Feasibility of Altering Health Insurance Premium Models

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Objective: The goal of this study was to determine whether lower premium payments for individuals with non-preventable diseases would be a viable option in the development of new health insurance models. This change would coincide with an increase in financial liability for those individuals with preventable illnesses. Theoretically, the proposed change would result in greater profits for providers and a more just allocation of payments.

Method: A brief survey was randomly distributed by phone calls and letters to individuals living in the Minneapolis West Metro area. The eighteen responses received were subsequently analyzed using Fisher and Chi-Square methods as well as basic statistical functions.

Results: While particular demographics tended to respond in similar ways, in no case were said responses statistically significant. There was no significant correlation for example, between the gender of participants and their responses to a potential change in insurance formulas to either aid those with non-preventable illnesses or increase costs for those with preventable health concerns. Additionally, responses were insignificant in relation to characteristics of participants such as smoking status and responses to other questions.

Conclusion: Although the potential for increased efficiency exists in the proposed change to health insurance formulas, public opinion could cause such a change to be detrimental to providers who choose to enact it.

Introduction

While the potential for significant cost savings exists in conjunction with the ability for insurers to switch to policies in which those with non-preventable chronic illnesses pay less than at current and those with preventable diseases pay more, insurers should not attempt to capitalize on this market inefficiency. Poor public opinion of such a change could result in a loss of market share for those companies who choose to do so. This is evident when results from a survey sample of the Minneapolis West Metro are analyzed. It is also important to keep in mind that it is not advisable to base margins used to evaluate future cost savings derived from any alterations to models on past years margins.

The above proposed change outlining decreased expenses for one group and increased for the other could be expected to be accepted by the public for several reasons. Employers already reward employees for healthy behaviors through wellness programs, the use of Fitbits and other wearable technology, and even point systems where individuals are allocated points for obtaining physicals, attending health fairs, and having blood tested. With almost half of US citizens blaming insurance companies for the astronomical cost of healthcare and extremely few believing that drug companies, hospitals, and others in the healthcare supply chain are responsible, it is likely that options to lower expenses would be appreciated. Additionally, the majority of Americans, fifty-eight percent, feel that the greatest problem with healthcare is the cost of premiums and medical expenses (Ramlet).

Objective

Ultimately, the only sure way to get a glimpse at public opinion is to ask the public their opinion of such alternations to health insurance models. In a randomized survey of the West Minneapolis Metro results were as follows. See Appendix 1. Seventy-six percent of respondents reported that they would react positively if they were told that those with “non-preventable” chronic illnesses would now be paying less for insurance/treatment than at current, while only twenty-nine point four percent reported that they would respond positively if they learned that individuals with “preventable diseases” would be paying more for insurance/treatment than currently. Given that the decreased revenue incurred by cutting payments for those with “non-preventable diseases would need to be compensated for elsewhere in this model from preventable chronic illness patients, it is not feasible to allow for lower fees for those with non-preventable diseases as public opinion would not allow for recuperation of expenses through the aforementioned format. Additionally, thirty-three percent of respondents claimed that they would switch providers if such an alteration were enacted, twenty-two percent were unsure, and forty-four percent said that they would not switch providers. Most respondents who would not change felt that since it did not affect them either way, it would not be worth the hassle. This underlines the high switching costs in the healthcare insurance industry which could benefit providers who chose to make such an alteration in their payment models.

Method

It is important to account for the demographic diversity of the group providing responses to the survey. See Figures 1-3. Of individuals contacted, those who responded averaged an age of sixty five point one years with five point six percent identifying themselves as smokers. One can infer that if more smokers had participated, a larger proportion of respondents may have been against increasing costs for those with preventable diseases. In terms of gender, thirty-eight point nine

percent of participants were male and sixty-one point one percent were female. Surveys were given through random phone calls and letters and questions were asked in the same order for each individual.

Results

A more in depth statistical analysis using the Fisher Model demonstrates that the gender of respondents did not significantly affect participants' responses to a potential change in insurance formulas to either aid those with non-preventable illnesses or increase costs for those with preventable health concerns. See Figure 4. Reactions to the statement that individuals with preventable illnesses would be paying greater sums for healthcare were also not significantly associated with whether or not the respondent would consider changing providers if this rule were to be enacted. See Figures 5-7. In terms of Chi Square analysis, responses to questions were again proved statistically insignificant in relation to defining characteristics of participants such as gender, smoking status, and responses to other questions. See Figures 8- 9.

If the survey had returned significant data, it would still be essential to consider past research and the state of the market. Despite the existence of past years data, margins from prior years cannot be used exclusively in the development of new models for premium expense distribution. In the past few years, margins have been high due to low spending on healthcare caused by the recession and this savings being consequently passed onto the insurers who were still receiving the same premium payments, but covering fewer expenses (Crosby). Additionally, the passage of the Affordable Care Act has changed the landscape of the healthcare market and the cumulative effect of modifications enforced by the law are unclear as of yet. On top of this uncertainty, upcoming elections could lead to a reversal or alteration of the law in the near future. The likelihood of this change lies with the American public, whom politicians must appease to some extent. At current, more adults have a favorable view of the ACA than those with an unfavorable view. However, this is a recent and minor change. Alternatively, of those who are uninsured, a large portion continues to hold an unfavorable view of the law (Kaiser).

Discussion

One should keep in mind that reactions from the public may change as more and more evidence emerges linking carcinogens such as nicotine to cancer as well as proof of causal relationships between obesity and heart disease can be proven. A recent study corroborated others with the results that there exists a significantly positive correlation between lung cancer death rates in correspondence with cumulative cigarette consumption (Yamaguchi). It has also been proven that smoking increases the risk of at least fourteen cancers, including unexpected strains such as bowel, ovary, and even leukemia. This occurs in large part because chemicals found in tobacco smoke can damage DNA, specifically a gene named p53, which usually would protect cells from cancers (Smoking). As additional research is made available to the public, it is reasonable to expect that opinions will be altered.

Focusing on how to restructure health insurance premium formulas, an understanding and close monitoring of the health insurance market will allow maximization resources. Healthcare is a vastly different market than that of other forms of insurance in that premiums have risen steadily since 2007 whereas premiums for other types of insurance have been more volatile. Health and fraternal organization Insurance have been the only two categories with entirely positive changes

since 2007. Comparing these two types, health insurance is increasing at a more stable rate of three to eight percent per year while fraternal organizations have varied from point zero two percent to twenty –two percent yearly increases (National). Recent increases in margins must be examined rather than taken at face value and assumed to continue. During the economic crisis, individuals found the cheapest ways to cover medicals expenses of which they were partially or fully responsible for payment of by choosing generic brands and delaying elective procedures. As the health insurance market is highly specialized and has a large number of restrictions and guidelines, a limited number of private insurers are able to exist. While it may seem that there are a larger number of corporations, many are simply divisions of a 35 total private insurers nationwide. Despite the small number of providers, the health insurance market remains competitive and offers a variety of options for participants (How Many). This may explain why an astounding seventy-six percent of Americans report being satisfied with the value of their medical care (Ramlet).

Conclusion

Given the competitive nature of the market, it is essential that health insurance providers consider any and all effects of altering formulas for premium payments. In light of the responses of participants in the West Minneapolis Metro survey in addition to the current conditions addressed above, it would be in the best interest of most providers to continue to offer plans and base premiums off of current models for the near future. After several years, companies should re-evaluate the market and public opinion once implications of the Affordable Care Act have become clearer and as more evidence of causal relationships between carcinogens and preventable diseases is made publicly available. While a system in which those with non-preventable chronic illnesses pay less than their counterparts with preventable health concerns appears just, it is not a change for which the public or health insurance corporations is ready to take on.

Figure 1

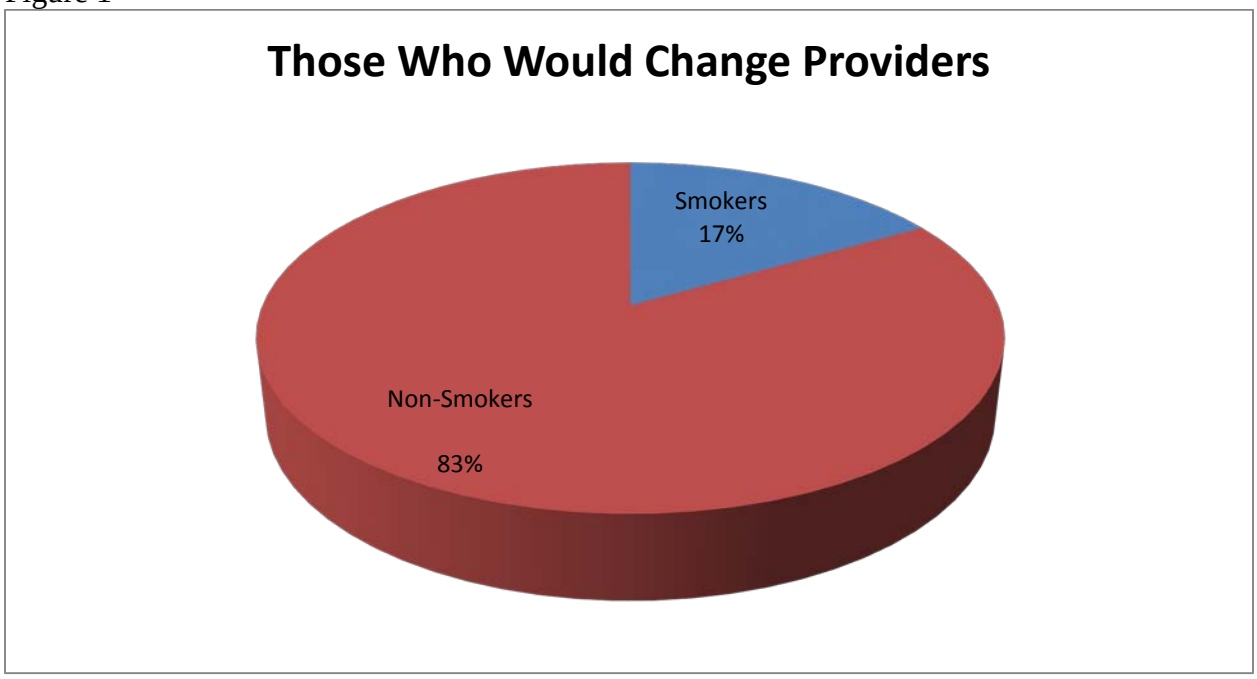


Figure 2

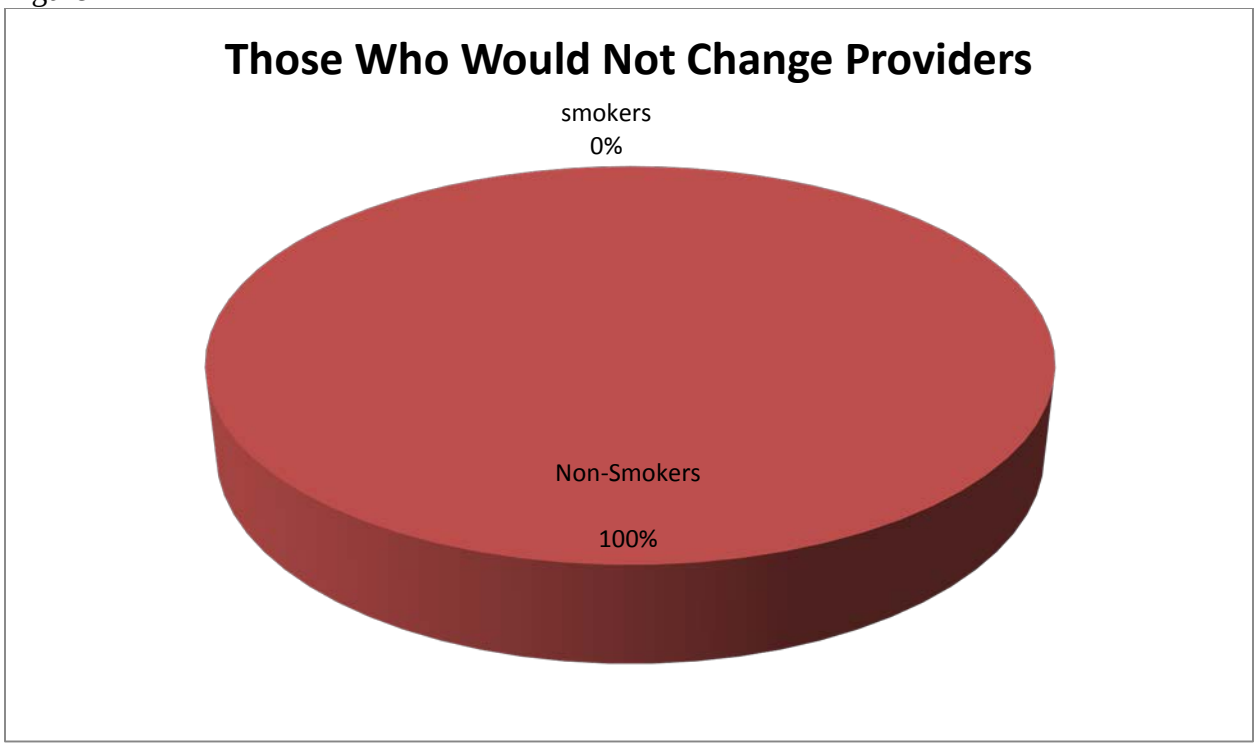


Figure 3

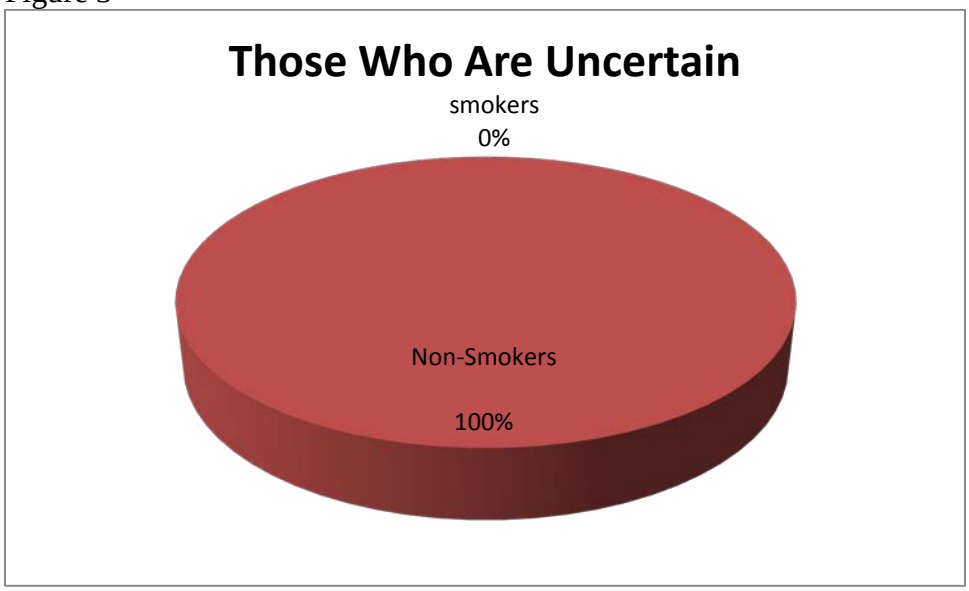


Figure 4

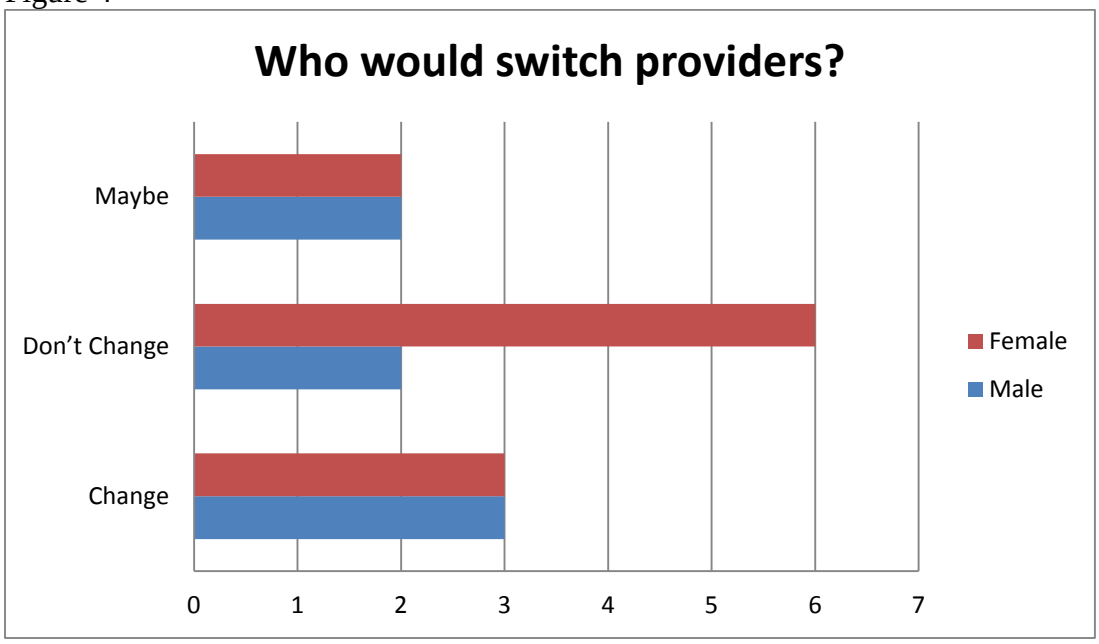


Figure 5

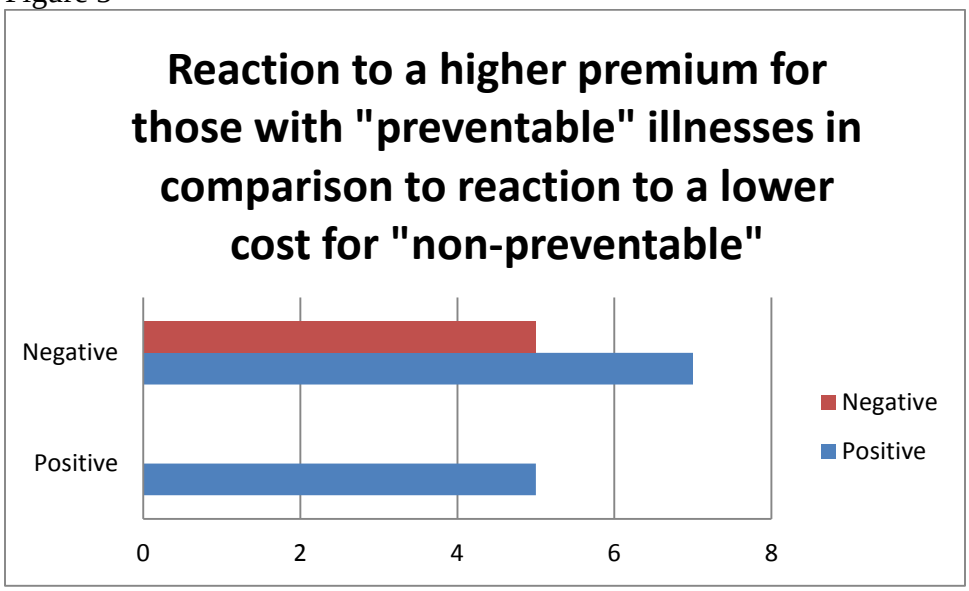
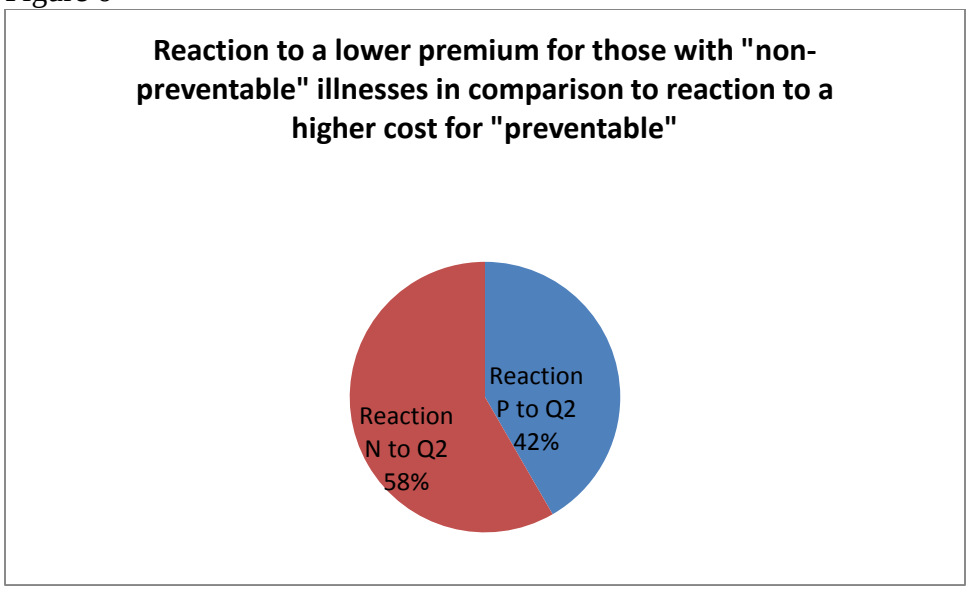


Figure 6



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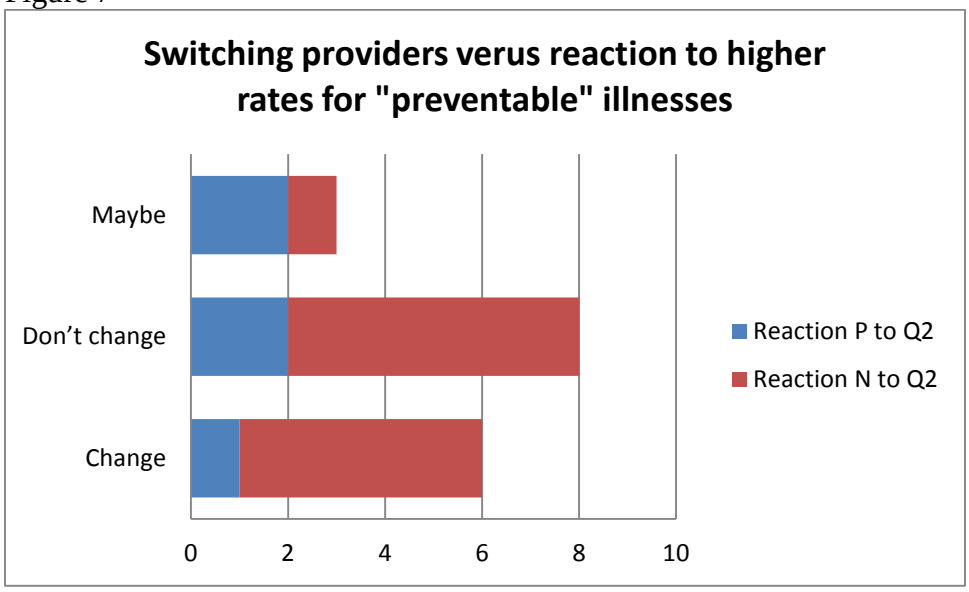


Figure 8

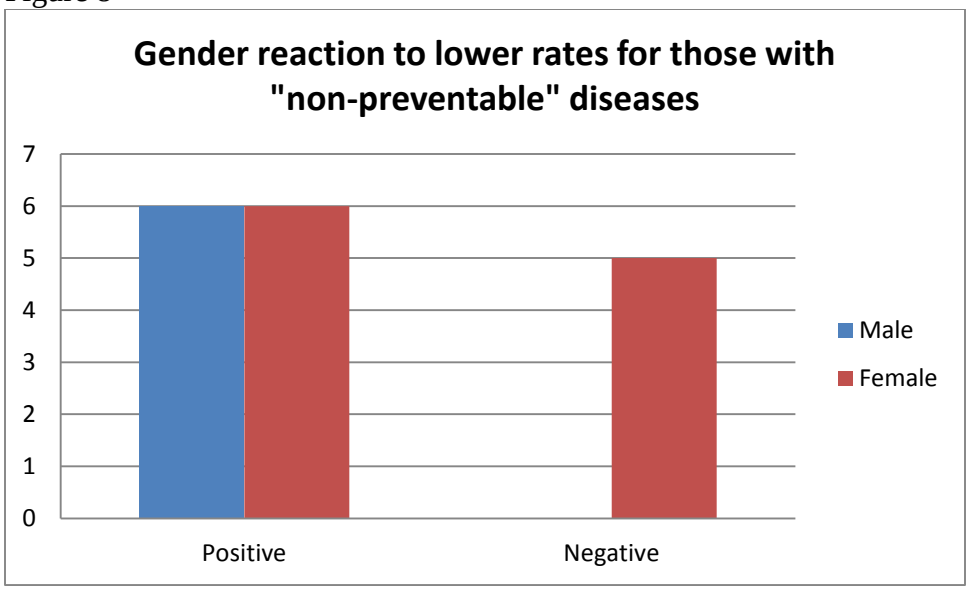
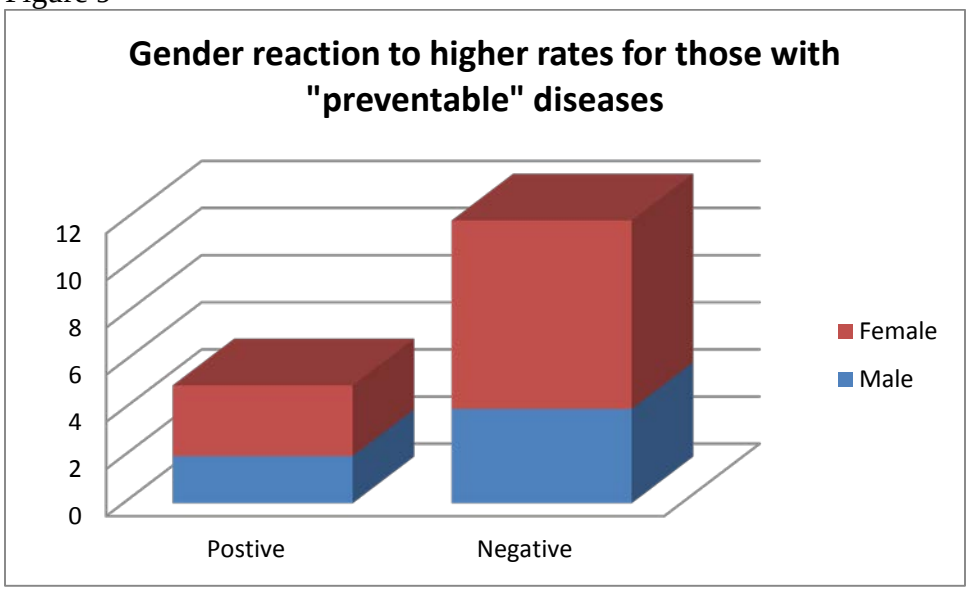


Figure 9



Appendix 1

1. Would you react positively or negatively if you were told those with “non-preventable” chronic illnesses would now be paying less for insurance/ treatment than at current?

2. Would you react positively or negatively if you found out those individuals with “preventable” diseases (ex: smokers with lung cancer, overweight individuals with heart disease) would be paying more for insurance/ treatment than currently.

3. Would you switch insurers who enacted either of these policies? Why or why not?

Demographic Questions (Any information you are willing to provide will be kept confidential and anonymous)

1. Do you smoke?
4. How old are you?
5. Are you male or female?

Your time and participation is much appreciated and essential to the success of this study. Thank you.