Do the Dutch Insured make Sound Decisions when Choosing their Health Care Insurer?
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1. Introduction

From 1941 until 2006 the Dutch health care system experienced numerous reforms in an attempt to (a) ensure universal coverage and equal access, (b) contain cost and (c) improve efficiency. Although, each phase of reform had known its successes, the systems’ structure during that period did not support the achievement of the three goals simultaneously. Notwithstanding, these years of reform did produce valuable insights and as such they led to the belief that managed competition would be able to produce the desired outcome. The rationales for the introduction of managed competition into this market are twofold: it generates efficiency incentives and it induces quality improvements in the health care sector (F.T. Schut and W.P.M.M. Van de Ven, 2005). These rationales eventually led to the enactment of the Health Insurance Act and the Market Regulation Act in 2006; the Dutch health care system as it is known today.

One of the areas where the competition has been introduced is the health care insurance (HCI) market. This newly introduced competition implies that there exists one uniform basic insurance, mandatory for every Dutch resident over the age of 18, which is purchased through private HCI companies. Moreover, health care insurers are obliged to accept every applicant of basic insurance. In addition, consumers can buy their basic HCI contracts at their preferred insurer and they are allowed to change insurer annually. Consumers may choose to buy supplementary health insurance covering care that is not included in the basic insurance, but this supplementary insurance is not characterized by open-enrollment (Hamilton, G. J. A. 2008).

However, of critical importance for the effectiveness of the introduced competition is sound decision making on the consumer side. This is defined as decisions that are based on both price and quality considerations (Hamilton, G. J. A. 2005). Moreover, as the insured have the opportunity to switch annually, it is essential for competitive effectiveness that these considerations are made each year. The choices made by the insured, whether they switch or not, will produce signals that convey their quality and price preferences to the HC insurers. These signals, in turn, allow HC insurers to purchase the appropriate health care and engage in selective health care purchasing. Thus, choices not based on the adequate considerations will hinder effective competition and as such distort the Dutch HC market. This is in line with the research of Kerssens and Groenewegen where they indicate that “low levels of switching may not provide adequate demand signals in a system of managed
competition”. Here, appropriate demand signals are defined as the adequate reflections of the consumers price and quality preferences, generated through informed consumer choice.

Although previous research has investigated the decision making process of the insured, no attempt has yet been made to investigate whether the Dutch insured have been considering these quality and price aspects yearly, after the new system has been introduced. Therefore, the objective of this paper is to analyze whether the Dutch insured that do not switch yearly consider the existing options with regard to their choice of health care insurer.

The second section of this paper will explain the concept of managed competition and the role of the health care insurer in more detail. Furthermore, this section introduces literature that addresses decision-making behavior. In the third section each construct of the model will be specified, after which the results of the analysis will be presented. Subsequently, a discussion and implication of the results, the conclusion and possible limitations and suggestions for further research are provided.

2. Theoretical framework

2.1 Literature review and hypothesis

A demand driven health care sector increases the importance of demand and addresses consumers preferences more effectively. In this setting, a well informed consumer will choose the health care insurer which offers good quality health care for a fair price. Theoretically, this will spur competition and in time result in decreased cost and increased efficiency within the health care sector (Nivel, 2008). Informed consumer choice is an inherent aspect of a health care sector which is described by managed competition (Shut, F.T., Doorslaer, v. E.K.A, 1999). In that, only informed consumer choices adequately reflect the consumers preferences. These reflections force health care insurers to compete on price and quality. This induced competition in turn enables health care insurers to engage in selective purchasing, and as such they encourage health care providers to increase effectiveness (Pomp, J.M., 2007).
Several studies have addressed this issue in a US context and analyzed the decision making process of the insured. Beaulieu (2002), for instance, indicated that the choice of health plan by Harvard University employees is positively influenced by health care quality ratings. Likewise, Chernew et al. (2005) found evidence that ratings affected the health plan choice of General Motor’s employees. Jin and Sorensen (2005) and Dafny and Dranove (2005), find similar results for federal employees and Medicare beneficiaries respectively.

Although these studies have indicated that the role of quality indicators on the choice of health plans is significant they also emphasized that the effect was rather small. It is therefore expected that the influence of health care quality on the yearly switching behavior of the insured in the Dutch HCI market is minor (M. Pomp and M. Bijlsma, 2008). This, however, does not necessarily imply that the switching behavior is mainly explained by price stimulus. An intervening factor might be the prevalence of a status quo bias, which is caused by switching barriers.

In the context of the Dutch insurance market, a status quo effect indicates that consumers will maintain their previous/current choice of health care insurer and partake in less search yearly than is optimal. This situation arises because (1) besides price and quality aspects, other psychological factors also play a role in the decision-making process, and/or (2) as a consequence of a lack of know-how. This status-quo effect is further amplified by the level of uncertainty involved in health-related decisions (W. Samuelson and R. Zeckhauser, 1988).

Traditionally, research has directed attention to the role of economic factors, such as satisfaction levels about perceived quality and provided service, in explaining the switching behavior of the insured. However, a meta-analysis of the available empirical evidence of satisfaction effects has indicated that these factors only play a minor role in explaining the variation in behavioral switching intentions (D.M. Szymanski and D.H. Henard, 2001). A more important role is played by factors that can be clustered under a psychological umbrella, like loss aversion, anchoring, and cognitive misconceptions.

The presence of these psychological factors induce switching barriers and as a result they might explain why many of the Dutch insured maintain the status quo – do not change HC insurer. The Dutch HCI market has experienced a sharp drop in switching rates; from almost 25% in 2006 to approximately 3% in 2009. Although, the high switching rates in 2006 might
be explained by the introduction of the new HC system, in subsequent years switching rates have dropped to the same levels as the levels of the old HC system (BS Health Consultancy, 2009). It is therefore interesting to explore which factors might create switching barriers.

Loss aversion, known as the endowment effect and part of prospect theory, relates to situations where “losses loom larger than the corresponding gains” (Kahneman, et al., 1991). In decisions related to choice of health care insurer, the current health care insurer will be treated as the reference point and as a result the consumer is biased towards the status quo.

By the same token, anchoring can explain a status quo effect. The consumer is rationally bounded and as such consumers “only partake in partial analysis of their available options” (Kahneman, 2003). These two factors can explain why, after the initial choice, consumers indicate that they cannot find a better alternative.

In a similar fashion, cognitive misconceptions can create switching barriers and thus contribute in explaining the status quo effect. Examples of cognitive misconceptions are ‘regret avoidance’, ‘drive for consistency’ and ‘feel of control’. Firstly, ‘regret avoidance’ positively influences status quo bias in decision making (Coricelli, G., 2005). Here, regret avoidance implies that consumers will avoid situations where the change leads to bad outcomes, even though the same bad outcomes may occur by maintaining the status quo (Kahneman & Tversky, 1982). Secondly, a ‘drive for consistency’ is related to the theory of cognitive dissonance and the conflict of choice. The essence of this theory is that, with regard to personal choice, individuals have the tendency to justify past decision by rationalizing them even if this not correct (Samuelson, W. and Zeckhauser, R., 1988). Hence, this drive for consistency can explain why consumers do not switch to another health care insurer. Lastly, ‘feel of control’ refers to the need of consumers to feel in control, where the illusion of being in control is created by maintaining the status quo.

Likewise, information overload can entail problems with filtering information. In this case, more effort is required to process the available information and as a consequence consumers may take poorer decisions (Jacoby et al., 1974), where poorer decisions can be defined as less informed consumer choices. Thus, consumers that encounter difficulties with information service and/or information processing might be more likely to maintain the status quo.
The above examples illustrate how psychological factors can create switching barriers and as a result may contribute to explaining why consumers maintain the status quo. This paper therefore investigates whether the low switching rates in the Dutch HCI market are the result of informed consumer choice or the consequence of a status quo effect.

2.2 Research design

The problem at hand involves a choice problem: determining yearly whether the current HC insurer is still the optimal choice, based on quality and price considerations, versus maintaining the status quo without these considerations. As explained before, the status quo can be maintained for a variety of reasons. In this research the dependent variable is therefore defined as the reasons for respondents to not switch of HC insurer, where these reasons have been clustered into four categories.

The first category relates to respondents who have indicated that they were satisfied with either the quality of the provided care, the quality of the provided service or the price level and therefore have not considered the alternatives. This category has been chosen because in the Dutch HC system it is assumed that the insured make choices based on quality and price considerations (Hamilton, G. J. A. 2005). However, previous results have yet indicated that choices are only based on a subset of these preset criteria (Monitor Zorgverzekeringsmarkt, 2008). Therefore, it has been decided that respondents will be assigned to this category when they base their decision on one of the three present criteria. In addition, recent research has indicated that an important role in the decision-making process is played by the advantages of the collective insurance (BS Health Consultancy, 2009). Accordingly, the second category contains respondents who indicated they did not consider alternatives, because they were satisfied about the advantages of their collective insurance. The third category is characterized by respondents who have considered the alternatives, but were unable to find a better option. The last category relates to respondent who encounter difficulties with processing information or information services. In this categorization, categories 1, 2 and 4 are indications of a status quo effect.

Important to note is that this research does not try to explain why a status quo effect exists, it merely attempts to observe if it exists in the Dutch HCI market.
For estimation the Multinomial Logit Model will be used, which can be described by the following logistic distribution functions:

\[
\Pr(y_i = 0) = \frac{1}{1 + \sum_{j=1}^{J} \exp(X_i \beta_j)},
\]

\[
\Pr(y_i = j) = \frac{\exp(X_i \beta_j)}{1 + \sum_{j=1}^{J} \exp(X_i \beta_j)}
\]

where for the \( i \)th individual, \( y_i \) – the observed outcome – represents the reason not to switch, and \( X_i \) is a vector of explanatory variables.

### 3. Research Methodology

#### 3.1 Variables

HC insurance is closely related to the concepts of health and HC, where HC represents the derived demand for health (Morris, Devlin and Parkin, 2007). In that, individuals with different health states will demand different types of HC insurance. Therefore, it is likely that factors influencing health may indirectly affect switching behavior.

As such, it is expected that the insured with a higher obtained educational level are more likely to acknowledge the importance of healthy living and hence are less likely to exhibit a status quo bias. Moreover, it is presumed that age will affect the reasons to switch, as Beaulieu (2001) indicated that younger individuals appear to be the most price sensitive. Likewise, it is plausible that families with children are more price sensitive as compared to families without children. Consequently, family composition is expected to have an effect. Similarly, type of occupation is expected to influence the reasons to switch – employed versus unemployed e.g. The variable gender is included as control variable.

Furthermore, factors influencing information service and processing are likely to have an effect. Correspondingly, the satisfaction level of the perceived availability of information and of the perceived clarity of the available information is presumed to affect the switching behavior. Likewise, the awareness of the annual switching opportunity and the website www.kiesbeter.nl are expected to influence switching behavior. Lastly it is interesting to determine whether the type of insurance in 2005, CZ or private, has an impact on current switching behavior.
3.2 Sample and Dataset

This research will be conducted by means of a questionnaire and the units-of-analysis are the Dutch insured. The objective of the designed questionnaire is to map out if the insured have changed insurer after 2006 and what the rationales are for their decision. The questionnaire can be found in appendix A.

Since basic insurance is mandatory for each Dutch resident over the age of 18, every Dutch inhabitant in this category can participate in the survey. Table 1 provides an overview of the type of respondents that have participated in the survey and indicates that it is a rather diverse group. This is confirmed by an analysis of the descriptive statistics, which can be found in tables 2, 3 and 4. In total 134 respondents participated in the survey, however, after the data processing only 128 surveys appeared valid. This was the direct result of inconsistencies in the answers of some respondents.

Table 1

<table>
<thead>
<tr>
<th>Location</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nieuwe binnenweg – shops</td>
<td>8</td>
</tr>
<tr>
<td>Train The Hague – Rotterdam</td>
<td>45</td>
</tr>
<tr>
<td>Parents neighbors</td>
<td>12</td>
</tr>
<tr>
<td>Network teacher at EUR</td>
<td>12</td>
</tr>
<tr>
<td>EUR students</td>
<td>15</td>
</tr>
<tr>
<td>Fitness First – employees</td>
<td>15</td>
</tr>
<tr>
<td>Fitness First – clients</td>
<td>22</td>
</tr>
<tr>
<td>Van Zandbeek – employees</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>134</strong></td>
</tr>
</tbody>
</table>

4. Results

4.1 Descriptive analysis

Tables 2 and 3 present descriptive information after deleting the cases that contained inconsistencies. Approximately 82% of the respondents indicated that they did not switch from HC insurer after 2006. Of these non-switchers about 75% denoted that they did not switch because they are satisfied with either the quality of the service, the quality of the provided care, the price level or the advantages of the collective insurance and therefore did not consider any alternatives.
Because of the problem of over dispersion – large standard errors – the categories of the variables perceived available amount of information and the perceived clarity of the available information have been merged. The original answer categories 1 - very dissatisfied, 2 - dissatisfied, 3 - neutral, 4 - satisfied and 5 - very satisfied, have been merged into 1 - very dissatisfied/dissatisfied, 2 - neutral and 3 – satisfied/very satisfied. By the same token the categories of age, education, family composition and occupation have been merged. How they have been merged is presented in table 3. Table 4 provides an overview of the percentage of respondents in each dependent variable category.

**Table 2**

<table>
<thead>
<tr>
<th>Variable name</th>
<th>In percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switch</td>
<td>82,03 % no switch</td>
</tr>
<tr>
<td>Awareness yearly switch option</td>
<td>34,5 % not aware</td>
</tr>
<tr>
<td>Awareness site</td>
<td>42,5 % not aware</td>
</tr>
<tr>
<td>Gender</td>
<td>50,1 % female</td>
</tr>
<tr>
<td>CZ/private</td>
<td>50,1 % private</td>
</tr>
</tbody>
</table>

**Table 3**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Percentage of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived quantity information</td>
<td>very dissatisfied/dissatisfied</td>
<td>13,4</td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>37,8</td>
</tr>
<tr>
<td></td>
<td>very satisfied/satisfied</td>
<td>48,7</td>
</tr>
<tr>
<td>Perceived clarity information</td>
<td>very dissatisfied/dissatisfied</td>
<td>25,2</td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>37,4</td>
</tr>
<tr>
<td></td>
<td>very satisfied/satisfied</td>
<td>37,4</td>
</tr>
<tr>
<td>Education</td>
<td>college</td>
<td>11,0</td>
</tr>
<tr>
<td></td>
<td>(secondary) vocational school</td>
<td>22,0</td>
</tr>
<tr>
<td></td>
<td>higher education</td>
<td>37,8</td>
</tr>
<tr>
<td></td>
<td>university</td>
<td>29,1</td>
</tr>
<tr>
<td>Age</td>
<td>≤ 25</td>
<td>27,2</td>
</tr>
<tr>
<td></td>
<td>&gt; 25 age ≤ 55</td>
<td>56,8</td>
</tr>
<tr>
<td></td>
<td>&gt; 55</td>
<td>16,0</td>
</tr>
<tr>
<td>Family composition</td>
<td>single</td>
<td>27,8</td>
</tr>
<tr>
<td></td>
<td>living with children</td>
<td>37,3</td>
</tr>
<tr>
<td></td>
<td>(w/wo partner)</td>
<td>21,4</td>
</tr>
<tr>
<td></td>
<td>with parents</td>
<td>13,5</td>
</tr>
<tr>
<td></td>
<td>other</td>
<td>13,5</td>
</tr>
<tr>
<td>Occupation</td>
<td>paid employment</td>
<td>66,9</td>
</tr>
<tr>
<td></td>
<td>unpaid employment</td>
<td>2,4</td>
</tr>
<tr>
<td></td>
<td>retired</td>
<td>7,9</td>
</tr>
<tr>
<td></td>
<td>student</td>
<td>22,0</td>
</tr>
<tr>
<td></td>
<td>disapproved</td>
<td>8,1</td>
</tr>
</tbody>
</table>

**Table 4**

<table>
<thead>
<tr>
<th>No-Switch categories</th>
<th>In percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;satisfied quality service or quality provided care or insurance premium, did not consider alternatives&quot;</td>
<td>57,6</td>
</tr>
<tr>
<td>&quot;satisfied advantages collective insurance, did not consider alternatives&quot;</td>
<td>17,2</td>
</tr>
<tr>
<td>&quot;did consider alternatives, but no better alternative found&quot;</td>
<td>15,2</td>
</tr>
<tr>
<td>&quot;difficulties with information service and processing, not able to make comparison&quot;</td>
<td>10,1</td>
</tr>
</tbody>
</table>
4.2 Econometric analysis

Table 5 reports seven sets of estimates for the multinomial logit model. The unknown parameters $\beta$ have been estimated by means of maximum likelihood. However, the relatively low number of respondents in the cells of the dependent variable constrained the possibilities of analyzing interaction effects and therefore only the main effects of the variables have been considered. A stepwise approach including one explanatory variable at a time, while keeping those variables that are significantly influencing the dependent variable in the model, has been used.

The first model included the variables Q_Info and C_Info, which refer to the perceived amount of available information and the perceived clarity of the available information respectively. As these two variables can be directly related to possible problems with information service and processing, the analysis has started with this specification. The variable gender has been included as a control variable, but proved to be insignificant, and as such it has been eliminated from the succeeding models.

In the subsequent models the variables ‘awareness of possibility to switch yearly’, ‘highest obtained educational level’, ‘family composition’, ‘type of insurance in 2005’, ‘age’, ‘awareness of www.kiesbeter.nl’, and ‘occupation’ have been entered consecutively. A serious constraint of this analysis is that these variables have been entered into the model without a proper motive for the sequence.

The Chi-square results indicate that the perceived amount of available information and age are significant at an alpha-level of 1%, indicating that these variables significantly contribute in explaining the variation of the dependent variable; ‘reasons not to switch’. Consequently, the odds-ratios of these variables and their corresponding confidence intervals have been calculated. ‘Considered alternatives, but did not find a better alternative’ has been chosen as the reference category, as the category refers to the most rational consumer decisions. The results of the maximum likelihood test are presented in table 6.

These results suggest that the odds of the respondents with age 55 or younger that experience difficulties with information service and processing is larger than for those with age +55. In a similar fashion the odds of the respondents that are dissatisfied with the perceived available amount that experience difficulties with information service and processing is larger than those belonging to the categories ‘neutral’ and ‘very
satisfies’/’satisfied’. In addition, it appears that the respondents who perceive the available amount of information as neutral are more likely to be ‘satisfied with current choice and therefore did not consider alternatives’.

In table 7 the test results related to the fit of the chosen model are presented. The Pearson goodness of fit test is not significant, indicating that the model is a good fit, since the predicted values are not significant different from the observed values. The Nagelkerke pseudo R² is 0.460, which implies that 46% of the total variation in the dependent variable is accounted for by the model.

Table 5

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model I</th>
<th>Model II</th>
<th>Model III</th>
<th>Model IV</th>
<th>Model V</th>
<th>Model VI</th>
<th>Model VII</th>
<th>Model VIII</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q_INFO</td>
<td>18,039**(6)</td>
<td>27,557**(6)</td>
<td>21,641**(6)</td>
<td>27,207**(6)</td>
<td>33,204**(6)</td>
<td>31,833**(6)</td>
<td>36,375**(6)</td>
<td></td>
</tr>
<tr>
<td>C_INFO</td>
<td>5,208**(6)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPTION_S</td>
<td></td>
<td>2,055**(3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDUCATION</td>
<td></td>
<td></td>
<td>14,826**(5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F_COMP</td>
<td></td>
<td></td>
<td></td>
<td>10,272**(9)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CZ/PRIVATE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3,786**(3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16,986**(6)</td>
<td>22,509**(6)</td>
<td>16,749**(6)</td>
</tr>
<tr>
<td>SITE_KB</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6,733**(3)</td>
<td></td>
<td>15,452**(9)</td>
</tr>
<tr>
<td>OCCU</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GENDER</td>
<td>4,918**(3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Entries represent Chi-Square and Df in parentheses

**P<0.01; *P<0.05
### Table 6

<table>
<thead>
<tr>
<th>NS_CAT†</th>
<th>B</th>
<th>Std. Error</th>
<th>df</th>
<th>Sig.</th>
<th>Exp(B)</th>
<th>95% Confidence Interval for Exp(B)</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;satisfied quality service or quality provided care or insurance premium, did not consider alternatives&quot;</td>
<td>Intercept</td>
<td>2.095</td>
<td>3.773</td>
<td>1</td>
<td>.052</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[Q_INFO=1,00]</td>
<td>.107</td>
<td>.007</td>
<td>1</td>
<td>.933</td>
<td>1.113</td>
<td>.092</td>
<td>13,440</td>
<td></td>
</tr>
<tr>
<td>[Q_INFO=2,00]</td>
<td>2.256</td>
<td>4.172</td>
<td>1</td>
<td>.041</td>
<td>9.545</td>
<td>1.095</td>
<td>83,169</td>
<td></td>
</tr>
<tr>
<td>[Q_INFO=3,00]</td>
<td>0</td>
<td>.</td>
<td>0</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td></td>
</tr>
<tr>
<td>[AGE_CAT=1,00]</td>
<td>-.006</td>
<td>.000</td>
<td>1</td>
<td>.997</td>
<td>.994</td>
<td>.052</td>
<td>18,877</td>
<td></td>
</tr>
<tr>
<td>[AGE_CAT=2,00]</td>
<td>-1.861</td>
<td>2.697</td>
<td>1</td>
<td>.101</td>
<td>.156</td>
<td>.017</td>
<td>1,433</td>
<td></td>
</tr>
<tr>
<td>[AGE_CAT=3,00]</td>
<td>0</td>
<td>.</td>
<td>0</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td></td>
</tr>
<tr>
<td>&quot;satisfied advantages collective insurance, did not consider alternatives&quot;</td>
<td>Intercept</td>
<td>1.202</td>
<td>1.096</td>
<td>1</td>
<td>.295</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[Q_INFO_CAT=1,00]</td>
<td>.796</td>
<td>.325</td>
<td>1</td>
<td>.568</td>
<td>2.216</td>
<td>.144</td>
<td>34,107</td>
<td></td>
</tr>
<tr>
<td>[Q_INFO_CAT=2,00]</td>
<td>2.556</td>
<td>4.550</td>
<td>1</td>
<td>.033</td>
<td>12.885</td>
<td>1.231</td>
<td>134,906</td>
<td></td>
</tr>
<tr>
<td>[Q_INFO_CAT=3,00]</td>
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</table>

† The reference category is: considered alternatives, but no better alternative found

b. This parameter is set to zero because it is redundant.

### Table 7

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<th>Goodness of Fit</th>
<th>Pearson (Chi-Square)</th>
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<td>McFadden</td>
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5. Discussion and implications

The results of this analysis indicate that respondents of age 55 or younger experience more difficulties with information processing and information service as older respondents do. This might seem odd at first sight as it seems more likely that older people would encounter difficulties. However, this effect might be explained by other confounding factors like the time available for market orientation. In spite of the fact that it is unclear why age affects the reasons to switch, this does suggest that if the information provision will be adapted to the needs of the different age categories, more sound decision will be made on the consumer side.

In addition, the results suggest that respondents who are dissatisfied with the perceived amount of available information are more likely to experience difficulties with information service and processing. Essential here is that it involves the respondents perceptions, as the amount of information is available for all. The latter, stresses the importance of ‘knowing where the information can be accessed’. Nonetheless, 77% of the respondents were not aware of the website www.kiesbeter.nl. Although it is unknown whether this unawareness is also prevalent in other information channels, 77% is a relatively high percentage.

Next to this, it is also interesting to note, that although the clarity of the available information does not significantly contribute in explaining the reasons to switch, 42% of the respondents indicated that enhanced transparency would enable them to make a more informed choice.

6. Conclusion

In the 80’s the Dekker plan already revealed that adequate provision of consumer information is an essential aspect in a HC system of managed competition, (Schut, F.T., Ven van de, W.P.M.M.,2005). Despite this, when introducing the new health care system in 2006, this was still one of the systems’ aspects of that was not optimally developed. Other economist have stressed before that improvement of the provision of consumer information is required (Schut, F.T., Ven van de, W.P.M.M.,2005 ). As such this research can be seen as a contribution to this.
In short, the results of this research emphasize the crucial importance of the provision and accessibility of consumer information in a HC sector characterized by managed competition.

7. Limitations and suggestions for further research

Although this analysis yields interesting results, caution must be taken in the interpretation as further analysis has indicated that the number of observations in each cell of the dependent are relatively low. Therefore this research should merely be seen as an indicator that other psychological factors might influence the switching behavior of the insured. Nevertheless, this research does shed light on possible drivers of distortions in the Dutch Health Care sector. Further research should therefore be devoted to the impact of psychological factors on the insured’ decisions of HC insurer. In addition, future research should aim to determine the optimal mix of information provision, the information channels to be used and the information messages to convey.
8. References


WHO, The determinants of health (downloaded 24th of June 2009)
9. Appendix

Questionnaire (Dutch):

1. Was u in 2005 ziekenfonds of particulier verzekerd?
   - ziekenfonds
   - particulier

2. Bij welke verzekeraar bent u momenteel verzekerd voor uw basispakket?
   - Aegon Zorgverzekering
   - Aevitae
   - Agis
   - AnderZorg
   - ASR Verzekeringen
   - Avero
   - Achmea
   - Azivo
   - AZVZ
   - Confior
   - CZ
   - De Amersfoortse
   - De Friesland Zorgverzekeraar
   - De Goudse
   - Delta Lloyd
   - DSW Zorgverzekeraar
   - DVZ Achmea
   - FBTO
   - Groene Land
   - Interpolis Zorg Actief
   - IZA Cura
   - IZA Zorgverzekeraar
   - IZZ Zorgverzekeraar
   - Kettlitz en Deenik
   - Kruidvat
   - Lancyr
   - Menzis
   - OHRA
   - ONVZ
   - OZF Achmea
   - PNO Ziektekosten
   - Pro Life
   - PWZ Achmea
   - Salland
   - SIZ
   - Stad Holland Zorgverzekeraar
   - TakeCareNow!
   - Trias
   - Turien & Co
   - Unive
   - VGZ
   - VVAA
   - Zilveren Kruis Achmea
   - Zorg en Zekerheid
   - Zorgverzekeraar UMC

3. Hoe heeft u de keuze voor de verzekeraar van uw basis verzekering gemaakt? Kies het antwoord wat het meest op u van toepassing is.
   Ik heb mijn keuze voor verzekeraar van de basis zorgverzekering gebaseerd op:
   - vergelijkingen tussen meerdere zorgverzekeraars op het gebied van de kwaliteit van hun dienstverlening.
   - vergelijkingen tussen meerdere zorgverzekeraars op het gebied van de kwaliteit van de verzekerde zorg.
O vergelijkingen tussen meerdere zorgverzekeraars op het gebied van de hoogte van de premies.

O vergelijkingen tussen meerdere zorgverzekeraars op het gebied van de voordelen van eventuele collectieve verzekerings.

O het feit dat ik voorheen ook hier verzekerd was.

O advies van collega’s, vrienden en/of familie

O anders, nl; ....................................................................................................................................................

4. Heeft u ook een aanvullende verzekering?
O ja
O nee → ga verder naar vraag 7

5. Bij welke zorgverzekeraar loopt uw aanvullende verzekering?

O Aegon Zorgverzekering
O Aevitae
O Agis
O AnderZorg
O ASR Verzekeringen
O Avero
O Achmea
O Azivo
O AZVZ
O Confior
O CZ
O De Amersfoortse
O De Friesland Zorgverzekeraar
O De Goudse
O Delta Lloyd
O DSW Zorgverzekeraar
O DVZ Achmea
O FBTO
O Groene Land
O Interpolis Zorg Actief
O IZA Cura
O IZA Zorgverzekeraar
O IZZ Zorgverzekeraar

O Kettlitz en Deenik
O Kruidvat
O Lancyr
O Menzis
O OHRA
O ONVZ
O OZF Achmea
O PNO Ziektekosten
O Pro Life
O PWZ Achmea
O Salland
O SIZ
O Stad Holland Zorgverzekeraar
O TakeCareNow!
O Trias
O Turien & Co
O Unive
O VGZ
O VVAA
O Zilveren Kruis Achmea
O Zorg en Zekerheid
O Zorgverzekeraar UMC

6. Hoe heeft u de keuze voor de verzekeraar van uw aanvullende verzekering gemaakt? Kies het antwoord wat het meest op u van toepassing is.
Ik heb deze zorgverzekeraar gekozen omdat mijn basisverzekering ook bij deze verzekeraar is afgesloten.

Ik heb mijn keuze gebaseerd op vergelijkingen tussen meerdere zorgverzekeraars op het gebied van de kwaliteit van hun dienstverlening.

Ik heb mijn keuze gebaseerd op vergelijkingen tussen meerdere zorgverzekeraars op het gebied van de kwaliteit van de verzekerde zorg.

Ik heb mijn keuze gebaseerd op vergelijkingen tussen meerdere zorgverzekeraars op het gebied van de hoogte van de premies.

Ik heb mijn keuze gebaseerd op de dekking van de aanvullende verzekering.

Ik heb mijn keuze gebaseerd op voordelen van eventuele collectieve verzekering.

Ik heb mijn keuze gebaseerd op advies van collega’s, vrienden en/of familie.

Ik heb mijn keuze gebaseerd op advies van collega’s, vrienden en/of familie anders, nl; ..............................................................

7. Bent u in de jaren na 2006 gewisseld van zorgverzekeraar voor uw basis pakket?
   O ja, 1 keer
   O ja, 2 keer
   O ja, 3 keer
   O nee → ga verder naar vraag 10

   O 2006-2007
   O 2007-2008
   O 2008-2009

9. U heeft vervolgens gekozen voor een andere zorgverzekeraar. Waarop heeft u uw keuze destijds voornamelijk gebaseerd? Kies het antwoord dat het meest op u van toepassing is. Ik heb mijn keuze destijds voornamelijk gebaseerd op...
   O vergelijkingen tussen meerdere zorgverzekeraars op het gebied van de kwaliteit van de dienstverlening.
   O vergelijkingen tussen meerdere zorgverzekeraars op het gebied van de kwaliteit van de verzekerde zorg.
   O vergelijkingen tussen meerdere zorgverzekeraars op het gebied van de hoogte van de premies.
   O vergelijkingen tussen meerdere zorgverzekeraars op het gebied van de voordelen van de collectieve verzekering
   O het advies van collega’s, vrienden en/of familie
10. Waarom bent u niet gewisseld van zorgverzekeraar van uw basispakket? Kies het antwoord wat het meest op u van toepassing is. Ik ben niet gewisseld, omdat .......

- ik tevreden ben over de kwaliteit van de dienstverlening bij mijn huidige zorgverzekeraar en me daarom niet verder heb georiënteerd op andere zorgverzekeraars.  
- ik tevreden ben over de kwaliteit van de verzekerde zorg bij mijn huidige zorgverzekeraar en me daarom niet verder heb georiënteerd op andere zorgverzekeraars. (zie ommezijde)  
- ik tevreden ben over de hoogte van de premie bij mijn huidige zorgverzekeraar en me daarom niet verder heb georiënteerd op andere zorgverzekeraars.  
- ik tevreden ben over de voordelen van de collectieve verzekering bij mijn huidige zorgverzekeraar en me daarom niet verder heb georiënteerd op andere zorgverzekeraars.  
- me wel heb georiënteerd op andere zorgverzekeraars, maar geen beter alternatief heb kunnen vinden wat betreft de kwaliteit van dienstverlening.  
- me wel heb georiënteerd op andere zorgverzekeraars, maar geen beter alternatief heb kunnen vinden wat betreft de kwaliteit van de verzekerde zorg.  
- me wel heb georiënteerd op andere zorgverzekeraars, maar geen beter alternatief heb kunnen vinden wat betreft de hoogte van de premie.  
- me wel heb georiënteerd op andere zorgverzekeraars, maar geen beter alternatief heb kunnen vinden wat betreft voordelen van de collectieve verzekering.  
- ik de informatie die beschikbaar is over de zorgverzekeraars te onduidelijk vind om goede vergelijkingen te kunnen maken, op basis van de kwaliteit van de dienstverlening.  
- ik de informatie die beschikbaar is over de zorgverzekeraars te onduidelijk vind om goede vergelijkingen te kunnen maken, op basis van de kwaliteit van de verzekerde zorg.  
- ik de informatie die beschikbaar is over de zorgverzekeraars te onduidelijk vind om goede vergelijkingen te kunnen maken., op basis van de hoogte van de premies,  
- ik vind dat er in het algemeen te weinig informatie beschikbaar is om vergelijkingen te kunnen maken.  
- ik vind dat er te veel zorgverzekeraars zijn, waardoor ik niet weet welke zorgverzekeraar ik moet kiezen.  
- anders, namelijk; ..............................................................................................................

Na het beantwoorden van deze vraag kunt u verder gaan naar vraag 11
11. Wat is er volgens u nodig, zodat u in staat wordt gesteld een betere keuze voor een zorgverzekeraar te kunnen maken? ............... 

12. Hoe tevreden bent u in het algemeen over de hoeveelheid informatie die beschikbaar is over de verschillende zorgverzekeraars?

O zeer ontevreden
O ontevreden
O neutraal
O tevreden
O zeer tevreden
O geen mening

13. Hoe tevreden bent u over het algemeen over de duidelijkheid van de beschikbare informatie over de verschillende zorgverzekeraars?

O zeer ontevreden
O ontevreden
O neutraal
O tevreden
O zeer tevreden
O geen mening

14. Bent u op de hoogte van de website www.kiesbewust.nl?

O ja
O nee → ga verder naar vraag 16

15. Heeft u bij het kiezen van een zorgverzekeraar gebruik gemaakt van deze website?

O ja
O nee

16. Bent u ervan op de hoogte dat u ieder jaar kan wisselen van zorgverzekeraar?

O ja
O nee

17. Wist u dat u uw aanvullende verzekering niet verplicht hoeft te nemen bij de zorgverzekeraar die uw basisverzekering aanbiedt?

O ja
O nee

Tenslotte zou ik willen verzoeken om de volgende algemene vragen te beantwoorden. Uiteraard is uw anonimiteit hierbij gewaarborgd.

1. Wat is uw geslacht?

O man
O vrouw
2. Wat is uw geboortejaar?

.............................

3. Wat is uw hoogst genoten opleiding?
   O middelbare school
   O vakschool
   O Middelbaar Beroeps Onderwijs
   O Hoger Beroeps Onderwijs
   O Universitair
   O anders, namelijk; ..........

4. Geef hieronder aan wat uw gezinssamenstelling is:
   O alleenstaand
   O alleenstaand met kinderen
   O samenwonend met partner
   O samenwonend met partner en kinderen kinderen
   O inwonend bij ouders
   O anders, namelijk; .....................

5. Geef hieronder aan wat op u van toepassing is:
   O ik ben in loondienst
   O ik verricht vrijwilligerswerk
   O ik ben gepensioneerd
   O ik ben student
   O ik ben werkloos

6. Geef hieronder aan in welke inkomensklasse uw huishouden valt:
   O minder dan € 31.659 bruto per jaar (zonder bonussen en vakantiegeld)
   O meer dan € 31.659 bruto per jaar (zonder bonussen en vakantiegeld)