THE EFFECT OF HEALTH INSURANCE ON HEALTH CARE SPENDING IN YOUNG ADULTS

Elizabeth Xiao*
May 2011

Department of Economics
Stanford University
Stanford, CA 94305
exiao@stanford.edu

Under the direction of Professor Jay Bhattacharya

ABSTRACT

Nearly a quarter of young adults between the ages of 19 and 23 are uninsured, making them the demographic most vulnerable to being uninsured in the United States. Young adults experience a sharp drop in health insurance rates at the age of 19 when they “age out” of their parents’ insurance plans. Exploiting this fact, I use a regression-discontinuity framework to explore the effect of health insurance on health care spending and to circumvent the usual problems of endogeneity. With data from the Medical Expenditures Panel Survey from 1996 through 2008, I estimate a 7% drop in insurance rates at the age of 19. I find that men spend significantly less on health care after this drop, and women spend more. With the passing of the 2010 Health Care Bill, we can expect young adults to rapidly become more insured. This paper’s results may provide insight into the policy’s potential consequences on health care spending.

* I would like to thank Jay Bhattacharya for helping me formulate my thesis and guiding my research. I am also grateful to Geoffrey Rothwell for counseling me throughout the writing process.
Introduction

The United States spends far more on health care than any other nation, yet an unusually high proportion of Americans are uninsured. Current figures estimate that 16% of the US population (47 million) is uninsured. Young adults ages 19 to 23 are most vulnerable, with 24.1% uninsured. They must be enrolled as full-time students to be eligible for their parents’ insurance plans. As a result, most young adults are not covered by their parents’ insurance. Furthermore, those that work are often not offered insurance by their employers; their jobs are less stable and their employers tend to be smaller. This is reflected in a drastic drop in insurance rates at age 19 accompanied by a similar drop in the amount of care provided to uninsured young adults (Anderson et al., 2010).

These concerns partly motivated the 2010 Health Reform Bill, which is predicted to extend insurance to 32 million more Americans in the next decade. The Bill extends Medicaid to a higher income bracket, mandates more employers to offer insurance, and allows young adults to stay on their parents’ insurance plans until the age of 26. These changes will result in higher insurance rates among young adults. To understand the cost implications of this policy change, we must explore how an individual’s health care spending changes with their insurance status.

There is an extensive body of research investigating the relationship between health insurance and utilization of health care. But this relationship is so complicated that causality is difficult to prove, let alone quantify, outside a randomized and controlled setting. Many socioeconomic differences between the insured and uninsured influence both insurance status and health care use and confound the relationship. When these differences aren’t included in an estimation of health care spending, their effects are
incorrectly attributed to insurance status. Previous studies typically leverage quasi-experimental variations in insurance status to circumvent endogeneity, especially using Medicare and Medicaid. Such studies, however, are mostly centered on the spending of very young and very elderly groups, which is not representative of the spending of the general population. Furthermore, the studies do not examine insurance effects separately for men and women, which I find to be drastically different. The relationship between insurance and health care utilization has been studied extensively. The focus of this paper, then, is to expand upon the methods used to study the relationship.

In this thesis, I exploit the drastic drop in insurance coverage at age 19 to evaluate the impact of insurance on health care spending. The data come from the Medical Expenditures Panel Survey from 1996 through 2008 and includes spending on inpatient care, outpatient care, office-based visits, home health, emergency rooms, and prescription medications. First I estimate the effect of being over 19 on a cross-section of spending between ages 14 and 24, specifically looking at differences between men and women. Then I incorporate SCHIP effects into the model by comparing data from years with SCHIP and from years prior to SCHIP. Both approaches use age as an instrument for insurance status, reducing the endogeneity between insurance and spending. I show that the 14 to 24 population as a whole does not spend differently based on insurance status, but, when examined separately, men in this age group spend much less on health care when they are uninsured, and women spend more.

The work of previous studies will inform my methodology, so I begin with a review of the existing literature on insurance effects on health care use. I select a few recent studies with viable methods for addressing confounding factors and compare the merits and
demerits of each method. I then describe relevant aspects of the data, and explain the base study design. I provide results of that design, and expand upon it by incorporating effects of SCHIP. I end with concluding remarks about the paper.

Literature Review

Researchers have approached the endogeneity problem with a variety of study designs, of which three types are most reliable. A few studies exploit natural experiments in insurance patterns and health care use. These studies attempt to randomize insurance status to reduce its endogeneity. Other studies follow the health care use of longitudinal cohorts of participants as they gain or lose insurance. This attempts to eliminate the effects of time-invariant differences between the insured and uninsured. Most studies use instrumental variables to treat the endogeneity of insurance status. These study designs will be valuable in informing the empirical strategies of this study. Following are remarks on the unique methods, general results, and targeted subpopulations of each study.

RAND Health Insurance Experiment

The RAND Health Insurance Experiment is the only randomized health insurance study to date. It serves as the benchmark study of insurance, and its results relating to health care use deserve immediate discussion. The RAND Experiment randomly assigned 5809 people into four types of insurance plans with varying degrees of coverage. One group had free care, and the others were responsible for 25%, 50%, and 95% of the costs of their care. The groups that paid for any part of their care made 1-2 fewer physician visits annually and had 20% fewer hospitalizations than those with free care. Similar declines were seen in dental visits, prescriptions, and mental health treatments. The groups that
paid also spent less on health care than the group with free care did: 20% less by the group that paid for 25% of its care, and 30% less by the group that paid for 95% of its care. The reduction in spending came from using fewer resources rather than using less expensive options. The results definitively pointed to an increase in health care use as a result of insurance.

The RAND Health Insurance Experiment is now almost 30 years old. Given substantial developments in medical knowledge, treatment patterns, and technology, the results of the RAND Experiment may be outdated today. Its external validity is questionable, and it does not identify a mechanism for the increase in health care use. Other trends in health care use, perhaps pertaining to a specific age group, might be more important to study for policy-making reasons. Therefore we consult a more recent body of research that uses different methods to address the same questions. Of particular interest is how each study defined its population, collected data, measured the use of health care, and chose explanatory variables. Though the RAND Experiment is the only randomized insurance experiment, other methodologies may produce more enlightening or generalizeable results.

**Natural Experiments**

Natural experiment studies attempt to quantify the effects of an exogenous event on health care use and compare the size of those effects on the insured and uninsured. These studies present unique methods whose results are tied to those health trends of interest to policy-makers. But their estimates are also least shielded from statistical bias. The major limitation of natural experiment studies is that omitted variables may exist. If unobserved characteristics that affect both insurance status and health care use are not taken into account, the results may be biased.
Carlson, DeVoe, and Wright (2006) observed the effects of a 2003 spending cut in the Oregon Health Plan. They took the cut to be an exogenous event that would randomize insurance status within their sample. Their sample consisted of 2800 adults who were enrolled in the Oregon Health Plan before the spending cut. The cut reduced overall insurance coverage by about half. The authors found that adults whose insurance coverage was disrupted or lost were less likely to have primary care visits and more likely to have medical debt. These results are the most direct attempt to estimate of the effects of policy change, but their validity is questionable. The spending cut probably did not reduce insurance randomly. For example, if the higher-income adults were cut first, then the estimates are downward biased.

In another natural experiment, Doyle (2005) compared health care use of the insured and uninsured victims of severe motor vehicle accidents. He argued that, because victims of severe accidents do not have a choice in receiving treatment, omitted variables like income cannot have a confounding effect. Doyle suggests that health care providers are choosing health care for the victims based on their insurance status. He examined police accident reports and hospital discharge abstracts for 10800 motor vehicle accidents in Wisconsin in the 1990s. The uninsured group had 22% fewer facility charges, 20% fewer days of care, and higher mortality rates compared with controls that had private medical insurance but lacked automobile insurance. While innovative, this method fails to address variables like region and race, which likely influence both insurance status and treatment patterns.
Longitudinal Studies

Longitudinal cohort studies observe health care use in participants with and without insurance over time. There are generally three groups of participants observed: a continuously insured group, a continuously uninsured group, and an intermittently insured group. This method rules out time-invariant characteristics, like sex and race, as explanations for differences in health care use. If all confounding factors are effectively ruled out, we can infer a causal relationship between health care insurance and use. However, it is difficult to truly rule out all confounding factors because longitudinal cohort studies do not inherently address characteristics that do vary with time. This is especially problematic for characteristics like age and income, which can cause a change in insurance status and also influence health care use over time.

Sudano and Baker (2003) measured the use of preventive health care services in 7300 elderly participants of the Health and Retirement Studies of 1992-1996. They measured use of mammography, pap test, cholesterol test, flu vaccine, prostate exam, and breast self-exam. They defined four cohorts of insurance status: continuously insured, continuously uninsured, newly insured, and newly uninsured. Among these cohorts, the continuously uninsured and newly uninsured were less likely to use preventive health care services, but the newly insured were not more likely to use preventive health care services. Sudano and Baker do not account for changing employment status or the like, which may strongly affect insurance status and health care use.

McWilliams, Meara, Zaslavsky, and Ayanian (2009) used the same group of Health and Retirement Study participants to health spending by elderly who were and were not insured before receiving Medicare at age 65. Comparing 3000 participants who were continuously
insured and 1600 participants who were not, they found that the uninsured group spent $1023 more in the year after they became eligible for Medicare. The authors similarly fail to account for health differences that existed before the scope of the surveys. These omitted variables may make insurance status nonrandom and weaken the validity of the studies’ estimates.

**Instrumental Variables**

Other researchers have used instrumental variables in addition to observing longitudinal cohorts. The technique centers on finding an instrument variable that is both correlated with insurance status and totally uncorrelated with health care use. If the instrument is valid, this might correct the omitted variables problem that would exist in a simple longitudinal study. Busch and Duchovny (2005) studied 90000 low-income previously uninsured mothers in states that experienced an expansion in Medicaid. Cohorts were divided by those who had Medicaid and those who did not. They used the time variation in states’ expansion of Medicaid eligibility as an instrument, and found that expansions led to a 29% increase in breast exams and pap smears. Johnson and Crystal (2000) studied 7018 participants of the Health and Retirement Survey. Cohorts were formed based on whether the participant had employment-based insurance, private insurance, or no insurance. They used job characteristics and common demographic variables as instruments and found that individuals with employment-based insurance had more physician visits, higher likelihood of hospitalization, lower out-of-pocket costs, and higher premium-related costs. Meer and Rosen (2004) studied 24000 participants of the Medical Expenditure Panel Survey, using self-employment status as an instrument variable. The cohorts were grouped by whether the participants had insurance or not. They found a
positive effect of insurance on health care use as well, with insured groups using 31% more office-based visits, 7% more overnight hospital stays, and 30-40% more preventive services.

Finally, some studies depend on instrumental variable analyses of cross-sectional data. Card, Dobkin, and Maestas (2008) examine the elderly population using the National Health Interview Survey to compare health outcomes among people just before and after the age of 65. They supplement their study with discharge records from three states to measure changes in hospital admissions for specific conditions. They find that Medicare eligibility causes a sharp increase in the use of health care services. The Medicare-eligible who have a supplemental form of coverage see a particularly sharp increase in the use of high-cost services. Most recently, Anderson, Dobkin, and Gross (2010) released a working paper studying young adult participants of the National Health Interview Survey before and after they “aged out” of their parents’ insurance. The data showed a 5-8% drop in insurance rates at age 19, so the instrumental variable used was an age indicator. The authors found that aging out of insurance resulted in a 40% reduction in emergency department visits and a 61% reduction in inpatient hospital admissions. Both papers use age as an instrument for insurance status to estimate the effect of insurance on health care utilization.

The findings of the instrumental variable analyses are only as valid as the instruments they use. Several of the instruments used in the studies are likely correlated with omitted variables that affect health care use. Others may be weak and lead to inconsistent results. The expansion of Medicaid eligibility in Busch and Duchovny’s research may have been accompanied by other state policies that could have affected health care use, like increased payments to health care providers. Meer and Rosen’s instrument, self-employment status, might be correlated with differing attitudes toward health care. Invalid
instruments lead to spurious findings, and may even exacerbate biases. Though a few papers included statistical tests designed to assess the validity of instruments, these tests cannot definitively show that instruments are not correlated with health care use. Analysis with instrumental variables must be interpreted with caution.

There are some key similarities among the studies. The results of all the papers are consistent with the RAND Experiment in predicting that health insurance causes an increase in use of health care services. Many of them study elderly or low-income populations, and they largely define insurance status in the same ways. They also have similar sample sizes that are well in the thousands. The studies differ in how they measure health care use and how they deal with the endogeneity of insurance status. The studies measure either spending on health care or frequency of health care use, and they focus on various combinations of hospital visits, physician visits, specialty services, vaccines, and prescription medications to capture health care use. Most importantly, some methods are better for correcting the endogeneity of insurance status. The natural experiment studies were weakest because they were most difficult to control for omitted variables that influenced both insurance status and health care use. Longitudinal cohorts were able to rule out some omitted variables by following cohorts over time, but probably not all of them. The best studies were those that used instrumental variables in addition to observing longitudinal cohorts. Though the validity of some instruments is suspect, this method corrects for the most possible omitted variables. Together, these studies set strong precedents for future research on how health insurance affects health care utilization.
Study Design

The economic model used here is an extension of the model by Card, Dobkin, and Maestas (2008), using age as an instrument for insurance to estimate its effect on a cross-section of expenditures. I begin with a simple log-normal model of the causal effects of insurance:

\[ \ln(y_{iga}) = \alpha_{iga} + \beta X_{iga} + \gamma a_i + \delta C_{iga} + \varepsilon_{iga} \]  

(1)

where \( y_{iga} \) is the health care expenditures of individual \( i \) in group \( g \) at age \( a \), \( X_{iga} \) is a set of covariates (e.g. race and family income), \( \gamma a_i \) represents a smooth linear age profile of expenditures, \( C_{iga} \) is an indicator health insurance coverage, and \( \varepsilon_{iga} \) is an unobserved error component. Estimation with this model presents two fundamental problems: the endogeneity between insurance and expenditures, and the numerous observations with zero expenditures that must be censored from the log-normal estimation.

The literature will inform the empirical strategy for addressing the first problem of endogeneity. Anderson, Dobkin, and Gross (2010) found that, in their data for young adults ages 18-19, insured individuals were less likely to be minorities, more likely to be female, and less likely to smoke. These and other factors make it difficult to prove a causal relationship between insurance and expenditures. Following the Card, Dobkin, and Maestas (2008) model, the age 19 threshold will be introduced as an instrument to address the endogeneity. To be a credible instrument, the age threshold should be uncorrelated with expenditures and it should provide exogenous variation in insurance status. For the first criterion, the critical assumption is that turning 19 does not discontinuously affect any other variables in the reduced-form equation. In particular, it is assumed that the expected value of the residual term \( \varepsilon_{iga} \) is continuous at age 19. To illustrate the second criterion, Figure 1
shows the age profiles of health insurance coverage estimated with the 1996-2008 Medical Expenditures Panel Survey. Participants who reported being uninsured in the past year are counted as uninsured at their age. The proportion of all respondents that were uninsured (plotted with circles) rises from 17 to 24 percent at age 19. The rise is more pronounced for men, whose uninsurance rate rises from 18 to 27 percent. Women’s uninsurance rate rises from 16 to 20 percent. These estimates are consistent with the 5-8% rise uninsurance rates found by Anderson, Dobkin, and Gross (2010).

![Figure 1. Proportion Uninsured by Age and Sex](image)

To proceed with the age threshold instrument, consider the following linear model for insurance status:

\[
C_{iga} = \lambda_g X_{iga} + \rho_g a_i + \pi_g Z_i + \mu_{iga}
\]  

(2)

where \(\rho_g a_i\) is a smooth linear age profile for group \(g\), \(Z_i\) is an indicator for whether the individual is over the age of 19. Since the age indicator is not the only determinant of
insurance coverage, the implemented framework is what Campbell (1969) calls a “fuzzy” regression discontinuity. Combining equations (1) and (2), the reduced-form model for logged expenditures is

$$\ln (y_{iga}) = \alpha g \delta g + (\beta g + \lambda g \delta g) X_{iga} + (\gamma g + \rho g \delta g) a_i + \pi g \delta g Z_i + \nu_{iga}$$

(3)

where $$\nu_{iga} = \mu_{iga} + \epsilon_{iga} \delta g$$ is an error term and, as before, $$\delta g$$ is the causal effect of insurance. Since $$(\gamma g + \rho g \delta g) a_i$$ is assumed to be a smooth age profile for expenditures, any discontinuity in expenditures at age 19 can be attributed to discontinuities in insurance coverage. The model will estimate the size of the expenditures discontinuity to be $$\pi g \delta g$$ for group $$g$$.

Beyond the endogeneity problem, the observations with zero expenditures present a problem within the log-normal model. Because these values cannot be logged, estimation with logged expenditures loses all these observations, which may lead to bias. As proposed by Manning and Mullahy (2000), this problem is best addressed by using a generalized linear model with log links and a gamma distribution. Generalized linear models have the advantages of not requiring normality or homoskedasticity and producing estimates that can be anti-logged without problems (Glick, 2010). That is, generalized linear models with log links return the log of the mean cost rather than the mean of the log cost.

This paper will rely on data from the 1996 to 2009 Medical Expenditure Panel Survey (MEPS), which is readily available from the U.S. Department of Health and Human Services. The Household Component of the Survey collects data on demographic characteristics, health insurance coverage, and medical expenditures of individual participants. Participants are drawn from a nationally representative sample of households from the U.S. civilian non-institutionalized population. The Survey involves five interviews conducted over two years,
as well as an annual self-administered questionnaire. It collects expenditure data for inpatient care, outpatient care, office-based visits, home health, emergency rooms, and prescription medications from both participants and health care providers. Expenditures are the amount paid out-of-pocket by patients and payments from insurance sources, not including payments for over-the-counter drugs or alternative health care services. The data is well-accepted for health care research purposes and has been tested for robustness bias and predictive accuracy with the generalized gamma model (Miller and Hill, 2006). I use these data to construct an estimate of age in months and adopt the convention that a person who has reached his 19th birthday at the beginning of an interview period is 19 years and 0 months of age. The cross-sectional analysis is limited to those over age 14 and under age 24, and the final sample size is 63,004, 31,049 of which are men and 31,955 of which are women.

Results

Discontinuous Insurance Effects for Men and Women

In this section we apply the model developed above to estimate the effect of discontinuous insurance at age 19 on expenditures for the entire sample, and then for men and women separately. The initial analysis of the entire sample estimated no significant change in spending at the age of 19 after adjusting for an age trend. This result is surprising, considering the drastic rise in uninsurance in the sample at age 19. The uninsurance age profile for the entire sample is plotted again in Figure 2 and overlaid with the age profile of expenditures.
Square markers represent mean annual expenditures of individuals at each age they are surveyed. Despite a 7% drop in insurance rates at the age 19 threshold, no effect on expenditures is evident. The generalized linear model also estimates that the age instrument has an insignificant effect on expenditures.

Further analysis reveals that insurance status at age 19 actually does have a significant effect on health care expenditures: it considerably lowers spending for men and raises spending for women. These effects are illustrated in Figures 3 and 4, which plot uninsurance against expenditures for men and women, respectively. Insurance rates fall by 9% for men at age 19 and they spend 44% ($358) less at age 19 than they spend at age 18. Women, on the other hand, see a 4% fall in insurance rates and spend 26% ($263) more at age 19 than they spend at age 18. Table 1 reports the drop in insurance rate at age 19 for various groups as well as the effect of losing insurance on each group’s expenditure. To
evaluate the sensitivity of these estimates, I’ve included estimates of the effect on individuals within 2, 5, and 10 years of age 19. Adjusting for an age trend, men ages 19 to 24 spend 46% less than men ages 14 to 19 do. The same model estimates that women in the sample spend 24% more after turning 19. In the 2-year window estimates, we see that the effect of insurance on spending is exaggerated and still significant for men, whereas the effect is subdued for women. The effects in the 10-year window are similar to those of the 5-year window. In general, men seem much more sensitive to the drop in insurance rates than women. Because the effects of insurance on men and women oppose each other, the net effect appears to be insignificant in the initial analysis of the entire sample.

Table 1. Effects of Insurance Coverage on Health Care Expenditures at Age 19

<table>
<thead>
<tr>
<th></th>
<th>All Years</th>
<th>Pre-SCHIP</th>
<th>SCHIP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Insurance Rate Discontinuity</td>
<td>- 0.09</td>
<td>- 0.04</td>
<td>- 0.8</td>
</tr>
<tr>
<td>Estimated Effect on Expenditures</td>
<td>2 Years: Ages 17-21</td>
<td>- 0.68*</td>
<td>0.17†</td>
</tr>
<tr>
<td></td>
<td>5 Years: Ages 14-24</td>
<td>- 0.46**</td>
<td>0.24**</td>
</tr>
<tr>
<td></td>
<td>10 Years: Ages 9-29</td>
<td>- 0.34**</td>
<td>0.22**</td>
</tr>
</tbody>
</table>

† Statistically significant at 10% level.
* Statistically significant at 5% level.
** Statistically significant at 1% level.
Figure 3. Male Age Profile of Uninsurance and Expenditures

Figure 4. Female Age Profile of Uninsurance and Expenditures
Discontinuous Insurance Effects Prior to SCHIP

An important consideration when studying health care trends of children and young adults is the effect of the State Children's Health insurance Program (SCHIP). SCHIP provides health insurance to children 18 and in low income families. Each state operates an independent SCHIP, so eligibility rules and coverage rates vary by region. SCHIP was signed into law in August 1997, and has since grown to provide coverage to more than 7 million children annually, as estimated by the Robert Wood Johnson Foundation.

Because SCHIP contributes significantly to the portion of insured children just below age 19, we can develop the generalized linear model further to examine the effect of the discontinuity at age 19 before and after SCHIP. I extend the model for logged expenditures as follows:

$$\ln(y_{iga}) = \alpha_{iga} + \delta_{g} + (\beta_{g} + \lambda_{g} \delta_{g}) X_{iga} + (\gamma_{g} + \rho_{g} \delta_{g}) a_{i} + \pi_{g} \delta_{g} Z_{i} + \theta_{g} P_{i} + \varphi_{g} Z_{i} P_{i} + v_{iga}$$

where $P_{i}$ is an indicator for an SCHIP year and $Z_{i} P_{i}$ is an interaction term between the age threshold indicator and the SCHIP indicator. Then the insurance effect on spending in an SCHIP year is $(\pi_{g} \delta_{g} + \varphi_{g})$. In a pre-SCHIP year, it is $\pi_{g} \delta_{g}$. In the MEPS data, pre-SCHIP years are 1996 and 1997 and SCHIP years are 1998 through 2008.

As expected, uninsurance for children 18 and under is higher in the years before SCHIP than during SCHIP years. This is illustrated in Figure 5, which overlays the uninsurance age profiles of participants before SCHIP with the uninsurance age profiles of participants during SCHIP. We also observe that, after age 19, SCHIP uninsurance rates are higher than pre-SCHIP rates. This may be explained by the “crowding out” effect of SCHIP. The inception of SCHIP caused demand for other forms of insurance to decrease. The price of private insurance to rose and adults 19 and over became less insured as a result. These
trends make the discontinuity at age 19 less pronounced for pre-SCHIP years. As reported in Table 1, men experience an 8% drop in insurance rates at age 19 before SCHIP, and a 10% drop after SCHIP. Women experience a 1% drop before SCHIP, and a 5% drop after SCHIP. The effect of the age 19 threshold on spending is less pronounced as well. In two of the pre-SCHIP estimates for women, virtually no insurance effect on spending is seen. The SCHIP estimates for both men and women are very similar to the estimates from the entire sample.

**Conclusions**

In this study I use the acute discontinuity in health insurance coverage at age 19 to measure the effects of insurance status on health care expenditures. The drop in coverage is due to insurance policies and not choices by the individual, so it allowed me to use age as
an instrument to reduce endogeneity. The estimated effects are considerable – a 9% decrease in insurance coverage rate among men reduces spending by 46%. A 4% decrease in insurance coverage rate among women led to a surprising increase in spending by 24%. Further analysis by the availability of SCHIP showed that, prior to SCHIP, the discontinuity was far less pronounced and produced less change in health care expenditures at age 19.

While the net effect of losing health insurance seems insignificant, the effect on men’s spending is quite large and negative, which is consistent with the conclusions of previous literature. The effect on women is lesser and in fact positive, which directly contradicts previous studies. The conventional result is that losing health insurance inevitably has a negative effect on utilization of care, which was not the case for women in this sample. This suggests that it is important to separate the effects of insurance on health care use not only by condition or provider, but also by sex.

My results apply specifically to young adults that lose insurance by “aging out” of their parents’ insurance plans. Nevertheless, the estimates may be more generalizeable to the non-elderly population than estimates from Medicare-based studies. Evidence suggests that young adults’ consumption of health care is quite similar to all non-elderly adults, and the consumption of elderly adults is too high to be representative (Anderson, Dobkin, Gross 2010). The 2010 Health Care Bill will massively affect insurance status of the non-elderly population. As such, more evidence on effects of insurance from the non-elderly population is needed to understand the implications of the Bill.
Works Cited


