Division of Economics
A.J. Palumbo School of Business Administration
Duquesne University
Pittsburgh, Pennsylvania

RETIREES AND HEALTH INSURANCE: AN ANALYSIS OF THEIR PRIVATE, PUBLIC AND OUT OF POCKET USAGE AFTER THEY MIGRATE SOUTH

Anthony Lucas

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Faculty Advisor Signature Page

Risa Kumazawa, Ph.D. Date
Assistant Professor of Economics

Amy Phelps, Ph.D. Date
Assistant Professor of Quantitative Sciences

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Retirees face many obstacles when they end the work stage of their life. To avoid some of these challenges, retirees have been moving South with hopes of improving their health because of the more appealing climate. The purpose of this paper is to examine retirees who migrate to the South to see if they are using less private insurance, public insurance and out of pocket expenses for healthcare then those who stay static.

To conduct this analysis, I use the total payouts of the individual's private insurance, total insurance and out of pocket expenses against various interaction terms associated with the South. Although migration does not have a statistically significant effect, there is evidence that shows that retirees are using more public insurance.

JEL classifications: I10, I11, I18

Key words: retiree, health insurance, healthcare, payout, migration, South

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I. Introduction

Affordable health insurance for the elderly is a major concern for today's society. It is especially important now with the aging baby boomer population entering into the retiree market. As a result, the United States is going to have one of the biggest booms of this incoming particular population at one time. Moreover, we will be having more people entering society that will rely on a fixed income and losing many of their former employer benefits, including health insurance. Because of their new monetary restraints, many retirees will be considering options that will help lower their expenses in the most effective way.

In recent years, retirees have made it a custom to travel and find new residences, especially to places of warmer climates. Rose and Kingma (1989) found that retirees are now leaving their homes in search of warmer and sunnier climates to the South in places such as Florida. They have been given the nickname of "Snowbirds" for their behavior is similar to birds whose norm is to migrate south for the winter. The snowbirds have done this with hope that they will have the opportunity to begin the next chapter of their life with sunnier and healthier days ahead at their new homes. However, it has become more customary that the snowbirds have no longer made this journey temporary, but, rather choose to stay in the warmer climate indefinitely.

The quality of retiree health and healthcare has been debated over the years. Arguments have been made both for and against retiree migration and predict there is an impact on health for retirees based on geographical climate and location. Specifically, there is criticism of the health care in the South. Regionally, Allison and Foster (2004)

conclude the South has less aggregated health than the rest of the United States and is distributed unequally.

Medicare, the government-funded health care plan for the elderly, age 65 and older, is available to society's senior citizen population. Unfortunately, Medicare does not cover all health care expenditures. As a result, most individuals have become reliant on other private supplemental insurance plans and out of pocket expenses. The purpose of this paper is to examine retirees who migrate to the South to see if they are using less private insurance, public insurance and out of pocket expenses for healthcare then those who stay static.

II. Literature Review

Rose and Kingma (1989) examine migration on Florida using U.S. Census data and nonpermanent residence status. Planning for service use of nonpermanent residence is negatively impacted by the lack of knowledge in determining when residency may become permanent. Without predictive data on the permanent and nonpermanent residence status of snowbirds, it is difficult to anticipate the demand for services geared towards the elderly or to insure an adequate supply of service will be available in proportion to the perceived demand. To effectively predict the level of services needed, a true pattern of residency must be studied and measured over time.

The effects of health on migration are substantially different for the elderly than the younger generation as reported by Halliday and Kimmit (2008). The positive effect of health on migration suggests that people move with a goal of improving health. The findings of Halliday and Kimmit indicate a gender difference in mobility, suggesting that

men have higher rates of mobility associated with health and age, while women demonstrated no relationship unless health of their spouse was a determinant.

Johansson (2000) uses an overlapping generations (OLG) model to study the economic effects of the increasingly aging population on healthcare systems. Using an analysis of the two age groups, those 15-64 and those 65 and older Johansson, examines the consumption of health and non-health goods and earning potential, with an emphasis on health insurance outcomes. He finds that insurance funding has a direct impact on the younger individuals commensurate with the growth rate of the economy and population, which often leads to system gaming.

Using the Asset and Health Dynamics Survey (AHEAD), Hurd and McGarry (1997) examine the impact of insurance coverage on health care service consumption in the elderly. They control for adverse selection of insurance by focusing on the economic resources necessary to purchase private insurance. Similar to other studies in this area, Hurd and McGarry find that the population with the most insurance is most likely to receive the highest frequency of services. Previous studies [Newhouse (1993)]examining the relationship between service use and insurance have been completed in the non-elderly, and demonstrate a correlation between patient liability for health care costs and health care expenditures. Studies by various researchers [Price and Mays (1985); Marquis and Phelps (1987)] examine the impact of adverse selection on health care consumption in the non-elderly, but it remains unclear if the results can be generalized to the elderly. Hurd and McGarry conclude that service use is determined by one's ability to purchase insurance and related incentives. As a result, they make predictions about the

wealthy retiree's ability to purchase supplemental insurance and predict a potential increase in visits and costs for Medicare.

From the public perspective, there is a rising cost when individuals receive the public option rather than participating in the private options. Glied and Stabile (2001) study the impact of Medicare as second payer (MSP) legislation to understand the impact on the private and public sectors. MSP legislation was passed in January 1983 to require Medicare to become a second payer if someone age 65 and older had insurance provided by an employer or remained employed. They found that MSP mandates did not have much of an impact with only about a third of companies complying with the mandate. Contributing factors to this lack of compliance includes the system failure to have standards private insurance records, and the reliance on employers and others to report employer provided benefits.

Understanding the impact of insurance consumption of health care utilization will be important in evaluating the costs associated with private and public insurance. Medicare costs are structured in a way that prices are administratively set and any willing quality provider is accepted into the structure, which is the complete opposite of the model generally applied by private insurers. Glazer and McGuire (2002) examine public payer interactions based on Medicare. They found that depending on how Medicare behaves in the presence of private payers, it can free-ride on the private payer and set its prices too low. As a result, Medicare has unsuccessfully been able to obtain acceptance of health plans in the United States Because of the method that Medicare's health plan formula is currently established, they fail to focus on its quality of services offered by its plans. Individuals may be skeptical of Medicare coverage and the quality of providers

based on this information, which may positively impact the desire to purchase supplemental insurance.

Two popular options for supplemental health insurance are available through health maintenance organizations (HMOs) and preferred provider organizations (PPOs). Medigap is a common type of supplemental insurance the elderly purchase. Ettner (1997) looks at medigap's market to see if adverse selection exists. Through her research, Ettner found that respondents living in states with higher medigap premiums were significantly less likely to have medigap insurance from any source. Using logit models, she found that observable health status was very significant while self-assessed health status did not come up significant. Wealth appears to be one of the most important driving forces in the insurance decision, and it is found those who purchase private supplemental insurance use more physician services.

Buchmueller (2006) examines "premium support" models by comparing them to a retirees' health plan choice in an employer-sponsored health benefits program that are for recommended for Medicare. He investigates the effect of premiums on the health insurance decisions of retirees in a situation that resembles Medicare reform proposals. How the elderly perceive health insurance options suggests that they are placing more importance on the quality of care received, freedom of referral and burden of paperwork than on premiums. Instead, retirees are treating health insurance premiums as an indicator of quality. Empirical testing finds that a negative and statistically significant effect of price on the probability a health plan is chosen and that there is a negative relationship between age and price sensitivity. Also, retirees not living in metropolitan

areas in most cases will choose PPO coverage than have no coverage at all or at least they will enroll in an HMO.

Unfortunately, the private insurance market does not offer many options for retirees outside of the private and public options. The lack of insurance options is a critical factor the aging population must consider as part of their decision to retire. Rogowski and Karoly (2000) found there are very limited options for affordable health insurance other than employers. Thus, offers of post-retirement health insurance are associated with an increased propensity to retire early.

Fortunately, most employers are mandated by federal law to extend their health care option after retirement. Continuation-of-coverage mandates that employers sponsoring group health-insurance plans offer terminating employees and their families the right to continued coverage for a specified period of time. Various states have done this at their own leisure, but the federal government mandated it in 1986 at the national level under Consolidated Omnibus Budget Reconciliation Act (COBRA). However, the length is quite short, which is usually for 18 months. Gruber and Madrian (1995) examine the effect of state and federal "continuation of coverage" mandates on the retirement decision by evaluating the role of health insurance. They found that one year of continuation coverage raises the retirement hazard by 30%, meaning that this is valued at $13,600, which is a higher differential cost compared to purchasing one's own private supplemental coverage. Also, their findings suggest that policies to provide universal health insurance coverage could lead to a large increase in the rate of early retirement. Pauly (1974) examines the competitive outcome in markets without perfect information for insurance may be illogical by developing a model, where you have two possible states

of the world. In one, the individual suffers no loss and in the second, the individual suffers a loss equal to a certain dollar amount. One of the solutions to this illogical behavior turns out to be some form of government intervention. Moreover, his research addresses the moral hazard issue that comes with universal government mandated insurance.

Once the retiree is no longer eligible under COBRA, they will need to enroll in a Medicare program and purchase other supplemental health insurance. For greater than 10% of retirees, it is estimated that healthcare expenditures represent 20% of their income. Levin (1995) studies whether or not the elderly have behavior for saving for unexpected healthcare expenditures. He concludes that access to government insurance options influences retirees on their savings patterns for healthcare costs. Also, both time and policy were found to impact consumption behavior.

After retirees enroll into the Medicare program, they typically purchase some kind of private supplemental insurance. Christensen and Shinogle (1997) research the use of health care services and how they affect their private supplemental insurance policies and their use of Medicare. They examine Health Maintenance Organizations (HMOs), medigap (MGP) and employment-based indemnity (EBI), which are different kinds of supplemental health insurance options. They used the 1994 National Health Interview Survey that included the kind of health insurance supplement each respondent had. In two separate models, they modeled the respondents' usage of health care services by looking at their outpatient visits and inpatient stays using socio-economic variables and the presence of chronic and limitation conditions. Christensen and Shinogle's major finding was that Medicare enrollees use more inpatient and outpatient care when

supplemental insurance is present. They also found that those with no supplemental insurance policy would respond with having chronic and/or limitation conditions and were in poor health. However, those with HMO policies did not report that chronic and limitation conditions were present or that their health was not good. Additionally, HMO policy holders had more outpatient visits than individuals with other supplemental coverage. Overall, the Medicare population was found to spend about 33% on outpatient care and 67% on inpatient care, which can be cost prohibitive over time.

III. Methodology

The purpose of this paper is to examine retirees who migrate to the South to see if they are using less private insurance, total insurance and out of pocket expenses for healthcare then those who stay static. Given the structure of the Medical Expenditure Panel Survey of 2006, I considered three different potential dependent variables. Two of these models examine the total costs burden of the insurances companies in the private and public sector and one to model the out of pocket burden of the individual.

To analyze the usage of private and public insurance, I use the total payout from private insurance and total insurance as my dependent variables and constructed two separate tobit regression models. For out of pocket usage, I use the total out of pocket expense payout as my dependent variable and constructed an OLS regression model.

Throughout the three estimated models, I use robust standard errors to correct for heteroskedasticity that is a commonality in survey data. Particularly in my dataset, an individual's response can cause heteroskedasticity because some individuals might provide more accurate answers than others. Also, while it might seem that some of my

independent variable might be correlated, I do not have severe multicollinearity. Correlation matrixes for each model can be found in Appendices D, E and F.

i. Tobit Regression

In my analysis, I had a problem of left censoring in my data with my dependent variable. Some of the payout variables in private insurance and public insurance have zeros. These zeros payouts are observed as a result of the individuals being healthy. Thus, these will bias my results if uncorrected. To correct for this censoring, I use tobit regressions on my private and public model to show what the payout would have been if those individuals with zero payouts had been sick.

Using explanatory variables of different races, age status, sex, perceived health status, region of location, metropolitan status, smoker status, attitude towards health insurance, number of visits to the doctor, total income, change of location and interaction terms of the explanatory variables paired with the South, I build two separate tobit models to forecast the individual's usage of private and public health insurance.

I estimate the following two models:

$$\begin{aligned} TOTPRV06_i = {} & \alpha + \beta_1 BLACK_i + \beta_2 HISPANIC_i + \beta_3 RETIRED_i + \\ & \beta_4 MALE_i + \beta_5 PHEALTH_i + \beta_6 SOUTH_i + \beta_7 METRO_i + \\ & \beta_8 SMOKE_i + \beta_9 RISKY_i + \beta_{10} ADAPPT42_i + \beta_{11} TTLP06X_i + \\ & \beta_{12} MOVE_i + \beta_{13} SBLACK_i + \beta_{14} SHISPANIC_i + \beta_{15} SRETIRED_i + \\ & \beta_{16} SMALE_i + \beta_{17} SPHEALTH_i + \beta_{18} SMOVE_i + \beta_{19} SMETRO_i + \\ & \beta_{20} SSMOKE_i + \beta_{21} SRISKY_i + \beta_{22} SADAPPT42_i + \beta_{23} STTLP06X_i + \varepsilon_i \end{aligned} \quad (1)$$

$$TOTPAY06_i = \alpha + \beta_1 BLACK_i + \beta_2 HISPANIC_i + \beta_3 RETIRED_i + \beta_4 MALE_i + \beta_5 PHEALTH_i + \beta_6 SOUTH_i + \beta_7 METRO_i + \beta_8 SMOKE_i + \beta_9 RISKY_i + \beta_{10} ADAPPT42_i + \beta_{11} TTLP06X_i + \beta_{12} MOVE_i + \beta_{13} SBLACK_i + \beta_{14} SHISPANIC_i + \beta_{15} SRETIRED_i + \beta_{16} SMALE_i + \beta_{17} SPHEALTH_i + \beta_{18} SMOVE_i + \beta_{19} SMETRO_i + \beta_{20} SSMOKE_i + \beta_{21} SRISKY_i + \beta_{22} SADAPPT42_i + \beta_{23} STTLP06X_i + \varepsilon_i \quad (2)$$

$TOTPRV06_i$	The total private insurance payout amount in 2006 from individual *i*.
$TOTPAY06_i$	The total insurance payout amount from all health insurances in 2006 from individual *i*.
$BLACK_i$	Individual *i*'s race status $BLACK_i = \begin{cases} 1 = \text{Individual is black} \\ 0 = \text{Individual is not black} \end{cases}$
$HISPANIC_i$	Individual *i*'s race status $HISPANIC_i = \begin{cases} 1 = \text{Individual is hispanic} \\ 0 = \text{Individual is not hispanic} \end{cases}$
$RETIRED_i$	Individual *i*'s age status $RETIRED_i = \begin{cases} 1 = \text{Individual's age is 65+} \\ 0 = \text{Individual's age is not 65+} \end{cases}$
$MALE_i$	Individual *i*'s sex status $MALE_i = \begin{cases} 1 = \text{Individual is male} \\ 0 = \text{Individual is not male} \end{cases}$
$PHEALTH_i$	Individual *i*'s perceived health status $PHEALTH_i = \begin{cases} 1 = \text{Individual is in poor health} \\ 0 = \text{Individual is not in poor health} \end{cases}$
$SOUTH_i$	Individual *i*'s regional location $SOUTH_i = \begin{cases} 1 = \text{Individual lives in the South} \\ 0 = \text{Individual does not live in the South} \end{cases}$
$METRO_i$	Individual *i*'s metropolitan status $METRO_i = \begin{cases} 1 = \text{Individual lives in a metropolitan area} \\ 0 = \text{Individual does not live in a metropolitan area} \end{cases}$
$SMOKE_i$	Individual *i*'s smoking status $SMOKE_i = \begin{cases} 1 = \text{Individual smokes} \\ 0 = \text{Individual does not smoke} \end{cases}$
$RISKY_i$	Individual *i*'s attitude towards health insurance $RISKY_i = \begin{cases} 1 = \text{Individual is not risk averse about health insurance} \\ 0 = \text{Individual is risk averse about health insurance} \end{cases}$
$ADAPPT42_i$	Individual *i*'s total number of visits to a healthcare facility for treatment in 2006.

$TTLP06X_i$	Individual *i*'s total income in 2006.
$MOVE_i$	Individual *i*'s change of regional location $MOVE_i = \begin{cases} 1 = \text{Individual moved from current location} \\ 0 = \text{Individual did not move from current location} \end{cases}$
$SBLACK_i$	Individual *i*'s race status $SBLACK_i = SOUTH_i \times BLACK_i$
$SHISPANIC_i$	Individual *i*'s race status $SHISPANIC_i = SOUTH_i \times HISPANIC_i$
$SRETIRED_i$	Individual *i*'s age status $SRETIRED_i = SOUTH_i \times RETIRED_i$
$SMALE_i$	Individual *i*'s sex status $SMALE_i = SOUTH_i \times MALE_i$
$SPHEALTH_i$	Individual *i*'s perceived health status $SPHEALTH_i = SOUTH_i \times PHEALTH_i$
$SMOVE_i$	Individual *i*'s change of regional location $SMOVE_i = SOUTH_i \times MOVE_i$
$SMETRO_i$	Individual *i*'s metropolitan status $SMETRO_i = SOUTH_i \times METRO_i$
$SSMOKE_i$	Individual *i*'s smoking status $SSMOKE_i = SOUTH_i \times SMOKE_i$
$SRISKY_i$	Individual *i*'s attitude towards health insurance $SRISKY_i = SOUTH_i \times RISKY_i$
$SADAPPT42_i$	Individual *i*'s total number of visits to a healthcare facility for treatment in the South in 2006. $SADAPPT42_i = SOUTH_i \times SADAPPT42_i$
$STTLP06X_i$	Individual *i*'s total income in the South in 2006. $STTLP06X42_i = SOUTH_i \times STTLP06X42_i$

ii. OLS Regression

Unlike the previous two models, censoring within my out of pocket was not a issue. These zeros payouts are not observed as a result of the individuals being healthy.

Here, the zeros mean that an individual simply did not have to use any out of pocket expenses for their healthcare.

Using explanatory variables of different races, age status, sex, perceived health status, region of location, metropolitan status, smoker status, attitude towards health insurance, number of visits to the doctor, total income, change of location and interaction terms with the explanatory variables paired with the South, I build an OLS model to forecast the individual's usage of out of pocket expenses for healthcare expenditures.

I estimate the following model:

$$\begin{aligned} TOTSLF06_i = {} & \alpha + \beta_1 BLACK_i + \beta_2 HISPANIC_i + \beta_3 RETIRED_i + \\ & \beta_4 MALE_i + \beta_5 PHEALTH_i + \beta_6 SOUTH_i + \beta_7 METRO_i + \\ & \beta_8 SMOKE_i + \beta_9 RISKY_i + \beta_{10} ADAPPT42_i + \beta_{11} TTLP06X_i + \\ & \beta_{12} MOVE_i + \beta_{13} SBLACK_i + \beta_{14} SHISPANIC_i + \beta_{15} SRETIRED_i + \\ & \beta_{16} SMALE_i + \beta_{17} SPHEALTH_i + \beta_{18} SMOVE_i + \beta_{19} SMETRO_i + \\ & \beta_{20} SSMOKE_i + \beta_{21} SRISKY_i + \beta_{22} SADAPPT42_i + \beta_{23} STTLP06X_i + \varepsilon_i \end{aligned} \quad (3)$$

$TOTSLF06_i$	The total out of pocket healthcare expense payout amount in 2006 from individual *i*.
$BLACK_i$	Individual *i*'s race status $BLACK_i = \begin{cases} 1 = \text{Individual is black} \\ 0 = \text{Individual is not black} \end{cases}$
$HISPANIC_i$	Individual *i*'s race status $HISPANIC_i = \begin{cases} 1 = \text{Individual is hispanic} \\ 0 = \text{Individual is not hispanic} \end{cases}$
$RETIRED_i$	Individual *i*'s age status $RETIRED_i = \begin{cases} 1 = \text{Individual's age is 65+} \\ 0 = \text{Individual's age is not 65+} \end{cases}$
$MALE_i$	Individual *i*'s sex status $MALE_i = \begin{cases} 1 = \text{Individual is male} \\ 0 = \text{Individual is not male} \end{cases}$
$PHEALTH_i$	Individual *i*'s perceived health status $PHEALTH_i = \begin{cases} 1 = \text{Individual is in poor health} \\ 0 = \text{Individual is not in poor health} \end{cases}$
$SOUTH_i$	Individual *i*'s regional location

	$SOUTH_i = \begin{cases} 1 = \text{Individual lives in the South} \\ 0 = \text{Individual does not live in the South} \end{cases}$
$METRO_i$	Individual *i*'s metropolitan status $METRO_i = \begin{cases} 1 = \text{Individual lives in a metropolitan area} \\ 0 = \text{Individual does not live in a metropolitan area} \end{cases}$
$SMOKE_i$	Individual *i*'s smoking status $SMOKE_i = \begin{cases} 1 = \text{Individual smokes} \\ 0 = \text{Individual does not smoke} \end{cases}$
$RISKY_i$	Individual *i*'s attitude towards health insurance $RISKY_i = \begin{cases} 1 = \text{Individual is not risk averse about health insurance} \\ 0 = \text{Individual is risk averse about health insurance} \end{cases}$
$ADAPPT42_i$	Individual *i*'s total number of visits to a healthcare facility for treatment in 2006.
$TTLP06X_i$	Individual *i*'s total income in 2006.
$MOVE_i$	Individual *i*'s change of regional location $MOVE_i = \begin{cases} 1 = \text{Individual moved from current location} \\ 0 = \text{Individual did not move from current location} \end{cases}$
$SBLACK_i$	Individual *i*'s race status $SBLACK_i = SOUTH_i \times BLACK_i$
$SHISPANIC_i$	Individual *i*'s race status $SHISPANIC_i = SOUTH_i \times HISPANIC_i$
$SRETIRED_i$	Individual *i*'s age status $SRETIRED_i = SOUTH_i \times RETIRED_i$
$SMALE_i$	Individual *i*'s sex status $SMALE_i = SOUTH_i \times MALE_i$
$SPHEALTH_i$	Individual *i*'s perceived health status $SPHEALTH_i = SOUTH_i \times PHEALTH_i$
$SMOVE_i$	Individual *i*'s change of regional location $SMOVE_i = SOUTH_i \times MOVE_i$
$SMETRO_i$	Individual *i*'s metropolitan status $SMETRO_i = SOUTH_i \times METRO_i$
$SSMOKE_i$	Individual *i*'s smoking status $SSMOKE_i = SOUTH_i \times SMOKE_i$
$SRISKY_i$	Individual *i*'s attitude towards health insurance $SRISKY_i = SOUTH_i \times RISKY_i$
$SADAPPT42_i$	Individual *i*'s total number of visits to a healthcare facility for treatment in the South in 2006.

	$SADAPPT42_i = SOUTH_i \times SADAPPT42_i$
$STTLP06X_i$	Individual *i*'s total income in the South in 2006. $STTLP06X42_i = SOUTH_i \times STTLP06X42_i$

IV. Results

i. Tobit Regression

The results of interactive terms from the tobit model estimated using equation (1) appear in Table 1. A complete result list using equation (1) can be found in Appendix A.

Table 1. Model of the Total Private Insurance Payout

$$TOTPRV06_i = \alpha + \beta_1 BLACK_i + \beta_2 HISPANIC_i + \beta_3 RETIRED_i + \beta_4 MALE_i + \beta_5 PHEALTH_i + \beta_6 SOUTH_i + \beta_7 METRO_i + \beta_8 SMOKE_i + \beta_9 RISKY_i + \beta_{10} ADAPPT42_i + \beta_{11} TTLP06X_i + \beta_{12} MOVE_i + \beta_{13} SBLACK_i + \beta_{14} SHISPANIC_i + \beta_{15} SRETIRED_i + \beta_{16} SMALE_i + \beta_{17} SPHEALTH_i + \beta_{18} SMOVE_i + \beta_{19} SMETRO_i + \beta_{20} SSMOKE_i + \beta_{21} SRISKY_i + \beta_{22} SADAPPT42_i + \beta_{23} STTLP06X_i + \varepsilon_i$$

Coefficient	Estimate	Robust Standard Error	P-value
α	-1702.64***	472.435	0.000
β_{13}	1191.617	729.032	0.102
B_{14}	6034.460	729.032	0.102
B_{15}	-671.872	491.762	0.172
β_{16}	232.148	388.026	0.550
β_{17}	-2899.432*	1494.336	0.052
β_{18}	-3065.320	2074.770	0.140
β_{19}	974.146*	522.988	0.063
B_{20}	292.261	575.461	0.612
B_{21}	-1978.158*	1052.528	0.060
B_{22}	479.856*	121.753	0.000
B_{23}	-0.017**	0.006	0.004
Pseudo R-squared	0.058	F-statistic	10.080
Left-censored observations	12,004	P-value (F-statistic)	0.000
Left-uncensored observations	7,529		

***Significant at 0.01, **Significant at 0.05, *Significant at 0.1

In this analysis, six of my coefficients are significant. The estimate for β_{17} indicates that on average, an individual who is in poor health and lives in the South uses less private health insurance by -$2,899.432, all else equal. Unlike Ettner's (1997) analysis, self-assessed health status did come up significant. I conclude one potential reason for this may be due to preexisting conditions and the inability of individuals in poor health to acquire private insurance. As a result, these individuals often do not seek care or rely on public health insurance programs, such as Medicare or Medicaid.

The estimate for β_{19} indicates that on average an individual who lives in a Southern region metropolitan area uses more private health insurance by $974.146, all else equal. Access to care in a metropolitan area is generally not a barrier for these individuals and their utilization of healthcare is higher compared to those in rural areas that have less medical facilities. Although causation is not understood, it is my opinion that this finding may be correlated to individual's preference of a PPO over an HMO private option, resulting in less managed care and more individual referrals for medical specialty services as found by Buchmueller (2006).

The estimate for β_{21} indicates that on average an individual who is non-risk averse towards health insurance and lives in the South uses less private health insurance by -$1978.158, all else equal. These individuals choose to rely on other options available to them at no additional cost and decline to purchase private health insurance. Declining to purchase private insurance is likely a reflection of this decreased usage. Other contributing factors may be that these individuals have minimal healthcare needs, which is a determinant in their decision to decline private coverage.

The estimate for β_{22} indicates that on average an individual's number of encounters at a healthcare facility for treatment who resides in the South uses more private health insurance by $479.857, all else equal. This finding is congruent with Ettner (1997) who found that on average individuals who purchase private supplemental plans have more frequent visits to the doctor. Additionally, Hurd and McGarry (1997) found that increased insurance is correlated with increased number of encounters in a healthcare facility.

The estimate for β_{23} indicates that on average an increase in income for an individual who lives in the South results in a decrease in usage of private health insurance by -$0.017, all else equal. The increase in income results in more disposable income, which may promote these individuals to access more self-pay health services and less utilization of their private coverage. This finding is consistent with Hurd and McGarry (1997) who predicted that an increased ability to purchase insurance results in an increased number of medical encounters and an associated rise in Medicare costs. One example of a self-pay service is elective surgery, such as cosmetic surgery, which is often not covered by insurance. Other potential other contributing factors could be the private insurance plans premiums, deductibles, co-pays and any capitation parameters.

The results of interactive terms from the tobit model estimated using equation (2) appear in Table 2. A complete result list using equation (2) can be found in Appendix B.

Table 2. Model of the Total Insurance Payout

$$TOTPAY06_i = \alpha + \beta_1 BLACK_i + \beta_2 HISPANIC_i + \beta_3 RETIRED_i + \beta_4 MALE_i + \beta_5 PHEALTH_i + \beta_6 SOUTH_i + \beta_7 METRO_i + \beta_8 SMOKE_i + \beta_9 RISKY_i + \beta_{10} ADAPPT42_i + \beta_{11} TTLP06X_i + \beta_{12} MOVE_i + \beta_{13} SBLACK_i + \beta_{14} SHISPANIC_i + \beta_{15} SRETIRED_i + \beta_{16} SMALE_i + \beta_{17} SPHEALTH_i + \beta_{18} SMOVE_i + \beta_{19} SMETRO_i + \beta_{20} SSMOKE_i + \beta_{21} SRISKY_i + \beta_{22} SADAPPT42_i + \beta_{23} STTLP06X_i + \varepsilon_i$$

Coefficient	Estimate	Robust Standard Error	P-value
α	-1571.206**	683.278	0.021
β_{13}	1933.494	1396.393	0.166
B_{14}	646.446	799.5207	0.419
B_{15}	2142.151**	1089.168	0.049
β_{16}	-1203.044*	634.259	0.058
β_{17}	-1603.235	2235.464	0.473
β_{18}	-9263.157	7077.324	0.191
β_{19}	-1852.969**	815.525	0.023
B_{20}	1385.102	853.288	0.105
B_{21}	1914.974	1736.464	0.270
B_{22}	547.153***	160.984	0.001
B_{23}	.0188**	0.009	0.028
Pseudo R-squared	0.002	F-statistic	14.220
Left-censored observations	4,977	P-value (F-statistic)	0.000
Left-uncensored observations	14,556		

***Significant at 0.01, **Significant at 0.05, *Significant at 0.1

In this analysis, six of my coefficients are significant. The estimate for β_{15} indicates that on average a retired individual living in the South uses more insurance when public insurance is present by $2142.151, all else equal. It is apparent that retirees are using more healthcare services in the South, which is contradictory to Halliday and Kimmit's (2008) conclusion that migration improves health. This finding is aligned with Allison and Foster (2004) who found that health is less equally distributed in the South

and is significant in understanding the healthcare utilization regionally in the new healthcare reform legislation.

The estimate for β_{16} indicates that on average a male individual who lives in the South uses less insurance when public insurance is present by -$1203.044, all else equal. This finding suggests there are gender differences in health for individuals in the South.

The estimate for β_{19} indicates that on average an individual who lives in the Southern region metropolitan area uses less insurance when public insurance is present by -$1852.969, all else equal. This finding may indicate an increased purchase and utilization of public insurance, which results in less of the cost being transferred to the private insurance. Additionally, this result is congruent to Christensen and Shinogle's (1997) study that found Medicare enrollees use more inpatient and outpatient care when supplemental insurance is present.

The estimate for β_{22} indicates that on average an individual whose number of encounters at a healthcare facility for treatment and lives in the South uses more insurance when public insurance is present by $547.153, all else equal. Results of this analysis indicate a direct relationship between increased utilization and cost. The poor development of the Medicare cost structure as reported by Glazer and McGuire (2002) may contribute to this result and the implications are relevant in planning for healthcare demands of retirees.

The estimate for β_{23} that on average an increase in income for an individual who lives in the South uses more insurance when public insurance is present by $0.019, all else equal. This was an expected result based on Hurd and McGarry (1997) who associates increased income to be predictive of purchasing supplemental insurance and a

potential increase in visits and costs for Medicare. To build a regional healthcare model the data on income will be valuable to predict future consumption of the public insurance.

ii. OLS Regression

The results of interactive terms from the least-squares regression model estimated using equation (3) appear in Table 3. A complete result list using equation (3) can be found in Appendix C.

Table 3. Model of the Total Out of Pocket Healthcare Expense Payout

$$TOTSLF06_i = \alpha + \beta_1 BLACK_i + \beta_2 HISPANIC_i + \beta_3 RETIRED_i + \beta_4 MALE_i + \beta_5 PHEALTH_i + \beta_6 SOUTH_i + \beta_7 METRO_i + \beta_8 SMOKE_i + \beta_9 RISKY_i + \beta_{10} ADAPPT42_i + \beta_{11} TTLP06X_i + \beta_{12} MOVE_i + \beta_{13} SBLACK_i + \beta_{14} SHISPANIC_i + \beta_{15} SRETIRED_i + \beta_{16} SMALE_i + \beta_{17} SPHEALTH_i + \beta_{18} SMOVE_i + \beta_{19} SMETRO_i + \beta_{20} SSMOKE_i + \beta_{21} SRISKY_i + \beta_{22} SADAPPT42_i + \beta_{23} STTLP06X_i + \varepsilon_i$$

Coefficient	Estimate	Robust Standard Error	P-value
α	397.436***	65.747	0.000
β_{13}	.604	187.188	0.997
B_{14}	-3.923	65.780	0.952
B_{15}	45.866	137.133	0.738
β_{16}	341.178***	64.723	0.000
β_{17}	415.571	346.095	0.230
β_{18}	-207.071	218.924	0.344
β_{19}	-70.896	78.549	0.367
B_{20}	63.726	70.259	0.364
B_{21}	-18.948	114.127	0.868
B_{22}	-28.800	18.179	0.113
B_{23}	0.001	0.002	0.355
Adjusted R-squared	0.088	F-statistic	94.450
Standard Error of Regression	1455.900	P-value (F-statistic)	0.000
Observations	19,533		

***Significant at 0.01, **Significant at 0.05, *Significant at 0.1

In this analysis, two of my coefficients are significant. The estimate for β_{16} indicates that on average a male individual who lives in the South pays more out of pocket expenses for healthcare by $341.1783, all else equal. Despite private and public insurance options, out of pocket expense are high for most individuals seeking medical care when considering plan parameters including overall benefits, co-pays, and deductibles. This result may indicate a difference in the services provided to males resulting in higher out of pocket expense.

V. Conclusion

The best way to answer my question whether or not retirees who migrate to the South to see if they are using less private insurance, public insurance and out of pocket expenses for healthcare then those who stay static is to compare all three payouts with the South interactive terms. The results of this comparison appear in Table 4. Areas with a negative sign (-) show a decrease in usage and areas with a positive sign (+) show an increase in usage. If an area is left blank, that variable did not have at least a 10% significance level.

Table 4. Payout Comparison amongst South Interactive Terms

Interactive Terms	Total Private Insurance Payout	Total Insurance Payout	Out of Pocket Expense
$SBLACK_i$			
$SHISPANIC_i$			
$SRETIRED_i$		+	
$SMALE_i$		-	+
$SPHEALTH_i$	-		
$SMOVE_i$			
$SMETRO_i$	+	-	
$SSMOKE_i$			
$SRISKY_i$	-		
$SADAPPT42_i$	+	+	
$STTLP06X_i$	-	-	

The purpose of this paper is to examine retirees who migrate to the South to see if they are using less private insurance, public insurance and out of pocket expenses for healthcare then those who stay static. Unfortunately, the interaction term ($SMOVE_i$) to show migration did not have statistical significance. Similar to the issues that Rose and Kingma (1989) had with residency status, it is possible that it is difficult to adequately define when a resident becomes a permanent resident of that region. Thus, my interaction term ($SMOVE_i$) may not be adequate to distinguish migration. However, I show that there are some major differences amongst other terms in the South.

In the private and public insurance payout, I show that retirees in the South did use more insurance. Although this does not show a migration factor associated with the retirees, it still has implications for healthcare quality and healthcare consumption in the South. Moreover, both the public coverage and out of pocket expense show gender effects indicating males likely have less hospital expenses and more healthcare expenses that are not fully covered by Medicare. Limitations of this analysis include a lack of data on the breakdown of supplemental plans and service utilization to determine accurate

policy implications from these results. Also, it is important to better understand how COBRA is affecting an individual's healthcare choice to have a greater understanding of where they are in their stage of life and how it affects the overall outcome.

Future research would benefit from an increased focus on obtaining more comprehensive data, such as claims data and insurance plan parameters, to allow a more in depth understanding of contributing factors in retirees insurance consumption, healthcare utilization and regional differences. Data on regional differences in income, healthcare utilization and insurance type will be necessary drivers in healthcare policy reform targeting the elderly. With the recent healthcare reform debate, it will be critical to understand the proposed Medicare expenditure reduction and the impact on retiree's consumption. Of equal importance, it will be essential to repeat an analysis similar to that of Johansson (2000) to understand the economic burden on the younger population to finance healthcare for the elderly.

VI. References

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Appendix A-Tobit Regression
Results of Non-Interaction Terms for Total Private Insurance Payout

$$TOTPRV06_i = \alpha + \beta_1 BLACK_i + \beta_2 HISPANIC_i + \beta_3 RETIRED_i + \beta_4 MALE_i + \beta_5 PHEALTH_i + \beta_6 SOUTH_i + \beta_7 METRO_i + \beta_8 SMOKE_i + \beta_9 RISKY_i + \beta_{10} ADAPPT42_i + \beta_{11} TTLP06X_i + \beta_{12} MOVE_i + \beta_{13} SBLACK_i + \beta_{14} SHISPANIC_i + \beta_{15} SRETIRED_i + \beta_{16} SMALE_i + \beta_{17} SPHEALTH_i + \beta_{18} SMOVE_i + \beta_{19} SMETRO_i + \beta_{20} SSMOKE_i + \beta_{21} SRISKY_i + \beta_{22} SADAPPT42_i + \beta_{23} STTLP06X_i + \varepsilon_i$$

Coefficient	Estimate	Robust Standard Error	P-value
α	-1702.640***	472.435	0.000
β_1	-1635.533***	465.352	0.000
B_2	-8274.040***	865.879	0.000
B_3	-947.210***	303.035	0.002
B_4	-399.908***	348.912	0.009
B_5	1272.540	1071.171	0.235
B_6	-1656.322***	537.213	0.002
B_7	-908.705***	348.912	0.009
B_8	-913.650***	328.756	0.005
B_9	893.828	849.024	0.292
B_{10}	473.923***	81.230	0.000
B_{11}	.051***	0.005	0.000
B_{12}	1914.617	1479.360	0.196
Pseudo R-squared	0.058	F-statistic	10.080
Left-censored observations	12,004	P-value (F-statistic)	0.000
Left-uncensored observations	7,529		

***Significant at 0.01, **Significant at 0.05, *Significant at 0.1

Appendix B-Tobit Regression
Results of Non-Interaction Terms for Total Insurance Payout

$$TOTPAY06_i = \alpha + \beta_1 BLACK_i + \beta_2 HISPANIC_i + \beta_3 RETIRED_i + \beta_4 MALE_i + \beta_5 PHEALTH_i + \beta_6 SOUTH_i + \beta_7 METRO_i + \beta_8 SMOKE_i + \beta_9 RISKY_i + \beta_{10} ADAPPT42_i + \beta_{11} TTLP06X_i + \beta_{12} MOVE_i + \beta_{13} SBLACK_i + \beta_{14} SHISPANIC_i + \beta_{15} SRETIRED_i + \beta_{16} SMALE_i + \beta_{17} SPHEALTH_i + \beta_{18} SMOVE_i + \beta_{19} SMETRO_i + \beta_{20} SSMOKE_i + \beta_{21} SRISKY_i + \beta_{22} SADAPPT42_i + \beta_{23} STTLP06X_i + \varepsilon_i$$

Coefficient	Estimate	Robust Standard Error	P-value
α	-1571.2060**	683.278	0.021
β_1	-4549.457***	834.189	0.000
B_2	-3658.398***	434.536	0.000
B_3	3178.210***	646.457	0.000
B_4	1389.716***	286.588	0.000
B_5	4930.448***	1736.837	0.005
B_6	-2610.164***	900.622	0.004
B_7	1196.677**	520.952	0.022
B_8	-1116.709*	575.291	0.052
B_9	-1577.286**	798.627	0.048
B_{10}	1056.845***	102.738	0.000
B_{11}	.0025456	0.005	0.575
B_{12}	6212.959	6661.674	0.351
Pseudo R-squared	0.002	F-statistic	14.220
Left-censored observations	4,977	P-value (F-statistic)	0.000
Left-uncensored observations	14,556		

***Significant at 0.01, **Significant at 0.05, *Significant at 0.1

Appendix C-OLS Regression
Results of Non-Interaction Terms for Total Out of Pocket Healthcare Expense

$$TOTSLF06_i = \alpha + \beta_1 BLACK_i + \beta_2 HISPANIC_i + \beta_3 RETIRED_i + \beta_4 MALE_i + \beta_5 PHEALTH_i + \beta_6 SOUTH_i + \beta_7 METRO_i + \beta_8 SMOKE_i + \beta_9 RISKY_i + \beta_{10} ADAPPT42_i + \beta_{11} TTLP06X_i + \beta_{12} MOVE_i + \beta_{13} SBLACK_i + \beta_{14} SHISPANIC_i + \beta_{15} SRETIRED_i + \beta_{16} SMALE_i + \beta_{17} SPHEALTH_i + \beta_{18} SMOVE_i + \beta_{19} SMETRO_i + \beta_{20} SSMOKE_i + \beta_{21} SRISKY_i + \beta_{22} SADAPPT42_i + \beta_{23} STTLP06X_i + \varepsilon_i$$

Coefficient	Estimate	Robust Standard Error	P-value
α	397.4362***	65.74688	0.000
β_1	-195.1573	151.8089	0.199
B_2	-111.1381	45.80643	0.015
B_3	339.4381***	93.98963	0.000
B_4	-546.6944***	25.58668	0.000
B_5	378.3816*	205.2946	0.065
B_6	-195.6979**	97.71241	0.045
B_7	20.83646	50.77185	0.682
B_8	-121.5907	47.1806	0.010
B_9	-13.19294	63.2131	0.835
B_{10}	188.4266***	11.13097	0.000
B_{11}	.0052113***	0.0007073	0.000
B_{12}	-59.71643	185.327	0.747
Adjusted R-squared	0.088	F-statistic	94.450
Standard Error of Regression	1455.900	P-value (F-statistic)	0.000
Observations	19,533		

***Significant at 0.01, **Significant at 0.05, *Significant at 0.1

Appendix D
Correlation Matrix for Private Insurance

	TOTPRV06	BLACK	HISPANIC	RETIRED	MALE	PHEALTH	SOUTH	METRO	SMOKE	RISKY	ADAPPT42	TTLP06X
TOTPRV06	1.000											
BLACK	0.011	1.000										
HISPANIC	-0.203	-0.115	1.000									
RETIRED	0.018	0.051	-0.182	1.000								
MALE	-0.051	0.017	0.273	0.019	1.000							
PHEALTH	0.048	-0.004	-0.081	0.138	0.012	1.000						
SOUTH	0.075	0.027	-0.229	0.195	0.054	0.137	1.000					
METRO	-0.062	-0.005	0.192	-0.160	-0.044	-0.109	-0.283	1.000				
SMOKE	0.034	0.017	-0.203	0.065	0.084	0.139	0.234	-0.205	1.000			
RISKY	0.019	0.006	-0.041	0.043	0.055	0.034	0.101	-0.046	0.096	1.000		
ADAPPT42	0.007	-0.059	0.543	0.083	-0.087	0.074	-0.107	0.056	-0.117	-0.076	1.000	
TTLP06X	0.167	0.060	-0.737	0.002	-0.257	-0.041	0.038	-0.004	-0.002	0.012	-0.542	1.000
MOVE	0.018	0.020	-0.026	0.009	0.011	0.018	0.022	-0.036	0.006	0.038	-0.022	0.0046
SBLACK	0.006	0.442	-0.051	-0.006	0.005	-0.006	0.132	-0.007	0.001	-0.006	-0.026	0.0294
SHISPANIC	-0.012	-0.018	0.152	0.066	0.030	0.032	0.444	-0.067	0.062	0.104	-0.117	-0.0253
SRETIRED	0.110	-0.012	-0.099	0.613	0.011	0.122	0.390	-0.159	0.033	0.040	0.047	-0.0134
SMALE	0.043	0.016	-0.143	0.111	0.304	0.086	0.642	-0.184	0.187	0.089	-0.115	0.0737
SPHEALTH	0.026	-0.009	-0.064	0.105	0.011	0.702	0.224	-0.105	0.106	0.026	0.054	-0.032
SMOVE	-0.002	-0.002	-0.004	0.017	0.003	0.003	0.059	-0.005	0.004	0.037	-0.018	0.001
SMETRO	0.063	0.034	-0.183	0.144	0.046	0.095	0.863	0.076	0.184	0.103	-0.107	0.051
SSMOKE	0.036	-0.009	-0.122	0.030	0.050	0.120	0.446	-0.161	0.624	0.052	-0.066	-0.012
SRISKY	0.000	-0.008	-0.018	0.041	0.029	0.033	0.208	-0.027	0.056	0.614	-0.035	-0.003
SADAPPT42	0.127	0.010	-0.201	0.240	0.000	0.197	0.706	-0.232	0.143	0.057	0.200	0.034
STTLP06X	0.080	0.043	-0.179	0.086	0.087	0.023	0.649	-0.131	0.108	0.051	-0.061	0.277
	MOVE	SBLACK	SHISPANIC	SRETIRED	SMALE	SPHEALTH	SMOVE	SMETRO	SSMOKE	SRISKY	SADAPPT42	STTLP06X
MOVE	1.000											
SBLACK	-0.002	1.000										
SHISPANIC	0.027	-0.008	1.000									
SRETIRED	0.013	0.001	0.141	1.000								
SMALE	0.014	0.080	0.299	0.227	1.000							
SPHEALTH	-0.003	-0.004	0.059	0.184	0.141	1.000						
SMOVE	0.547	-0.001	0.057	0.031	0.038	-0.002	1.000					
SMETRO	0.024	0.138	0.430	0.298	0.553	0.160	0.060	1.000				
SSMOKE	0.002	0.012	0.134	0.084	0.343	0.183	0.012	0.358	1.000			
SRISKY	0.032	-0.004	0.187	0.082	0.173	0.053	0.062	0.205	0.104	1.000		
SADAPPT42	0.004	0.072	0.187	0.436	0.370	0.300	0.021	0.583	0.282	0.123	1.000	
STTLP06X	0.012	0.142	0.192	0.189	0.531	0.052	0.035	0.602	0.223	0.111	0.474	1.000

Appendix E
Correlation Matrix for Total Insurance

	TOTPAY06	BLACK	HISPANIC	RETIRED	MALE	PHEALTH	SOUTH	METRO	SMOKE	RISKY	ADAPPT42	TTLPO6X
TOTPAY06	1.000											
BLACK	-0.016	1.000										
HISPANIC	-0.021	-0.115	1.000									
RETIRED	0.082	0.051	-0.182	1.000								
MALE	0.001	0.017	0.273	0.019	1.000							
PHEALTH	0.062	-0.004	-0.081	0.138	0.012	1.000						
SOUTH	-0.006	0.027	-0.229	0.195	0.054	0.137	1.000					
METRO	-0.009	-0.005	0.192	-0.160	-0.044	-0.109	-0.283	1.000				
SMOKE	0.004	0.017	-0.203	0.065	0.084	0.139	0.234	-0.205	1.000			
RISKY	-0.002	0.006	-0.041	0.043	0.055	0.034	0.101	-0.046	0.096	1.000		
ADAPPT42	0.061	-0.059	0.543	0.083	-0.087	0.074	-0.107	0.056	-0.117	-0.076	1.000	
TTLPO6X	-0.007	0.060	-0.737	0.002	-0.257	-0.041	0.038	-0.004	-0.002	0.012	-0.542	1.000
MOVE	0.013	0.020	-0.026	0.009	0.011	0.018	0.022	-0.036	0.006	0.038	-0.022	0.005
SBLACK	-0.010	0.442	-0.051	-0.006	0.005	-0.006	0.132	-0.007	0.001	-0.006	-0.026	0.029
SHISPANIC	-0.022	-0.018	0.152	0.007	0.030	0.032	0.444	-0.067	0.062	0.104	-0.117	-0.025
SRETIRED	0.052	-0.012	-0.099	0.613	0.011	0.122	0.390	-0.159	0.033	0.040	0.047	-0.013
SMALE	-0.003	0.016	-0.143	0.111	0.304	0.086	0.642	-0.184	0.187	0.089	-0.115	0.074
SPHEALTH	0.037	-0.009	-0.064	0.105	0.011	0.702	0.224	-0.105	0.106	0.026	0.054	-0.032
SMOVE	-0.006	-0.002	-0.004	0.017	0.003	-0.003	0.059	-0.005	0.004	0.037	-0.018	0.001
SMETRO	-0.013	0.034	-0.183	0.144	0.046	0.095	0.863	0.076	0.184	0.103	-0.107	0.051
SSMOKE	0.001	-0.009	-0.122	0.030	0.050	0.120	0.446	-0.161	0.624	0.052	-0.066	-0.012
SRISKY	0.004	-0.008	-0.018	0.041	0.029	0.033	0.208	-0.027	0.056	0.614	-0.035	-0.003
SADAPPT42	0.044	0.010	-0.201	0.240	0.000	0.197	0.706	-0.232	0.143	0.057	0.200	0.034
STTLP06X	-0.008	0.043	-0.179	0.086	0.087	0.023	0.649	-0.131	0.108	0.051	-0.061	0.277
	MOVE	SBLACK	SHISPANIC	SRETIRED	SMALE	SPHEALTH	SMOVE	SMETRO	SSMOKE	SRISKY	SADAPPT42	STTLP06X
MOVE	1.000											
SBLACK	-0.002	1.000										
SHISPANIC	0.027	-0.008	1.000									
SRETIRED	0.013	0.001	0.141	1.000								
SMALE	0.014	0.080	0.299	0.227	1.000							
SPHEALTH	-0.003	-0.004	0.059	0.184	0.141	1.000						
SMOVE	0.547	-0.001	0.057	0.031	0.038	-0.002	1.000					
SMETRO	0.024	0.138	0.430	0.298	0.553	0.160	0.060	1.000				
SSMOKE	0.002	0.012	0.134	0.084	0.343	0.183	0.012	0.358	1.000			
SRISKY	0.032	-0.004	0.187	0.082	0.173	0.053	0.062	0.205	0.104	1.000		
SADAPPT42	0.004	0.072	0.187	0.436	0.370	0.300	0.021	0.583	0.282	0.123	1.000	
STTLP06X	0.012	0.142	0.192	0.189	0.531	0.052	0.035	0.602	0.223	0.111	0.474	1.000

Appendix F
Correlation Matrix for Out of Pocket

	TOTSLF06	BLACK	HISPANIC	RETIRED	MALE	PHEALTH	SOUTH	METRO	SMOKE	RISKY	ADAPPT42	TTLPO6X
TOTSLF06	1.000											
BLACK	-0.018	1.000										
HISPANIC	0.038	-0.115	1.000									
RETIRED	0.070	0.051	-0.182	1.000								
MALE	-0.216	0.017	0.273	0.019	1.000							
PHEALTH	0.056	-0.004	0.081	0.138	0.012	1.000						
SOUTH	0.027	0.027	-0.229	-0.229	0.195	0.137	1.000					
METRO	0.009	-0.005	0.192	-0.160	-0.044	-0.109	-0.283	1.000				
SMOKE	-0.044	0.017	-0.203	0.065	0.084	0.139	0.234	-0.205	1.000			
RISKY	-0.025	0.006	-0.041	0.043	0.055	0.034	0.101	-0.046	0.096	1.000		
ADAPPT42	0.172	-0.059	0.543	0.083	-0.087	0.074	-0.107	0.056	-0.117	-0.076	1.000	
TTLPO6X	0.054	0.060	-0.737	0.002	-0.257	-0.041	0.038	-0.004	-0.002	0.012	-0.542	1.000
MOVE	-0.009	0.020	-0.026	0.009	0.011	0.018	0.022	-0.036	0.006	0.038	-0.022	-0.061
SBLACK	-0.011	0.442	-0.051	-0.006	0.005	-0.006	0.132	-0.007	0.001	-0.006	-0.026	0.029
SHISPANIC	-0.045	-0.018	0.152	0.066	0.030	0.032	0.444	-0.067	0.062	0.104	-0.117	-0.025
SRETIRED	0.038	-0.012	-0.099	0.613	0.011	0.122	0.390	-0.159	0.033	0.040	0.047	-0.013
SMALE	-0.040	0.016	-0.143	0.111	0.304	0.086	0.642	-0.184	0.187	0.089	-0.115	0.074
SPHEALTH	0.047	-0.009	-0.064	0.105	0.011	0.702	0.224	-0.105	0.106	0.026	0.054	-0.032
SMOVE	-0.009	-0.002	-0.004	0.017	0.003	-0.003	0.059	-0.005	0.004	0.037	-0.018	0.001
SMETRO	-0.031	0.034	-0.183	0.144	0.046	0.095	0.863	0.076	0.184	0.103	-0.107	0.051
SSMOKE	-0.025	-0.009	-0.122	0.030	0.050	0.120	0.446	-0.161	0.624	0.052	-0.066	-0.012
SRISKY	-0.014	-0.008	-0.018	0.041	0.029	0.033	0.208	-0.027	0.056	0.614	-0.035	-0.003
SADAPPT42	0.049	0.010	-0.201	0.240	0.000	0.197	0.706	-0.232	0.143	0.057	0.200	0.034
STTLP06X	0.009	0.043	-0.179	0.086	0.087	0.023	0.649	-0.131	0.108	0.051	-0.061	0.277
	MOVE	SBLACK	SHISPANIC	SRETIRED	SMALE	SPHEALTH	SMOVE	SMETRO	SSMOKE	SRISKY	SADAPPT42	STTLP06X
MOVE	1.000											
SBLACK	-0.002	1.000										
SHISPANIC	0.027	-0.008	1.000									
SRETIRED	0.013	0.001	0.141	1.000								
SMALE	0.014	0.080	0.299	0.227	1.000							
SPHEALTH	-0.003	-0.004	0.059	0.184	0.141	1.000						
SMOVE	0.547	-0.001	0.057	0.031	0.038	-0.002	1.000					
SMETRO	0.024	0.138	0.430	0.298	0.553	0.160	0.060	1.000				
SSMOKE	0.002	0.012	0.134	0.084	0.343	0.183	0.012	0.358	1.000			
SRISKY	0.032	-0.004	0.187	0.082	0.173	0.053	0.062	0.205	0.104	1.000		
SADAPPT42	0.004	0.072	0.187	0.436	0.370	0.300	0.021	0.583	0.282	0.123	1.000	
STTLP06X	0.012	0.142	0.192	0.189	0.531	0.052	0.035	0.602	0.223	0.111	0.474	1.000