract**

We have found modest effects of widowhood events on loss of health insurance. There are also modest effects of widowhood on labor supply, which we have not as yet attempted to attribute to insurance demand. Even new widowhood events, however, are not random with respect to initial conditions. Both initial health insurance status and risk of future widowhood are related to basic characteristics observed when married at baseline. When these confounding variables are controlled for in models of the effect of widowhood events on uninsurance, there is no longer statistical evidence of an independent effect of husband's death on risk of losing insurance. Part of the reason why the measured independent effect of widowhood appears small is that there are events within marriage that can also affect insurance coverage, such as retirement or health events. Even though the number of uninsured women whose lack of coverage can be attributed to widowhood is therefore small, and not a distinct major policy motive for changes in age of eligibility for Medicare, uninsurance rates overall among the near elderly, and the potential public burden of cost-shifting from years just before 65 to years just after gaining Medicare coverage, suggest that Medicare eligibility policies should be a focus of continued research.

## **Authors' Acknowledgements**

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## **INTRODUCTION**

The age of eligibility for Medicare has been the topic of policy discussion from two perspectives. Policy-makers concerned with the uninsured near-elderly have advanced policies to lower the age of eligibility, mainly through subsidized buy-in rights. Others, noting the cost of the program and the scheduled increase in the normal retirement age for Social Security, have proposed raising the age of eligibility to 67, as Social Security will do, or even higher.

In this paper, we examine the risk of uninsurance for divorced and widowed women, an important and vulnerable population among the elderly and near-elderly for whom Medicare eligibility policy might have substantial effects. Previous work has shown widowhood to be associated with declining income and wealth and increasing poverty, with little compensating increase in labor force participation (Weir, Willis, and Sevak, 2002).

The predominance of employer-provided health insurance for the under-65 population, combined with the significant number of married women over 50 who rely on their husband's health insurance for their own coverage, creates a large population of women potentially vulnerable to loss of coverage in the event of divorce or a husband's death.

The incomplete coverage of both men and women in the 50-64 age group implies that, for some couples, the illness and medical expenditures that precede a death can have a substantial negative impact on the financial security of a widow. The risk of husband's death in this age group is not trivial: at current mortality rates, approximately one out of every six males who reaches age 50 will not live to his sixty-fifth birthday.

Distinguishing between absence of coverage while married and inability to continue coverage after widowhood is important for two reasons. First, it separates the negative impact of husband's death into effects associated with the husband's medical care and effects associated with subsequent needs by the widow. More importantly, they are affected very differently by potential policies. An expansion of COBRA rights, especially if augmented by some form of subsidy to employers or survivors to reduce the cost, might be effective at eliminating problems due to loss of dependent coverage, but would have no impact when the married couple had no health insurance to begin with. The option to buy into Medicare before 65 could help both situations, depending on its price.

### Prior Studies

In previous work (Weir, Willis, and Sevak, 2000), we have demonstrated that women widowed between 50 and 65 are much more likely to fall into poverty after a husband's death, and to be at much greater risk of poverty at older ages than are other women the same age who were widowed later. At least some of this appears predictable from the financial and insurance position of couples before retirement (Weir and Willis, 1997; Weir and Willis, 2000). Whether this arises from lack of foresight, or preferences across future states, is not easily determined. It does raise questions about what role health insurance and/or medical expenditures might play in the impact of loss of spouse on women's economic well-being.

## Data

This study will utilize the original Health and Retirement Study (HRS) cohorts, born 1931-41 and interviewed in 1992, 1994, 1996, 1998, and 2000. The HRS is a nationally representative sample with over-samples of African-Americans and Hispanics. This group, originally about 12,500 persons aged 51-61 in 1992 are now aged 59-69. The cumulative experience provides eight years of longitudinal data for individuals and on a synthetic cohort basis spans eighteen years from 51 to 69. Beginning in 1998, the original HRS cohorts were combined with older cohorts from the AHEAD study, and two new cohorts to make it a complete sample of the population over age 50. The combined study is also known as HRS. We do not intend to use the other cohorts in this study, so HRS in this context refers only to the original HRS cohorts.

Several features of the HRS make it especially well-suited to the needs of this project. The sample design targeted individuals in the age range 51-61, but included spouses or partners of the sampled individuals and asked many questions about the household's resources. For each individual at each interview date the HRS determines the source of health insurance (employer, Medicare, Medicaid, CHAMPUS, private-pay) and whether this coverage is provided directly to the individual or indirectly through a spouse's eligibility. The study also tracks many of the important determinants of health insurance coverage: employment, income, and health status.

There are, however, several major limitations of the HRS for the study of insurance choices. The study does not attempt to measure the offer prices and benefits of policies available to respondents other than the one chosen because of the burden such questions would place on respondents in both interview length and cognitive demand. Early attempts to survey employers about health insurance options, in the same way HRS surveys employers about pension plans, were not successful.

### Methods

The primary purpose of this study is to measure the importance of inadequate health insurance coverage and vulnerability to loss of coverage in determining the status of widows. The main methodological concern is to not over or understate these effects by failing to control for the joint influence of other underlying characteristics on both health insurance status and widows' well-being (see McClellan, 1998 for similar concerns). Thus, we begin by trying to understand the determinants of initial health insurance status at baseline, and of the risks of a husband's death, to determine which variables are possible confounders of the relationship between health insurance, change in insurance after widowhood, and well-being of widows. Some plausible candidates are education, employment history, health status, and income.

There are no obvious natural experiments from which to estimate behavioral responses to policy changes involving Medicare eligibility and premium costs. Rather, we will focus on identifying what proportion of widows might consider taking it up (those who have no coverage to begin with, or become uninsured after losing dependent coverage, or buy

private or continuation coverage at expensive premia). Within a range that allows for individual choices to differ, we can assess how many might benefit from expanded eligibility and how much they would benefit. To assess the impact of delaying the age of Medicare eligibility, we will look at three effects: the additional number of men who will die without insurance coverage between 65 and 67, the additional number of women who will lose dependent coverage by widowhood, and the additional amount of uninsured medical expenses that would be incurred by women widowed before age 65 if their entry into Medicare was delayed two additional years. There are, of course, numerous second-order effects that might be explored in future work, such as the impact of loss of coverage by widows on their health status and life expectancy.

## **BACKGROUND ANALYSES**

### Cross-Sectional Patterns of Insurance Coverage by Marital Status

Table 1a shows type of insurance coverage by marital status in the HRS panel. It is based on pooling all five available waves for the 3,690 women who were age-eligible (51-61) in 1992. Uninsurance rates for widows are nearly double those of married women.

Divorced and never-married women are more likely to be uninsured than married, but less so than widows. Non-married women are much less likely to have employer-based coverage and more likely to have public insurance, including Medicare (even though the sample is restricted to the under-65). Table 1b shows, for the same data, the distribution by marital status of each insurance type. Twenty percent of the uninsured near-elderly



women are widows, and 16% divorcees, even though they only make up 26% of the overall population.

For the purpose of comparison, Tables 2a and 2b repeat the same format using the MEPS cross-section data for 1998. The data have been re-weighted to match the age distribution in the pooled HRS dataset used in Table 1. Uninsurance rates are slightly higher in the MEPS sample, and more equal between the widowed and divorced women. The MEPS sample also has a higher proportion of divorced women relative to widows. Combined, those two distinctions result in a reversal of the relative importance of widows and divorcees in the uninsured, with the divorced being more important in MEPS and widows in HRS.

Marital status is clearly associated with health insurance coverage. Compared with its importance for poverty differentials, however, the association is rather mild. If all women had the coverage rates of married women, the overall uninsurance rate for the 55-64 age group would fall from 15% to 11.5%, with about 400 thousand fewer women uninsured.

### Marital Transitions

The primary goal of this project is to use longitudinal data available in HRS. Table 3 summarizes the number of marital transitions available in four transition periods consisting of five interview waves and eight years of observation. The sample consists of women who were age-eligible (age 51-61) and married in 1992, and who were

interviewed continuously through 2000. We exclude observations in which the woman reached age 65 or over, because we want to focus on health insurance coverage before age-based eligibility for Medicare. The initial sample of 2,525 married women in 1992 produced a total of 8,604 transitions (including non-movement) over 17,208 person-years of observation. Of these, 238 were new widowhood events, and 46 were new divorces. Of the divorcees, 10 reported being separated in at least one interview before reporting themselves as divorced.

The small number of divorces limits the statistical analyses that can be undertaken, but it is not out of line with expectations based on annual divorce rates of approximately 4 per thousand married in the 55-64 age group. The HRS panel is not a small sample, and it is unlikely that any random household sampling study will produce large numbers of new divorce observations in this age group. Further study of the health insurance effects of divorce in the near elderly may need to use targeted samples or administrative data.

#### Health Insurance Transitions by Marital Status Transitions

Table 4 provides basic descriptive results on how health insurance transitions vary by marital status transitions. Age-eligible women who were not married in 1992 are included here to provide a comparison of continuing divorced or widowed women with the newly divorced or widowed. Turning first to the initial insurance status of each group, we see that while married women who become divorced have very similar initial coverage rates as women who remain married, those who become widowed have substantially lower rates while still married. A likely explanation is that husbands with

higher mortality risk are less likely to provide coverage for their spouse. This will be examined in more detail below. Women who are already divorced or widowed in the baseline interview have lower coverage rates than married women who become divorced or widowed.

Looking at the rates of insurance loss, there is a great disparity between divorce and widowhood. Newly divorced women are actually (insignificantly) less likely to lose insurance than women who stay married. New widows are more likely to lose insurance than women who stay married and also compared with women who have already been widowed. Widowhood thus seems a more important cause of uninsurance than divorce, perhaps because women who divorce are better prepared to be alone (whatever the causality between preparation and risk).

The loss of insurance by the insured is only part of the story. Table 4 also shows that there is considerable movement out of uninsurance in all marital status combinations. Surprisingly, this is even higher for new marital dissolutions than for continuing ones. Uninsured married women who become widowed have a 47% chance of gaining insurance, compared with 43% for those who remain married, and 36% for uninsured widows who remain widowed. Uninsured married women who become divorced have a 60% chance of gaining insurance, versus 47% for divorced women who remain divorced.

#### Uninsurance Rates by Time Relative to Marital Transitions

Overall, the rates of gaining and losing insurance, coupled with the initial coverage rates, imply relative stability in coverage rates for those who stay married as well as for new

marital dissolutions. This pattern can be seen more clearly in Figure 1, which shows uninsurance rates over time for new marital dissolutions. Data have been pooled and centered on the dissolution event, which occurs between time  $-1$  (last interview in married state) and time  $0$  (first interview after marriage ended). There is very little change in overall coverage rates immediately following the end of a marriage. Widows had higher uninsurance rates in marriage than did divorcees (see also Table 4), and the gap persisted after the dissolution.

That might be attributable to continuation coverage options (COBRA) in some family insurance plans (Gruber and Madrian, 1996). Most expire after 3 years, so we might expect to see a delayed response. In waves following the dissolution widows tended to improve their coverage situation, while for divorced women it got worse. Four years after the first report of dissolution, the coverage rates for the two groups were quite similar. Future work might explore whether divorced women are more vulnerable to expiration of continuation coverage.

#### Determinants of Health Insurance Type at Baseline

Before beginning the analysis of longitudinal transitions in marital status and health insurance coverage, we examine the determinants of health insurance status at baseline in 1992 to better understand initial conditions. This is done in Table 5 by means of a multinomial logit model across four insurance categories: uninsured (the omitted category), employer coverage, other private coverage, and public coverage. We exclude women who were covered by Medicare in 1992, so public coverage is essentially

Medicaid. The coefficients of the multinomial logit model indicate the effect of a given right-hand-side variable on the likelihood of having a given insurance coverage relative to having no coverage. Therefore, if coefficients are similar across columns that variable raises odds of all types of insurance more or less equally. Big differences across columns indicate that the variable affects one type of coverage differently than another. The estimated relationships cannot be interpreted as causal. We don't observe the relative prices of insurance plans and don't observe the complete past history.

Age raises the odds of employer or other private insurance, but there is little impact on public relative to no insurance (the sample is limited to ages 51-61, and Medicare beneficiaries are excluded). Relative to whites, African-Americans have higher odds of being covered by public insurance and lower odds of privately purchased insurance. Hispanics have lower odds of both employer and other private insurance.

Less education lowers the odds of all types of insurance relative to having no insurance. however, more education has little effect. Poor health raises the odds of public insurance, but has little effect on private or employer coverage relative to none. This is what one would expect if Medicaid participation were driven by need and not just eligibility rules. Excellent health, like higher education, has little effect. Not surprisingly, employment raises the odds of employer coverage, while actually lowering the odds of public coverage relative to uninsurance. Log income raises the odds of all insurance types, but especially employer coverage—no doubt an endogenous effect of employment raising both income and employer coverage. Having an income below 125% of poverty (a proxy

for Medicaid eligibility) does raise the odds of public coverage relative to no insurance, and greatly lowers the odds of employer coverage.

Recent work has shown that there is substitution at the margin between insurance benefits and wages for married women, with earnings about 20% higher for women with no insurance from their job in CPS (Olson, 2002), and wages about 7% higher in the HRS (Liang, 2000). Thus, some women with good coverage from a spouse may choose jobs without health insurance. In our data, being married to a man who does not himself have employer-based coverage does not alter the odds of insurance much relative to not being married at all. Being married to a husband with employer coverage raises the odds of the wife's employer coverage (which includes employer-based coverage through spouse), and lowers the odds of public insurance. As anticipated, most of the effect of marital status on insurance seems to operate through husband's access to employer coverage, although that may also proxy for other characteristics that affect insurance demand or offers.

To highlight the distinction between employer coverage through husband and employer coverage on own job, we re-estimated the multinomial logit splitting employer coverage between those two types (ties went to the wife). Table 5b shows that there are some important differences between the two sources of coverage. Some variables, such as age, education, health, and income affect the two in similar directions and with generally similar-sized effects. The big differences are for work status and husband's coverage status. Women who work are more likely to have their own coverage, and less likely to

have coverage through spouse, all else equal. Women whose husbands have employer coverage are, of course, vastly more likely to have coverage through a husband's employer than single women. More interestingly, they are also more likely to have coverage through their own employer. Similarly, women whose husbands do not have employer coverage are less likely to have insurance from their own employer than are single women. There appear to be household-level effects missing from the model that affect the chances of own-employer coverage for both spouses.

### Risk of Widowhood and Initial Health Insurance Coverage

A second source of confounding in the relationship between marital transitions and health insurance is correlation between the determinants of husband's mortality and the wife's initial health insurance. For example, we saw earlier that newly widowed women had higher uninsurance rates while married than other married women. In Table 6, we look at models of the determinants of husband's death. All households are observed throughout the eight-year period, so we model this simply as a logit regression of the probability of dying anytime between 1992 and 2000.

In the first panel of the table, we isolate the relationship between wife's insurance coverage type and her husband's mortality. We have no theoretical reason to expect a direct effect from wife's coverage to husband's risk of death, so any observed correlation can be attributed to omitted (including unobservable) variables. The first panel shows that a wife with employer coverage is significantly less likely to become widowed than

either a wife with no insurance (the reference coverage category), or wives with public or other private coverage. It is primarily through employer coverage, then, that the higher risk of widowhood for uninsured wives is produced.

In the second panel, we add characteristics of the wife and the household, but none specific to the husband. The magnitude of the employer coverage effect is reduced, but remains significant. The relationship between initial coverage and risk of widowhood is therefore not simply due to basic characteristics of the wife that might be correlated with both. In the third panel, we include characteristics of the husband only. In this model, the correlation of wife's coverage and husband's risk of dying is reduced to insignificance. The main variables that account for this are age, husband's work status and health. Age is highly related to mortality, and may influence offers of health insurance. This is even more true of health status because a man's work status will be affected by his health, and that will in turn affect insurance offers. The coefficient on health status must also be interpreted in light of the coefficient on husband having employer coverage, which independently but not significantly lowers mortality risk. Together they imply that working men with no employer coverage have lower mortality risks than non-working men, but men with employer coverage do slightly better.

## **LONGITUDINAL ANALYSES OF EFFECTS OF WIDOWHOOD**



## Widowhood and Health Insurance Transitions

Now we turn to estimates of the effects of widowhood on health insurance transitions. We wish to model transitions from insured into uninsurance, as that is the object of greatest policy interest. To do this we estimate a hazard model of the risks of first report of uninsurance. We therefore exclude from the panel all waves of data for any woman who was either not married or not insured in 1992. All subsequent observations of widowhood are therefore new events within the panel, as are observations of uninsurance.

Table 7 reports estimates for five variants of the model. In the first model, widowhood alone increases the risk of becoming uninsured, compared with remaining married. The effect is substantial and significant. As we have already indicated, however, it is also likely to be correlated with other characteristics that affect insurance coverage. We are also interested in whether the mechanism for widowhood's effect is primarily through the loss of coverage by spouse. Because that is clearly endogenous, we would prefer to use whether or not the husband's employer offered coverage for the wife. That is not available in the early waves of HRS. Instead, we use a variable indicating whether the spouse had coverage in the previous wave (last wave alive for widows) as a proxy for access to insurance through spouse. A husband who had insurance the previous wave greatly lowers the risk of a woman becoming uninsured. The magnitude of the widow effect went down considerably because, as we saw previously, the risk of widowhood is lower for women whose husbands have coverage. In the third panel, we seek to test whether widowhood works through the loss of husband's coverage by adding an

interaction term that takes on the value 1 when the woman is a widow and her husband had coverage before his death. The coefficient on the interaction term is poorly estimated due to the small number of observations. It is not very large either, and does not much affect the coefficients on the main effect terms.

In the fourth and fifth panels, we add variables related to insurance status. The most prominent in panel four are having less than a high school education, being African-American, and having income below 125% of the poverty line (which adjusts for family size). These three variables raise the risk of becoming uninsured. The coefficient on the main effect of widowhood is considerably reduced and becomes statistically insignificant. Thus, most of the effect of widowhood can be accounted for by a relatively small number of observed variables. The fifth panel adds health terms. Although these are difficult to interpret because they could be outcomes of change in insurance status, we find health problems are associated with higher risks of uninsurance. This is compatible with McClellan (1998), who found that new health events raised the risk of uninsurance. It is not clear from work using HRS whether that is due to changes in health insurance offers, or to changes in take-up rates conditional on prices and benefits offered.

#### Labor Supply Response to Widowhood

One response to the economic loss associated with death of a spouse is to increase labor supply, which could be partially motivated by the desire to obtain employer-provided health insurance. In terms of the participation decision alone, this could take two forms:

re-entry into the labor force after widowhood, or delaying retirement by continuing to work longer than would have been the case in the absence of a husband's death.

In Table 8 we show the results of a logit estimate of labor force participation based on the pooled sample. The data are limited to women who were married in 1992 and under 65 at the time of the interview. To test the effects of widowhood on labor force participation, we create a four-way categorization based on prior wave labor force participation and current wave marital status (widowed or not). The excluded category is women who are married and did not work the previous wave. The effect of widowhood on re-entry is directly estimated by the coefficient on the category of widowed who did not work the previous wave. Compared with non-working women who stayed married, formerly non-working widows had a statistically significant higher probability of re-entering the labor force. There is, then, evidence that widowhood induces re-entry into the labor force.

The test of whether widowhood promotes delayed retirement is the difference between widows who worked last wave and married women who worked last wave. For convenience, we ran the model a second time, using as the excluded category married women who worked last wave. The coefficient on widows who worked last wave is positive, but smaller than the effect on re-entry and not statistically significant. The effect is in the expected direction but it would take a larger sample to find significance for an effect of this size.

The other variables in the model are familiar determinants of labor supply. They are needed as controls for differences between widows and married women that might bias the coefficients on the marital/work status categories. Age is of course an important determinant of work in the near-elderly population and is also a useful metric for evaluating the scale of other coefficients. The widowhood effect on re-entry into the workforce, for example, is equivalent to being three to four years younger. Hispanics have higher labor force participation, but there is no difference between whites and African-Americans.

Education has no net effect, which might seem surprising. There are several possible explanations. One is that women's education is also correlated with husband's earnings, and that makes her participation less likely. Another is that some of the pathways through which education affects labor supply are controlled for by other variables. Poor health and disability both have strong negative effects on labor supply, and there is a well-known strong correlation between education and health that is not always accounted for in labor supply studies. Our model also controls for work history prior to 1992 with a variable indicating if the woman has worked less than five years total up to that time. Education's effect on lifetime labor supply is to some extent controlled for with this variable, which would reduce the overall effect.

## CONCLUSION

We have found modest effects of widowhood events on loss of health insurance. There are also modest effects of widowhood on labor supply, which we have not as yet attempted to attribute to insurance demand. Even new widowhood events, however, are not random with respect to initial conditions. Both initial health insurance status and risk of future widowhood are related to basic characteristics observed when married at baseline. When these confounding variables are controlled for in models of the effect of widowhood events on uninsurance, there is no longer statistical evidence of an independent effect of husband's death on risk of losing insurance.

Part of the reason why the measured independent effect of widowhood appears small is that there are events within marriage that can also affect insurance coverage, such as retirement or health events. Even though the number of uninsured women whose lack of coverage can be attributed to widowhood is therefore small, and not a distinct major policy motive for changes in age of eligibility for Medicare, uninsurance rates overall among the near elderly, and the potential public burden of cost-shifting from years just before 65 to years just after gaining Medicare coverage, suggest that Medicare eligibility policies should be a focus of continued research.

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TABLE 1. Health Insurance by Marital Status in the HRS Panel

1a. HRS Health Insurance Coverage Distribution by Marital Status

	Current Marital Status					Total
	Married	Widowed	Divorced	Separated	Never Married	
<u>Current Health Insurance Coverage</u>						
Medicare	4.1	12.0	9.0	9.6	9.8	6.1
Employer Provided	72.8	44.9	57.2	38.0	55.8	65.8
Privately Purchased	9.5	12.3	8.7	4.6	7.5	9.5
Medicaid or Champus	1.3	6.3	8.1	24.2	9.5	3.7
Uninsured	12.4	24.6	17.0	23.7	17.4	15.0
Total	100	100	100	100	100	100
Sample Size	10,589	2,139	2,310	456	669	16,163

1b. HRS Marital Status Distribution of Health Insurance Coverage Categories

	Sample Size	Current Marital Status					Total
		Married	Widowed	Divorced	Separated	Never Married	
<u>Current Health Insurance Coverage</u>							
Medicare	3,206	45.4	24.4	20.7	3.5	6.1	100
Employer Provided	10,360	75.0	8.5	12.1	1.3	3.2	100
Privately Purchased	1,466	67.4	16.0	12.6	1.1	3.0	100
Medicaid or Champus	733	23.7	21.3	30.7	14.6	9.7	100
Uninsured	2,685	56.1	20.3	15.7	3.5	4.4	100
Total	18,450	67.8	12.4	13.9	2.2	3.8	100

Note: These include only those under age 65.

TABLE 2. Health Insurance by Marital Status in the MEPS

2a. MEPS Health Insurance Coverage Distribution by Marital Status

Current Health Insurance Coverage	Current Marital Status					
	Married	Widowed	Divorced	Separated	Never Married	Total
Medicare	3.2	11.7	9.8	15.1	14.7	6.1
Private	77.9	60.7	64.0	49.0	57.4	72.0
Other Public	4.8	5.8	4.5	14.1	8.5	5.3
Uninsured	14.1	21.7	21.7	21.9	19.4	16.6
Total	100	100	100	100	100	100
Sample Size	1140	181	288	48	109	1766

2b. MEPS Marital Status Distribution of Health Insurance Coverage Categories

Current Health Insurance Coverage	Sample Size	Current Marital Status					
		Married	Widowed	Divorced	Separated	Never Married	Total
Medicare	109	34.1	22.6	25.5	5.0	12.7	100
Private	1231	70.2	10.0	14.2	1.4	4.3	100
Other Public	111	59.2	13.2	13.6	5.4	8.7	100
Uninsured	315	54.8	15.5	20.8	2.7	6.2	100
Total	1766	64.9	11.8	16.0	2.0	5.3	100



TABLE 3. Marital Transitions, 1992-2000

Marital Transition	Frequency	Weighted Frequency	Weighted Percent
Stayed Married	7,892	22,049,989	92.49
Divorced	36	100,981	0.42
Widowed	238	591,147	2.48
Separated to Married	10	21,300	0.09
Separated to Divorced	10	29,144	0.12
Separated to Widowed	1	1,032	0.00
Stayed Divorced	65	182,241	0.76
Stayed Widowed	257	644,591	2.70
Remarried	14	37,957	0.16
Other	81	182,847	0.77
Total	8,604	23,841,229	100.00

Note: Pooled sample of four inter-wave periods of observation, 1992 to 2000.  
Sample restricted to women who were married and age-eligible in 1992 and under 65 in the current wave.

TABLE 4. Health Insurance Changes by Marital Transition

Marital Transition	Percent of Population (excluding missing)	Percent of Population (including missing)	Percent Insured in Beginning Wave	Percent of Insured who Lose Insurance	Percent of Uninsured who Gain Insurance
Stayed Married	93.1%	72.8%	89.4%	4.8%	43.0%
Married to Divorced	0.6%	0.4%	89.6%	3.4%	60.6%
Married to Widowed	2.3%	1.8%	79.3%	12.0%	46.7%
Stayed Divorced	1.0%	0.8%	89.1%	9.5%	80.6%
Stayed Widowed	2.4%	1.9%	84.1%	3.2%	36.7%
Remarried	0.2%	0.1%	94.3%	16.9%	0.0%
Other	0.6%	0.4%	80.6%	9.8%	28.0%

Note: Includes only individuals who never received Medicare before age 65, those under age 65 and who were married in 1992. Individuals who report separated in one wave but later specify married or divorce are classified by their final status instead of separated.

TABLE 5. Determinants of Health Insurance Coverage at Baseline (t-statistics below coefficients)

	<u>Public Plan</u>	<u>Employer Plan</u>	<u>Private Plan</u>
Age in 1992	0.023 0.89	0.056 3.12	0.082 3.28
Black	0.415 2.01	0.231 1.53	-0.590 -2.38
Hispanic	-0.078 -0.31	-0.618 -3.14	-1.333 -3.76
Less than high school	-0.284 -1.38	-0.690 -4.84	-0.861 -4.08
More than high school	-0.025 -0.10	0.211 1.45	0.140 0.73
Working for pay in 1992	-1.488 -6.97	1.534 11.17	-0.022 -0.13
Self-Rated Health in 1992: Excellent or very good	0.004 0.02	-0.116 -0.84	0.119 0.62
Self-Rated Health in 1992: Fair or poor	0.632 2.85	-0.132 -0.80	-0.184 -0.76
Log 1992 household income	0.145 1.41	0.651 7.87	0.158 1.57
Income less than 125% of poverty threshold	0.475 2.21	-0.954 -5.10	-0.286 -1.12
Married, Spouse has Employer Insurance in 1992	-1.303 -2.76	2.983 13.77	-0.444 -1.03
Married, Spouse does not have Employer Insurance in 1992	-0.57 -2.88	-0.47 -3.45	0.74 3.91
Constant	-3.407 -1.82	-9.517 -7.03	-6.903 -3.90

\*Excludes those covered by Medicare in 1992

TABLE 5b. Determinants of Health Insurance Coverage at Baseline (t-statistics below coefficients)

	Public Plan	Own Employer Plan	Spouse Employer Plan	Private Plan
Age in 1992	0.024 0.89	0.069 3.70	0.052 2.11	0.090 3.59
Black	0.421 2.04	0.342 2.17	-0.217 -0.95	-0.573 -2.30
Hispanic	-0.070 -0.28	-0.473 -2.29	-1.151 -3.77	-1.307 -3.67
Less than high school	-0.268 -1.30	-0.747 -4.95	-0.549 -2.58	-0.869 -4.11
More than high school	0.028 0.11	0.282 1.87	0.114 0.60	0.176 0.90
Working for pay in 1992	-1.437 -6.73	2.053 13.96	-0.376 -2.01	0.049 0.29
Self-Rated Health in 1992: Excellent or very good	-0.014 -0.06	-0.107 -0.75	-0.128 -0.69	0.127 0.66
Self-Rated Health in 1992: Fair or poor	0.647 2.91	-0.072 -0.41	-0.021 -0.09	-0.153 -0.63
Log 1992 household income	0.147 1.42	0.763 8.65	0.391 3.22	0.178 1.76
Income less than 125% of poverty threshold	0.481 2.23	-1.074 -5.16	-0.787 -2.21	-0.291 -1.14
Married, Spouse has Employer Insurance in 1992	-0.880 -1.85	0.593 2.65	5.745 16.51	-0.586 -1.36
Married, Spouse does not have Employer Insurance in 1992	-0.562 -2.82	-0.615 -4.29	0.415 1.16	0.692 3.64
Constant	-3.493 -1.86	-11.786 -8.24	-8.794 -4.57	-7.568 -4.23

\*Excludes those covered by Medicare in 1992

TABLE 6. Determinants of Husband's Risk of Death (t-statistics below coefficients)

	1	2	3	4
<b>Wife's Characteristics</b>				
Wife has Public plan	0.331	0.318	0.320	0.380
	1.11	1.00	0.97	1.14
Wife has Employer plan	-0.641	-0.414	-0.178	-0.257
	-3.61	-1.97	-0.70	-0.93
Wife has Private plan	0.116	0.068	0.130	0.005
	0.45	0.24	0.43	0.01
Wife's Age in 1992		0.070		-0.005
		3.22		-0.19
Black		0.449		2.036
		2.34		3.15
Hispanic		-0.724		-0.397
		-2.28		-0.72
Less than high school education		-0.009		-0.062
		-0.05		-0.30
More than high school education		-0.087		0.142
		-0.53		0.77
Working for pay in 1992		-0.078		-0.161
		-0.53		-0.99
Self-rated health 1992: Excellent or very good		0.057		0.195
		0.36		1.14
Self-rated health 1992: Fair or poor		-0.073		-0.317
		-0.36		-1.45
<b>Household Characteristics</b>				
Log 1992 household income		-0.387		-0.006
		-3.55		-0.05
Income less than 125% of poverty threshold		0.019		-0.123
		0.07		-0.42
<b>Husband's Characteristics</b>				
Husband has employer insurance in 1992			-0.210	-0.234
			-1.17	-1.26
Husband's Age in 1992			0.062	0.065
			4.70	4.27
Husband black			0.079	-1.835
			0.36	-2.81
Husband hispanic			-0.985	-0.500
			-2.91	-0.89
Husband less than high school			-0.086	-0.021
			-0.47	-0.11
Husband more than high school			-0.353	-0.431
			-2.00	-2.28
Husband working for pay in 1992			-0.717	-0.716
			-4.53	-4.37
Husband's self-rated health 1992: Excellent or very good			-0.616	-0.662
			-3.27	-3.48
Husband's self-rated health 1992: Fair or poor			1.102	1.163
			6.23	6.45
Constant	-1.592	-1.509	-5.018	-4.720
	-10.10	-0.89	-5.86	-2.54

TABLE 6b. Determinants of Husband's Risk of Death (t-statistics below coefficients)

	1	2	3	4
<b>Wife's Characteristics</b>				
Wife has Public plan	0.259	0.190	0.256	0.300
	0.99	0.69	0.87	0.99
Wife has Own Employer plan	-0.452	-0.159	-0.154	-0.240
	-2.42	-0.74	-0.71	-1.02
Wife Covered by Husband's Employer	-0.862	-0.634	-0.340	-0.438
	-5.01	-3.28	-1.19	-2.06
Wife has Private plan	0.022	0.011	0.224	0.106
	0.09	0.04	0.82	0.38
Wife's Age in 1992		0.087		0.028
		4.33		1.13
Black		0.365		2.257
		1.99		2.74
Hispanic		-0.824		-0.565
		-2.82		-1.10
Less than high school education		0.015		-0.053
		0.09		-0.28
More than high school education		-0.130		0.126
		-0.86		0.73
Working for pay in 92		-0.122		-0.101
		-0.85		-0.65
Self-rated health 1992: Excellent or very good		0.010		0.123
		0.07		0.76
Self-rated health 1992: Fair or poor		-0.001		-0.253
		0.00		-1.21
<b>Household Characteristics</b>				
Log 1992 household income		-0.308		0.011
		-3.34		0.10
Income less than 125% of poverty threshold		0.113		-0.055
		0.47		-0.21
<b>Husband's Characteristics</b>				
Husband has employer insurance in 1992			-0.022	
			-0.09	
Husband's Age in 1992			0.056	0.051
			4.50	3.60
Husband black			-0.017	-2.172
			-0.08	-2.61
Husband hispanic			-0.933	-0.345
			-3.07	-0.66
Husband less than high school			-0.025	0.035
			-0.15	0.20
Husband more than high school			-0.308	-0.374
			-1.84	-2.09
Husband working for pay in 1992			-0.765	-0.781
			-5.20	-5.18
Husband's self-rated health 1992: Excellent or very good			-0.654	-0.702
			-3.74	-3.96
Husband's self-rated health 1992: Fair or poor			0.997	1.051
			6.10	6.32
Constant	-1.592	-3.139	-4.574	-5.859
	-10.13	-2.05	-5.74	-3.40

TABLE 7. Widowhood and Risk of Uninsurance (t-statistics below coefficients)

	1	2	3	4	5
Widow	1.016 4.72	0.610 2.83	0.642 2.49	0.367 1.30	0.314 1.10
Husband had employer coverage in previous wave		-0.589 -5.10	-0.582 -4.86	-0.566 -4.42	-0.568 -4.55
Widow & Husband had employer coverage			-0.089 -0.19	-0.076 -0.16	-0.055 -0.11
Age				0.016 0.85	0.013 0.69
Black				0.766 4.71	0.675 4.09
Hispanic				0.252 1.05	0.170 0.69
Less than high school education				0.445 2.95	0.340 2.20
More than high school education				0.020 0.15	0.069 0.52
Less than 5 years of work history				-0.030 -0.24	0.048 0.26
Income less than 125% of poverty threshold				1.025 5.60	1.011 5.63
Self-rated health: Excellent or very good					0.033 0.23
Self-rated health: Fair or poor					0.506 2.86
One or more ADL difficulties					0.475 2.36
Constant	-3.192 -55.79	-2.544 -5.10	-2.548 -28.41	-3.750 -3.16	-3.690 -3.26
Log-Likelihood	-1546.97	-1417.87	-1416.1	-1409.42	-1349.85

TABLE 8. Determinants of Labor Force Participation (t-statistics below coefficients)

Widowed, worked last wave	3.729 18.19
Widowed, did not work last wave	0.490 2.20
Married, worked last wave	3.445 40.45
Age	-0.136 -12.58
Hispanic	0.303 2.26
Black	0.090 0.86
Less than high school education	0.028 0.30
More than high school education	0.094 1.30
Less than 5 years of work history	-0.931 -6.75
Self-rated health:Excellent or very good	0.063 0.83
Self-rated health: Fair or poor	-0.766 -7.28
One or more ADL difficulties	-0.713 -5.05
Constant	6.129 9.50



FIGURE 1. Dynamics of Insurance Coverage Before and After Marital Dissolution

