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The Dutch Health Care Payment Problem

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The Dutch Health care payment problem

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Abstract

The Dutch health care payment problem

This study examined whether there is a connection between switching to a new health insurance and not having health insurance payment problem. In this current study 360 respondents were involved, both males and females in varying age groups from 18 till 65+. This group completed an online questioner and remains anonymous. The questionnaires consisted of topics of healthcare knowledge, switching insurance and payment problems. The results of the respondents showed that when a respondent switches to a new health insurance and claims he or she is better off with the new insurance, the chance of having payment problems becomes smaller. Also the connection between payment problems and demographic criteria was confirmed. Finally the connection between payment problems and financial situation (good, moderate or bad) has been proven, but also disproven. It is disproven when taken into consideration that not all people who have a payment problem will have to get a payment plan (they have to pay 130% premium) with the healthcare insurer. There is no proven relation between financial situation and having a health care payment plan.

Keywords: Health insurance, Payment problem, Own risk, Basic insurance, Additional insurance, Premium, Switching health insurance, Collective discount, Payment plan, Financial situation, Health care comparison websites

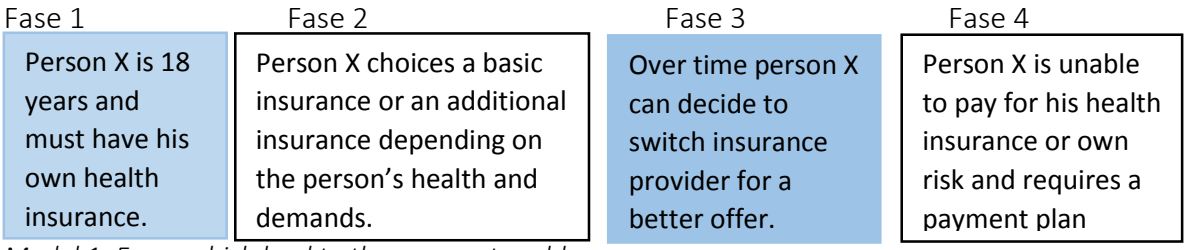
Introduction

The Dutch health care is getting more expensive. The own risk part of the health insurance has increased to €375 and in exchange for a lower contribution of the health insurance, the own risk can be increased to €875(in exchange for a discount on the insurance). This increase of own risk leads to payment problems for hundred –thousands of households. There has been a fivefold increase in payment problems of own risk since 2012 (Vreede, 2014). This problem has also reached politics which has led to parliamentary questions like: What are the social costs and benefits for people who are in debt with the health insurer? Also what are the social costs of avoiding or delaying necessary medical care? According to a rapport of minister Schippers the problem is currently handled by writing of the debt of 90% of the people who absolutely cannot pay it (Schippers, 2015). This is no real solution for this problem.

The history behind the Dutch health care system. The Dutch healthcare system changed drastically in 2006 with the introduction of the basic health insurance (Donker, 2007). The introduction of this new system has led to fierce competition between health insurers. To keep this competition fierce the insurance taker is able to switch health insurer in the period 1 November – 31 December. The insurance takes effect on the first of January (Independer, 2014). The goal of this new system was to increase efficiency by decreasing costs. This was proven effective. The average insurance costs for the basic insurance were €1025, which was significantly less than was estimated by the ministry of health and welfare €1106. The basic health insurance has increased to €1162 in 2015 which is an increase of 13% over 9 years, which average an annual growth of 1.4%. (ANP, 2014)

The new system should have made the health care system more affordable with the increased competition, but the payment problems are increasing. The question remains why is the insured party unable to pay his health insurance?

The model below shows how the problem comes about.



Model 1: Fases which lead to the payment problem

Fase 1: Who needs a health insurance: According to independer.nl the Dutch health insurance system works as followed (Independer, 2014):

"Everyone in the Netherlands must have a basic health insurance. This is required by law. With the basic insurance you are insured for hospital and general practitioner visits. Health insurers must accept you for basic insurance regardless of your gender, age or health. For additional insurance such acceptance obligation does not apply. A health care provider may therefore refuse you for an additional insurance."

According to Independer when you become 18 you will need your own health insurance, before you were 18 you were insured by your parents health insurance. You need to be insured on the first day of the next month after your 18th birthday. You need at least a basic insurance, but you can also choose for an additional insurance. When you insure yourself you can choose to stay with the same provider as your parents, but you can also choose a different provider who offers a better deal.

Fase 2: Choosing between a basic and an additional health insurance: According to the research paper "the difference between basic and additional health insurance" the basic health insurance covers (Esveld, 2013):

- Medical care, including care provided by general practitioners, hospitals, medical specialists and obstetricians
- Hospital stay
- Dental care (up to 18 years from 18 years only specialized dentistry and dentures)
- Aids (note: By 2013, various walking aids such as walkers passed from the basic package)
- Medications
- Maternity care

- Ambulances (ambulance and seated transport)
- Paramedical care (limited physiotherapy / remedial therapy, speech therapy, occupational therapy, dietary advice)

If you want to have physical therapy, 18+ dental or other services not mention in this list above you should consider an additional health care package.

Fase 3: Choosing a health insurance: If you want to have a better or cheaper health insurance you can switch health insurer. The paper "the effect of CQ information on choosing health insurer" offers the following reasons to stay with or switch health insurance (L.H.H.M. Boonen, 2009).

Stay with health insurance:

- Premium and own risk
- Collectivity discount
- Coverage of the additional insurance

Switch health insurance:

- Collectivity contract at other insurer
- Basic premium to expensive
- Additional premium to expensive
- Not enough coverage in additional insurance

The paper of Boonen also offer another interesting variable: reasons why after considering to switch insurer not to switch. These reasons are as followed:

- Not enough difference between current insurer and new insurer
- Changing health insurance to complicated
- Premium of other insurers to high

Looking at these arguments it becomes clear that the insured party has to collect quite a lot of information before he or she can make a decision whether or not to switch.

Fase 4: Unable to pay health insurance: According to the Dutch government (Rijksoverheid) if you are unable to pay the insurance your health provider will send you a reminder of payment or offers you a payment plan. If you haven't paid in 6 months the health insurer will register you as a defaulter on Zorginstituut Nederland. If you are registered at this institute you will have the pay a premium of 130%. You are also unable to switch health insurer. You will be unregistered as defaulter when you have paid your debt or when you have made an arrangement with schuldhulpverlening (debt relief) (Rijksoverheid, 2015).

The health care payment problem in The Netherlands

In The Netherlands being unable to pay health insurance has become a growing problem with serious consequences for the insured party (having to pay a premium of 130% and being unable to switch health insurance). There are many studies focused on choosing the right health insurance (L.H.H.M. Boonen, 2009) and risk selection for choosing a health insurance (D. Duijmelinck MSc, 2013). The paper “the micro foundation of competition and choice in public service” focusses on a similar problem (choice-overload) but with a different angle (Jilke, 2015). There are no studies on the growing payment problems of the Dutch health care system. This paper investigates the reason behind the health insurance payment problem.

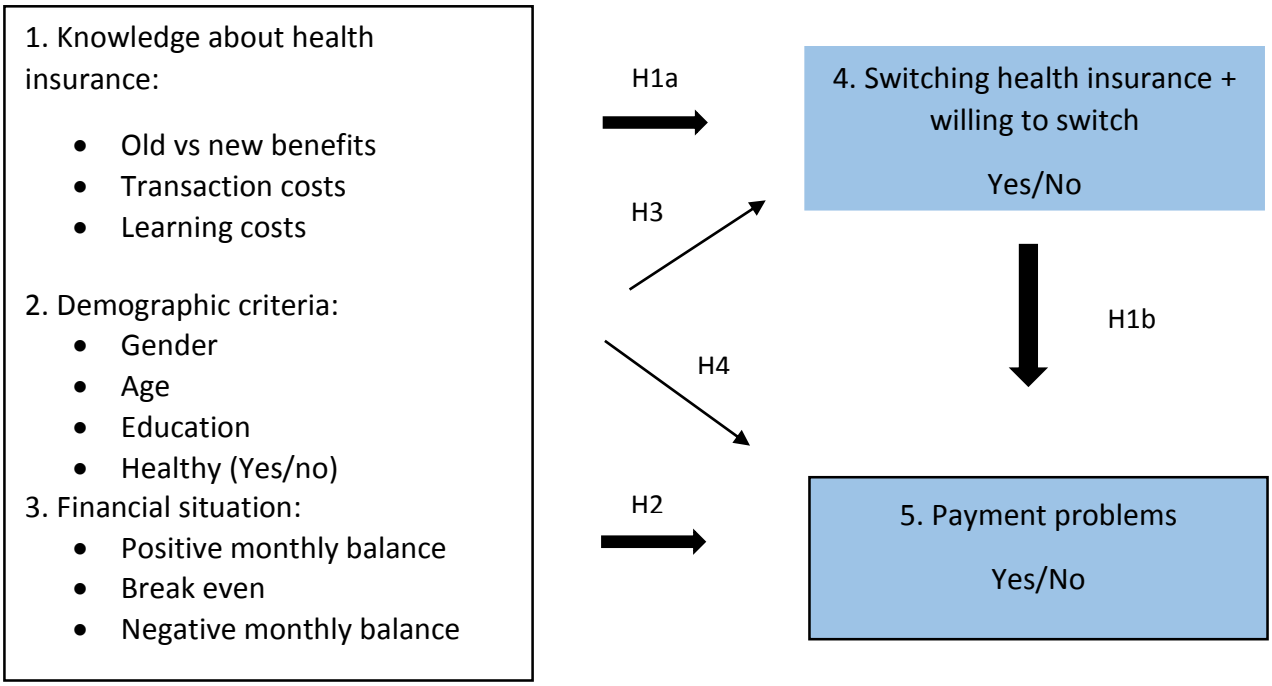
Theory

An important question in this paper is how the payment problem arises. Has the person chosen for the right health insurance, is the financial situation of the person the cause of the payment problem or are there demographic criteria like health or age part of the problem. The goal of the research is to gain more insight into the current health insurance payment problem. The following questions are addressed in this study:

1. Is there a positive effect of having knowledge about Dutch health insurance on being able to pay for this insurance?
2. To what extent are demographic criteria responsible for the health insurance payment problem?
3. To what extent is the financial situation of person 2014-2015 responsible for the health insurance payment problem?
4. What is the influence of knowledge about health insurance and demographic criteria on switching health insurance?
5. To what extent is switching health insurance in the period 2012-2015 responsible for the payment problem?

The following variables are mentioned in the sub-questions: Knowledge about health insurance, demographic criteria, financial situation, switching health insurance and payment problems. This variables are further explained in the conceptual model.

Conceptual model



Model 2: Conceptual model

Explanation of each variable:

1. **Knowledge about health insurance.** The right knowledge is necessary to find the best suitable health insurance for the insured party. If this insured party decide to switch insurer they must take into account pros and cons. These are mentioned in the research paper of (L.H.H.M. Boonen, 2009).

Pros	Cons
Lower basic premium or additional premium	Loss of acquired benefits (collectivity discount)
New collective contract	Coverage of additional insurance
Broader additional insurance	Loss of current health insurance service

Table 1: Pros vs Cons switching health insurance

The insured party also need to make some effort to switch health insurance. This effort can be compared with transaction costs (effort to take out the insurance) and learning costs (finding out the rules and procedures of the new insurer).

2. Demographic criteria: The demographic criteria: age, gender, education and health (yes/no) are used in the papers of (D. Duijmelinck MSc, 2013) and (L.H.H.M. Boonen, 2009). The demographic criteria are also sufficient for this paper.
3. Financial situation: The insured party can have a healthy financial situation (spending less money compared to earnings) or an unhealthy situation (spending more money compared to earnings). There is also a third option in between healthy nor unhealthy or living paycheck to paycheck. These are the 3 situation I will use for this variable.
4. Switching health insurance + willing to switch: 1.2 million people switched health insurance in 2013 and 1.1 million people switched in 2014 (Vektis, 2014). Furthermore there are 13 million people above 18 (CBS, Statweb, 2014). This means 10-20% of the population switched health insurance in 2013-2014. To increase these group it is also possible to consider people who are willing to switch but have not switched yet. The willingness to switch can be measured by giving respondents multiple possible insurance options which the question if they want to switch to this health insurance package.
5. Payment problems: At least 800.000 people cannot afford their own risk part of the health insurance (Vreede, 2014). 6% of the Dutch population above 18 has a health care payment problem. The research should focus on at least 6% people with payment problems.

Hypotheses

H1a: Knowledge → Switching health insurance.	When the insured party has proper knowledge about health insurance, the insured party will be able to select a more suitable health insurance and will be more likely to switch health insurance.
H1b: Switching health insurance → Payment problems.	When the insured party switches health insurance for a better offer the chance of having payment problems should become smaller.
H2: Financial situation → Payment problem	The financial situation will determine if the insured party will have a payment problem. Financial situation will make the effect which knowledge and demographics have on payment problems insignificant.
H3: Demographics → Switching health insurance	• H3.1: Males are more eager to switch health insurance compared to females • H3.2: Younger people are more eager to switch health insurance compared to older people. • H3.3: Higher educated people are more eager to switch health insurance compared to less educated people • H3.4: Healthy people are more eager to switch compared to unhealthy people.
H4: Demographics → Payment problems	• H4.1: Older people have more payment problems compared to younger people. • H4.2 Higher educated people are less likely to have health insurance payment problems compared to lower educated people. • H4.3 Unhealthy people are more likely to have health insurance payment problems compared to healthy people.

Table 2: hypotheses

Theoretical background

The right knowledge to find a suitable health insurance

Research will show what kind of knowledge is necessary to find a suitable health insurance. Proper knowledge (about health insurance) is available online for example on health insurer websites and health comparison websites. These parties can be considered expert of health insurance knowledge.

Expert knowledge: Experts like Independer, Hoyhoy and Zorgwijzer offer comparison tool to help consumers find a more suitable health insurance. These tools offer the following selection criteria (Independer, 2015) (Zorgwijzer, 2015) (HoyHoy, 2015):

Own risk:	Own risk varies form €375 till €875. The insured party can decide how much risk they want to take. Example: Own risk €875 has a monthly fee of €70, yearly cost €840-€1615 Own risk €375 has a monthly fee of 85, yearly costs €1020-1395 The insured party can save up to €180 or lose up to €220 depending on what happens to his physical state the upcoming year.
Physiotherapy	Some conditions like a whiplash are insured up to 20 therapy sessions. But if your physical illness is not on the list, the insured party has to pay for the therapy or insure this with an additional insurance. Between 9 to unlimited sessions can be insured with prices varying between €4.95 and €107(only offered in an additional package) per month. The insurer also need to have a contract with the therapist if not the costs won't be insured.
Medicines	The basic health insurance covers some of the medicines for other medicine you have to pay additional contribution. This contribution can become expensive which is why it can be insured. This additional insurance covers between €100 and completely depending on the package. Some insurers don't cover all medicines (ADHD medicine for example). The insured party needs to check if there medicine will be insured by their insurer

Medical care abroad	The basic insurance covers medical care abroad according to the Dutch market rate. The remaining cost will be paid by the insured party or can also be insured. Medical care abroad is also insured by your travel insurance. If this person has no travel insurance it can be insured in the health insurance, which is offered in some packages. It can also be insured for an additional fee between 0.75 and 3 euro per month.
Alternative medicine	Alternative medicines are not insured in the basic insurance. Between €200 and €1250 can be insured with an additional insurance. The coverage for doctor or therapist may differ.
Spectacles and lenses	The basic insurance only insures spectacles if it is a medical necessity. If the insured party buys the spectacles or lenses at the optician it is not covered. It can be covered with an additional insurance between €100 and €300, which is paid out every 2-3 years.
Dental	Children up to 18 years are partially insured in the basic insurance. Adults are not insured. The additional insurance can insure this between €150 -€1750 and offers coverage between 70-100%
Insurance type (restitution or natura)	The natura polis offers contracted care. The insurer has contract with certain hospitals and therapist. The insured party will only get a compensation for the contracted hospitals and therapists. The restitution polis offer free choice of care, but is usually more expensive.

Table 3: Selection criteria to be considered when choosing a health insurance.

The insured party need to consider multiple things before choosing a health insurance. The following self-reflection question can be formed from the information of table 3:

- Question 1: Will I be using my own risk this year or can I save up to €180?
- Question 2: Do I need Physiotherapy this year or will I be doing risky activities this year?
- Question 3: Do I need costly medicine or medicine which are not insured by every insurer?
- Question 4: Will I travel to a country with expensive health care and do I have a travel insurance?
- Question 5: Do I want to use alternative medicine and how expensive are the medicine?
- Question 6: Do I need spectacles or lenses and how much do I want to spend on these?
- Question 7: Do I have good teeth or do I need a certain level of dental care?
- Question 8: Do I want to be treated at a certain hospital or clinic?

If the insured party is able to answer all the questions, (s)he will be able to find the right health insurance. The insured party should also consider the cost when deciding on health insurance. To insure everything will cost up to €188 euro per month. The most basic insurance is €66.

Knowledge of the insured party: The study "The effect of CQ-information on the choice for a health insurer" offers respondent input concerning reasons to switch or not switch health insurance (L.H.H.M. Boonen, 2009). This reasons are translatable in knowledge which these respondents have off health insurance. These respondents knowledge consist out of the following subjects:

- Topic 1: Premium costs (38% of the respondents mention this as the main reason to switch insurance)
- Topic 2: Collectivity contracts (31% of the respondents mention this as the main reason to switch insurance)
- Topic 3: Coverage of the additional insurance (26% of the respondents mention this as the main reason to switch insurance)

The questions formed from table 3 and the topic mentioned above are quite similar to each other, but the main reason to switch health insurance is money driven (38%+31%) and not improvement of health care. These respondents compared health insurances to look for the best price.

The effect of switching health insurance on the risk having Payment problems

The payment problem occurs when the insured party is unable to pay the premium of the health insurance or the own risk part of the insurance. The premium payment problem could have been solved by having a cheaper health insurance and the own risk part payment problem could have been solved by having a more expensive health insurance with a lower own risk (€375 instead of €875). Self-awareness is key when deciding what kind of health insurance is most suitable for the person in question.

Other payment problems occur when the basic insurance doesn't cover the costs or the clinic/hospital isn't covered by the health insurance. With these problems knowledge about health insurance might have helped.

The effect of financial situation on payment problems

A bad financial situation might be the only cause of having health insurance payment problems but that doesn't necessary has to be true. Because of the heavy penalty the insured party gests when they don't pay the health insurance they might decide to save money some other way. On the other hand people who have no financial problems might have health care payment problems when they unexpectedly have to pay the full own risk part for a medical treatment.

The current financial situation of the insured party:

The Dutch central bureau of statistics (CBS) offers useful information concerning the Dutch economic climate until 2013 (CBS, Consumentenvertrouwen, economisch klimaat en koopbereidheid, 2015). Table 4 offers information concerning the financial situation of the Dutch households. 42% of the households had less money to spend in 2013. This is an increasing line compared to 2009 and 2012.

Financial situation last 12 months	2009	2012	2013
Clearly improved	5	4	4
Slightly improved	7	6	5
Indifferent	64	56	47
Slightly worsened	13	18	21
Clearly worsened	10	15	21
No opinion	1	1	1
Total	100	100	100

Table 4: Financial situation of Dutch households between 2009 and 2013(source: CBS)

The Dutch household have less to spend which suggest they have to save money by cutting costs for some activities. Table 5 shows these cost saving activities. The health insurance is not mentioned in this table but it might be connected to other or everything or nothing. A cheaper health insurance can also be considered a cost saving.

Cost savings	2012	2013
Food, liquor and Tabaco	10	10
Clothing and shoes	9	8
Car and transport	11	11
Holiday	16	16
Recreation	14	14
Other	15	15
Everything or nothing	12	11
Don't know	14	14

Table 5: Cost saving activities of the Dutch households (source: CBS)

These two tables show a large group of household which might have a healthcare payment problem right now or in the near future. Unfortunately there is no clear connection between the financial situation and the health care payment problem.

Credit firm GGN offers more suitable information concerning payment problems (GGN, 2014). According to GGN research 15% of the Dutch households have payment problems and of these 15%, 3% have severe payment problems. 36% of the households admits paying bills late (28% sometimes and 8% regularly). This study also mentions which bills are paid first and last.

Surprisingly the health insurance bill is paid last. The mortgage has the first priority followed by the energy bill.

The financial situation seems to have a connection with health care payment problems. Is this the sole reason or are there other variables responsible for the problem? Research will show what the connection is.

Demographic criteria for switching health insurance

Certain demographic criteria might have some relation with switching health insurance. A certain amount of effort is necessary if the insured party wants to switch. On the other hand switching insurance mostly happens online on insurance websites or health insurance comparison websites. Some groups don't have the capabilities to do this or find it too much effort. There is also the fear of losing the old privileges when switching, especially for people with a bad health this might become problematic.

The effort of switching might have some connection with education. The paper "the micro foundation of competition and choice in the public service" also research this topic for a different branch (Jilke, 2015). According to this study, respondents with a low education will less likely switch health insurance compared to high educated people.

The following things can be considered for the other demographic variables: Online switching might be more suitable for younger groups compared to older groups. Fear of losing privileges might have some connections with physical health. Gender might also have influence on switching health insurance.

Demographic criteria for payment problems

Certain demographic criteria might have some effect on payment problems. There might be an age group who has trouble paying their health insurance. According to GGN people in the age group 45-55 have more difficulty paying their bills compare to the other age groups. The relation between payment problem and financial situation is already proven (GGN, 2014). The bad financial situation can be linked to a demographic criteria like bad health or a low education.

Method

The Survey

The survey consist out of 15 Questions. And takes approximately 2-5 minutes to complete. There are multiple choice, check box and open questions. The questions are divided in the following categories:

- Health insurance knowledge
- Current insurance
- Switching health insurance
- Choosing a health insurance
- Financial situation
- Payment problem
- Demography

The interview questions can be found in the appendix. The table below shows the link between the 4 hypothesis and the interview questions.

	Dependent	Independent	References
H1a	Switching Q 3-8	Knowledge Q 1+2	(D. Duijmelinck MSc, 2013)
H1b	Payment problem Q 10+11	Switching Q 3-8	(L.H.H.M. Boonen, 2009) (HoyHoy, 2015) (Independer, 2015) (Zorgwijzer, 2015)
H2	Payment problem Q 10+11	Financial situation Q 9	(CBS, 2015)
H3.1	Switching Q 3+8	Gender Q 12	(Jilke, 2015) (Vektis, 2014)
H3.2	Idem	Age Q 13	
H3.3	Idem	Education Q 14	
H3.4	Idem	Health Q 15	
H4.1	Payment problems Q 10+11	Age Q 13	(GGN, 2014)
H4.2	Idem	Education Q 14	
H4.3	Idem	Health Q 15	

Table 6: The link between interview questions and Hypothesis

To get a better understanding what the practical use is of the questions answered in the survey, the reasoning behind each question is explained below:

Question 1 and 2 are part of the knowledge questions in the survey. In Question 1 respondents were tested on knowledge concerning health insurance. The following questions were asked to test their knowledge (these questions are based on the info found on page 15):

- Do you know what the Basic health insurance covers?
- Do you know which hospitals are insured by your health insurance?
- Do you know which collectivity discounts are offered by your health insurance?
- What is the difference between restitution and naturis polis?
- Do you know what your additional health insurances covers?

Respondents were asked to rate each question between 1 and 7. They rated 1 if they didn't know anything about the topic and 7 if they knew everything about the topic. This is based on the Likert scale. The following research used the same method (Bharwana, 2006). The research uses the Likert scale to find out which dimensions customer were most and least satisfied with. For this research the Likert scale can be used to find out which topic respondents know the most and which the least. It can also be used to rate the customers knowledge.

The five knowledge questions will become 1 variable with the help of factor analysis. After this a chi-square test and a binary logistic test will be used to find a relationship with the variable switching health insurance and payment problem.

Question 2 offers information on were knowledge about health insurance is collected, but it is also a check question to test if the respondents have collected any information about health insurance. The multiple choice question is based on a question used in the paper of (L.H.H.M. Boonen, 2009).

Question 3 and 4 ask for information about the respondents' current insurance. This information concerning the type of insurance and the amount own risk. These questions give an idea how the respondents are insured. No relationship with other variables is tested

Questions 5-8 offer information concerning switching health insurance. Question 5 is used as a dependent variable to test the relationship between knowledge and switching health insurance and the relationship between switching health insurance and demographic criteria. Question 5 will also be used as an independent variable to test the relationship with payment problems.

Question 6 is has the same function as question 5, but consist out of respondents who answered yes on question 5. By asking respondents if they think their new insurance is an improvement a group is created which has done enough research to find a suitable health insurance and a group is created which should have done more research. This question a binary question (yes = 1 no = 0) and is used as an independent variable to test the relationship with payment problems with the help of binary logistic regression.

Question 7 offer information why respondents switch insurance. This offers a motive why the respondents switch. No relationship with other variable is tested.

Question 8 shows 8 possible health insurances with varying coverage (dekking) and prices. The respondents were asked if they are willing to switch health insurance for one of the offers. This question was in first instance created to split the respondent group in willing to switch and not willing to switch in case there were not enough respondents who switch health insurance. This was not the case. Furthermore a very small group of the respondents was not willing to switch which made the variable not representative. This question is used to find the perfect health insurance for the respondents using a conjoint analysis.

Questions 9-11 requested information concerning the respondents' financial situation. Question 9 requested information about their current financial situation. Because this is a very personal question no exact numbers were asked. The 3 multiple choice options for financial situation were transformed into dummies and with the help of binary logistics the relationship between financial situation and payment problems is tested.

Question 10 divides the respondents into a payment problem group and a no payment problem group. This question is a binary question (yes = 1 no = 0). This question is used as a dependent variable to test relationships with switching health insurance, financial situation and demographic criteria.

Question 11 is only for the respondents who answered yes on question 10. This question divides the respondents into a group of people who were able to pay of their health insurance debt

before they need a payment plan and a group who didn't pay in time and had to experience the consequences of the health insurance payment plan. This group has to pay a premium of 130% and is unable to switch health insurance. This variable is used as a dependent variable and has the same function as question 8. It is used to find a relationship with financial situation with the help of binary logistic regression.

Questions 12-15 are demographic variables and are used to find a relation with switching health insurance and payment problems (demographic on an individual level and combined level). The chi-square test will be used to test the individual relationship of the demographic variables. The binary logistic regression will be used to find the relationship between demographic criteria and the dependent variables switching health insurance and payment problems.

Statement of accountability

Respondents: 360 participants took part in this study. According to an online sample size calculator 360 respondents means a confidence interval of 94.5% (Steekproefcalculator, 2015). These participants completed the survey online and are completely anonymous. The table below shows the demographic characters of the respondents.

	Number	Percentage
Switched health insurance		
Yes	151	41.9
No	209	58.1
Health insurance payment problems		
Yes	77	21.4
No	283	78.6
Financial situation		
Monthly +€	128	35.6
Monthly +/-€	122	33.9
Monthly -€	110	30.6
Gender		
Male	170	47.2
Female	190	52.8
Age		
18-25	47	13.1
26-35	78	21.7
36-45	99	27.5
46-55	84	23.3
56-65	38	10.6
65+	14	3.9
Education		
Vmbo or lower	38	10.6
Havo, vwo	37	10.3
MBO	121	33.6
HBO	127	35.3
University	37	10.3

Personal health		
Good	240	66.7
Moderate	101	28.1
Bad	19	5.3
Current Insurance		
Basic insurance	116	32.2
Additional insurance	244	67.8
Current own risk		
Minimal €375	289	80.3
Increased €475-€775	22	6.1
Maximum €875	49	13.6

Table 7: background of the respondents

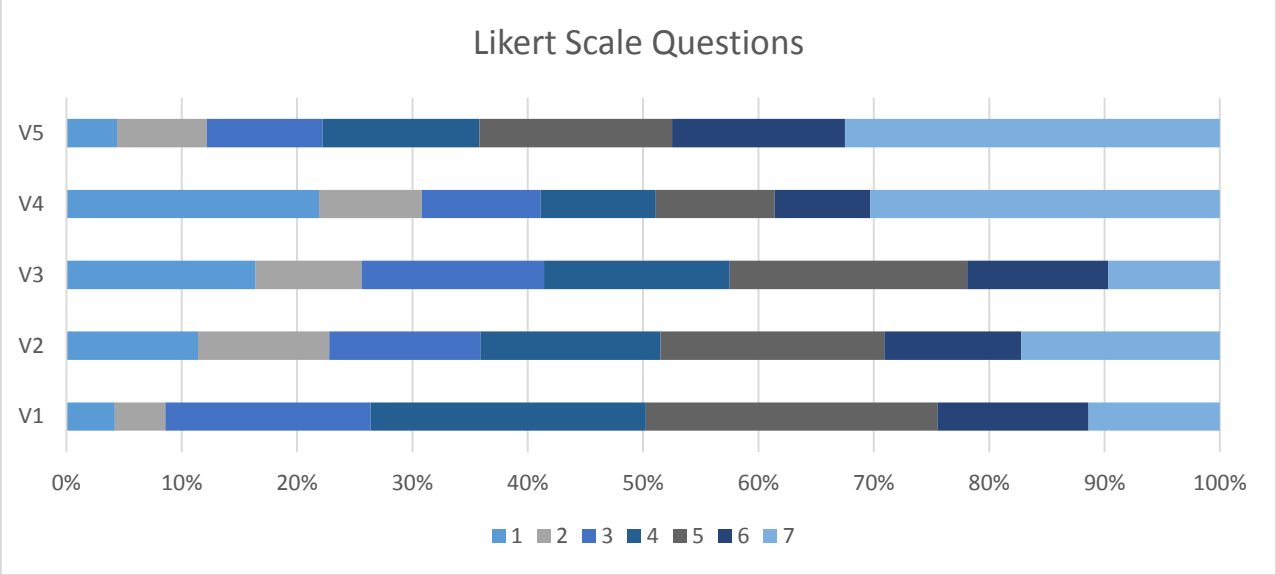
Procedure: You need to have willing people to complete a survey which take 2-5 minutes to complete. Your personal social media offers such a group, this is usually not a very large group. Using this technique resulted into 20 completed surveys. Of this group 5 people had switched health insurance and 0 people had payment problems. This wasn't the right group for the paper. These 20 completed surveys were not used in this paper.

A slightly different technique was used to find the right respondents. The right respondents is eager to switch health insurance (needs to be looking for the best possible deal) and should have a bad financial situation. These respondents were found in the free stuff (gratis) community. This community is willing to complete a survey if your offer them a compensation or the chance for a certain price. For this survey respondents were offered a price. Certain price win websites were used like gratis.nl to advertise this survey. This technique resulted into 360 respondents which were all used in this paper.

Results

H1A: The effect of knowledge on switching health insurance

For this hypothesis the connection between knowledge of the respondents and switching health insurance is tested. The bar graph and table 8 shows the results of the 5 knowledge questions and the average score per question. The numbers 1 to 7 are the Likert Scale. According to this table people have the most knowledge about their additional insurance and the least knowledge about collectivity discounts.



Bar graph 1: Result Likert Scale Questions

	V1	V2	V3	V4	V5
Mean Score	4,469	4,247	3,908	4,24	5,054
STdf	1,524	1,945	1,890	2,356	1,845

Table 8: Knowledge questions scores

The Cronbach's Alpha test was used to see if it is possible to reduce the five data points into 1 score. The Cronbach's Alpha is 0.869> 0.7 which means the 5 questions all measure the same construct. The Inter-Item Correlation Matrix which can be found in table 9 was used to find any excludable variables. All variables have an inter-item correlation above 0.3 which means none of the variables have to be excluded.

	Knowledge basic Insurance	Knowledge insured hospitals	Knowledge collectivity discount	Knowledge Natura vs Restitution	Knowledge additional insurance
Knowledge basic Insurance	1,000	,676	,604	,566	,654
Knowledge insured hospitals	,676	1,000	,638	,561	,579
Knowledge collectivity discount	,304	,638	1,000	,552	,467
Knowledge Natura vs Restitution	,566	,561	,552	1,000	,585
Knowledge additional insurance	,654	,579	,467	,585	1,000

Table 9: Inter-Item Correlation Matrix

With factor analysis 1 variable was generated for the 5 Likert scale questions. The minimum of these variables is -2.21666 and the maximum 1.69863. The variables were divided into 3 groups to make them useful. The size of ease group was calculated as followed 2.2+1.7=3.9; 3.9/3=1.3. The groups are as followed:

- Bad knowledge: < -0.9(-2.2+1.3)
- Average Knowledge 0.9> and <0.4 (-0.9+1.3)
- Good knowledge >0.4

The Chi-Square Tests was used between the conjoint knowledge variable and the switching health insurance variable to test the hypothesis "there is a relationship between knowledge and switching health insurance. The Pearson Chi-Square score of 0,351 ($p<0.05$) is not significant and doesn't prove the hypothesis.

Fortunately there are more variables which can prove the hypothesis. The previous Chi-Square test didn't take into account that there are people who switch to the wrong new health insurance. This might have a connection with not having enough knowledge about health insurance. The questions are you better off with your new health insurance was ask to further analyze this problem. The Chi-Square Tests was used between the conjoint knowledge variable and being better off with the new health insurance variable to test once again the hypothesis. The Pearson Chi-Square score of 0,066 ($p<0.05$) is a lot closer to having a significant effect compared to the 0.351 of the last Chi-Square test, but is not significant and doesn't prove the hypothesis.

Even though the hypothesis is not proven, it remains interesting how the respondents obtained their information about health insurance. Health care provider websites and health provider comparison websites are the most used tools. This means responders gather their health insurance mostly online. 26.7% of the respondents used no tools which means they haven't done any research concerning health insurance.

Used Tools	N	Percent	Percent of Cases
No tools used	96	18,70%	26,70%
Health provider comparison website	189	36,80%	52,50%
Health provider website	204	39,70%	56,70%
Health care consultant	4	0,80%	1,10%
intermediary	9	1,80%	2,50%
Different tool	12	2,30%	3,30%
Total	514	100,00%	142,80%

Table 10: tools used for gathering information concerning health insurance (Multiple responses)

Respondents who answered different tool were able the further explain their answer. Table 11 shows these answers. These answers are quite different from each other. Only called the provider, exchanging experiences and internet forum are used multiple time.

	N
App of the health care provider	1
Discount by the collective insurer	1
Reviewed the offered polices	1
Called the health care provider	3
Exchanging experiences with family, colleague and friends	2
Internet forum	2
United consumers	1
Special offer of health care provider because of low income	1
The health care provider where I work	1

Table 11: Answers for the selection option Different tools

The group that didn't getter knowledge offer a new variable to prove the hypothesis. The variable having gathered information yes/no is the independent variable, switching health insurance is the dependent variable. The Chi-Square test was used to check the relationship. The Pearson Chi-Square score of 0,376($p<0.05$) unfortunately contradicts this theory.

H1B: Switching Health insurance and the risk of having payment problems

This chapter tests the hypothesis "switching health insurance will decrease health insurance payment problems". The variable payment problems and switching health insurance were tested with the help of the Chi-Square test. **The Pearson Chi-Square score of 0,263 (p<0.05)** is not significant and doesn't prove the hypothesis.

The variable doesn't take into account that people are not always better off with their new insurance. Fortunately the question are you better off with your new health insurance was also asked to the respondents (**of the 151 switching respondents 117 are better off with their new insurance**). By slightly tweaking the hypothesis to switching to the right insurance will decrease health insurance payment problems another Chi-square test can be done. The variables "are you better off with your new health insurance" and "having payment problems" were tested. **The Pearson Chi-Square score of 0,019 (p<0.05)** is significant and prove the hypothesis. The crosstab below (table 12) shows the count and the expected count. The count for yes new health insurance improvement and no payment problems is lower compared to the expected count. This confirms the hypothesis

			New health Insurance improvement		Total
			No	Yes	
Payment problems	No	Count	23	100	123
		Expected Count	27,7	95,3	123,0
	Yes	Count	11	17	28
		Expected Count	6,3	21,7	28,0
Total		Count	34	117	151
		Expected Count	34,0	117,0	151,0

Table 12: Payment problems new health insurance improvement crosstab*

The reason why people switch might offer some information on what this improvement health insurance offers. Table 13 shows the answers of the respondents. The main reason is financial (discount or better premium). The improved health insurance might be a more affordable insurance. The answers of the respondents who selected different reason are related to a discount, more additional insurance or they were obliged.

	N	Percent	Percent of Cases
Collectivity discount	43	22,5%	28,5%
Better premium	90	47,1%	59,6%
More additional	39	20,4%	25,8%
Different reason	19	9,9%	12,6%
Total	191	100%	126,50%

Table 13: Reasons to switch health insurance

The Chi-Square test has shown a connection between having no payment problems and having an improved insurance. The reason why people switch is also known. Still the question remains what does this improved insurance look like. To answer this question respondents were asked if they would change health insurance for a certain offers (8 in total). Table 14 shows which offers are most popular. Offer 8 is the most popular offer. This is the most expensive insurance with the lowest own risk free choice of health provider and dental + Physio insured.

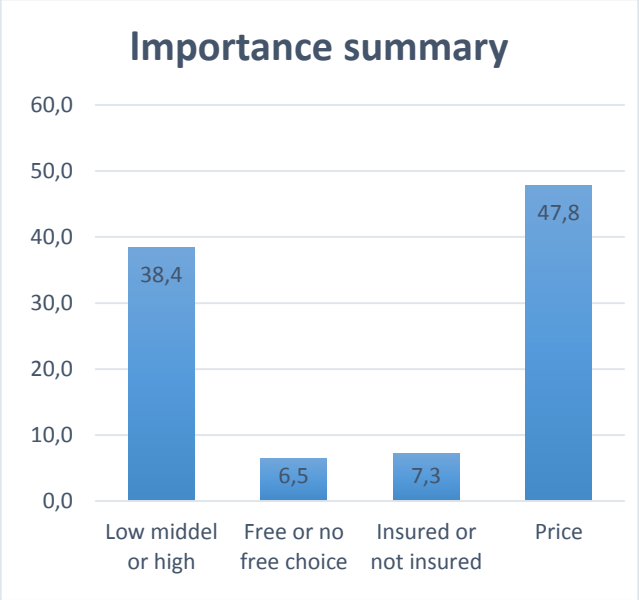
	N	Percent	Percent of Cases
Selected offer 1	29	8,5%	9,5%
Selected offer 2	12	3,5%	3,9%
Selected offer 3	15	4,4%	4,9%
Selected offer 4	53	15,5%	17,3%
Selected offer 5	20	5,9%	6,5%
Selected offer 6	37	10,9%	12,1%
Selected offer 7	40	11,7%	13,1%
Selected offer 8	135	39,6%	44,1%
Total	341	100,0%	111,4%

Table 14: Selected health insurance offer

Conjoint and factor analysis were used to analyze these results. Table 15 shows the utility of the variable for the 8 offers. This table was created with the orthogonal design in combination with a conjoint analysis. It shows a high utility for €375 own risk and Price €120. The bar chart shows which variable is most important. Price is the most important followed by Own risk.

		Utility Estimate
Own risk	€875	-,096
	€575	-,122
	€375	,218
Health provider choice	No choice	-,022
	Free choice	,022
Physio dental	Not insured	-,017
	Insured	,017
Price	66	-,290
	88	,000
	100	,000
	120	,290
(Constant)		,206

Table 15 : Utilities of the Orthogonal Design card variables



Bar chart 2: importance summary card variables

H1A + H1B: The relationship of knowledge + switching versus payment problems.

The Binary logistic regression can be used to define the relations between the dependent variable payment problems and the independent variables knowledge about health insurance and switching health insurance. Dummy variable are used to define the variable knowledge. The table below (table 16) shows the results of the regression. Average knowledge cannot be found in this table but equals Bad Knowledge + Good knowledge = 0. Knowledge has a positive effect on payment problems. People with more health insurance knowledge are less likely to have payment problem. The effect of switching health insurance is insignificant. This means that the hypothesis is partially proven.

	B	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Bad_Knowledge	0,689	0,305	5,09	1	0,024	1,992	1,095	3,623
Good_Knowledge	-0,909	0,344	6,986	1	0,008	0,403	0,205	0,791
Changed_Insurance	-0,222	0,274	0,656	1	0,418	0,801	0,469	1,37
Constant	-1,133	0,221	26,372	1	0	0,322		

Table 16: Binary logistic regression: Knowledge+ switching versus payment problem

H2: Payment problems versus the financial situation of the insured party

Payment problems and having a bad financial situation seem to have a clear relation with each other but there are arguments which contradict the hypothesis. For example because of the high financial penalty for not paying your insurance people might decide to save money in a different way. To test the hypothesis "the financial situation will determine if the insured party will have payment problems" a Chi-Square test was used on the variables financial situation and having payment problems. **The Pearson Chi-Square score of 0,000 (p<0.05)** is significant and proves the hypothesis. The crosstab below (table 17) shows the count and the expected count. The count for having payment problems is far higher for the Monthly -€ and Monthly+/-€ compared to the expected count. This confirms the hypothesis

			Payment problem		Total
			No	Yes	
Financial situation	Monthly +€	Count	124	4	128
		Expected Count	100,6	27,4	128,0
	Monthly+/-€	Count	103	19	122
		Expected Count	95,9	26,1	122,0
	Monthly +€	Count	56	54	110
		Expected Count	86,5	23,5	110,0
Total		Count	283	77	360
		Expected Count	283,0	77,0	360,0

*Table 17: Financial situation*Payment problem crosstab*

A regression analysis will compare the effect of each financial situation on the variable payment problems. Dummies are made to make 3 variables for financial situation. Table 18 shows the results of the **binary regression analysis with a significance of 0.002 (p<0.05)**. Moderate Finance (Monthly +/-€) cannot be found in this table, but equals Bad Finance + Good Finance = 0. Respondents with a bad financial situation have a larger change of having payment problems compared to respondents with a good or moderate financial situation.

	B	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Bad_Finance	1,654	0,314	27,71	1	0	5,227	2,824	9,677
Good_Finance	-1,744	0,566	9,489	1	0,002	0,175	0,058	0,53
Constant	-1,69	0,25	45,83	1	0	0,184		

Table 18: Binary logistic regression: Financial situation versus payment problem

Even though the connection between payment problem and financial situation is proven there is still one variable left which can disprove the hypothesis. This variable is having a payment arrangement with the insurer (**of the 77 payment problem casus 45 needed a payment plan**). Once the respondent have reached this point he/she has to pay a monthly fee of 130%. The argument is that people with Monthly -€ and Monthly+/-€ try will pay the health insurance before they have to pay the 130% by saving on other things. Fortunately the **Pearson Chi-Square score of 0,051 (p<0.05)** is not significant and doesn't prove the hypothesis.

Dummies for the financial situation were also used to look for individual connections. **The binary regression analyses with a score of 0,999(p<0.05)** is also not significant and does not prove the theory.

H3.1: The effect of gender on switching health insurance

The possible connection between gender and switching. Switching is mostly done online and American studies have shown that men have different internet behavior compared to women (brandpepper, 2014). The variables switching health insurance and gender are tested to check this theory. The **Pearson Chi-Square score of 0,717 (p<0.05)** is not significant and doesn't prove the hypothesis.

H3.2: The effect of age on switching health insurance

Age is also a variable to consider when switching health insurance. First of all when someone turn 18 they have to get their own health insurance. They can decide to stay with their current insurer or look for a better offer. Furthermore switching health insurance is mostly done online. Older age groups with lack of online knowledge might not be able to switch health insurance using online tools. Nevertheless the Pearson Chi-Square score of 0,599 ($p<0.05$) is not significant and doesn't prove the hypothesis.

H3.3: The effect of education on switching health insurance

A certain amount of knowledge is necessary to find the right health insurance. The variable education level might explain which groups switch health insurance. Nevertheless the Pearson Chi-Square score of 0,496 ($p<0.05$) is not significant and doesn't prove the hypothesis.

3.4 The effect of personal health on switching health insurance

Having a bad personal health can have consequences when wanting to switch for a new health insurance. Insurers are able to decline your request for additional insurance (not basic insurance), which makes it for some groups impossible to switch. Nevertheless the Pearson Chi-Square score of 0,550($p<0.05$) is not significant and doesn't prove the hypothesis.

Demographic criteria combined

None of the Demographic variables seem to have any connection with de dependent variable switching health insurance. The last tool which can be used to find any connection between the variables is logistic regression. Because the dependable variable is a yes or no question Binary logistic can be used. Unfortunately none of the demographic variables become significant.

The interaction effect might help to find a significant variable. The following 4 interaction variables are generated from the demographic variables:

- **Age X Education:** Some of the older groups might have had the capabilities to study, but were unable to, which was common for that time.
- **Gender X Health:** Physically intensive work, attracts usually more males compare to females. This might affect their health.
- **Health X Age:** It might be easier to get health insurance with a bad health and a young age compared to bad health and old age.
- **Education X Health:** Educated people usually have less physical work compared to low educated people, which might affect health

Table 19 shows a binary regression model with the dependent variable switching health insurance and the independent demographic variables and interaction effects. Unfortunately none of the variables are significant.

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	D1Gender	,825	,600	1,890	1	,169	2,283
	D2Age	-,592	,332	3,187	1	,074	,553
	D3Eduation	-,199	,307	,421	1	,516	,819
	D4Health	-,690	,749	,848	1	,357	,502
	Age_Education	,070	,071	,987	1	,320	1,073
	Gender_Health	-,551	,421	1,712	1	,191	,577
	Health_Age	,199	,144	1,923	1	,166	1,221
	Education_health	,068	,178	,144	1	,705	1,070
	Constant	1,171	1,295	,818	1	,366	3,226

Table 19: Binary logistic regression model: switching health insurance vs demographic criteria with interaction effects

H 4.1: There is a connection between age and payment problems

Their might be an age group who has more payment problem cases compared to the other age groups. The Chi-Square test will help find this possible connection. The **Pearson Chi-Square score of 0,216 (p<0.05)** is not significant and doesn't prove the hypothesis.

H4.2: There is a connection between education and payment problems

Education can be linked to a higher paying job and also more knowledge. A better paying job makes the respondent more capable of paying health insurance and more knowledge can lead to a more suitable health insurance. The Chi-Square test will help test this hypothesis. The **Pearson Chi-Square score of 0,039 (p<0.05)** is significant and prove the hypothesis. The crosstab on the next page (table 20) shows the count and the expected count. The count for yes payment problems for HBO and University is lower compared to MBO, Havo, Vwo and Vmbo. This confirms the hypothesis.

			Payment problems		Total
			No	Yes	
Education	Vmbo and lower	Count	25	13	38
		Expected Count	29,9	8,1	38,0
	Havo, vwo	Count	27	10	37
		Expected Count	29,1	7,9	37,0
	MBO	Count	91	30	121
		Expected Count	95,1	25,9	121,0
	HBO	Count	107	20	127
		Expected Count	99,8	27,2	127,0
	University	Count	33	4	37
		Expected Count	29,1	7,9	37,0
Total		Count	283	77	360
		Expected Count	283,0	77,0	360,0

Table 20: Crosstab payment problem vs education

H4.3: There is a connection between person health and payment problems

Health care is more expensive for people with a bad health compare to a good heath. The health care is also a lot more important for the bad health group because they have to rely on it more.

It can be argued that the bad health group have more trouble paying health care. On the other hand it can also be argued that because healthcare is so important for the bad health group they will save money on other activities to be able to pay the important health care. To Chi-Square test will test this theories. The **Pearson Chi-Square score of 0,000 (p<0.05)** is significant and prove the hypothesis. The crosstab on the next page (table 21) shows the count and the expected count. The count for yes payment problems for bad health and moderate health is far lower compared to the expected count. This confirms the hypothesis.

			Payment problem		Total
			No	Yes	
Health	Good health	Count	202	38	240
		Expected Count	188,7	51,3	240,0
	Moderate health	Count	72	29	101
		Expected Count	79,4	21,6	101,0
	Bad health	Count	9	10	19
		Expected Count	14,9	4,1	19,0
Total		Count	283	77	360
		Expected Count	283,0	77,0	360,0

Table 21: Crosstab payment problem vs personal health

Demographic criteria combined

The effect of Education and Health on health care payment problems has been proven, but the effect of age remains insignificant. Logistic regression might help to find the combined effect of age, education and health. The binary logistic regression is used because the dependent variable payment problem is a yes/no question. Table 22 shows the results of this test. Age has become significant, education and health remain significant. The personal health has the most effect on payment problems followed by education. Age has the least effect.

		B	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1[a]	Age	-,215	,104	4,258	1	,039	,806	,657	,989
	Education	-,325	,118	7,528	1	,006	,723	,573	,911
	Health	,842	,212	15,704	1	,000	2,321	1,530	3,519
	Constant	-,869	,584	2,213	1	,137	,419		

Table 22: Binary logistic regression model: payment problems vs demographic criteria

Conclusion

This paper is focused on the following research questions:

1. Is there a positive effect of having knowledge about Dutch health insurance on being able to pay for this insurance?
2. To what extent is switching health insurance in the period 2012-2014 responsible for the payment problem?
3. To what extent is the financial situation of person 2014-2015 responsible for the health insurance payment problem?
4. What is the influence of knowledge about health insurance, demographic criteria on switching health insurance?
5. To what extent are demographic criteria responsible for the health insurance payment problem?

The answers on the research can be sequentially summarized.

1. (Hypothesis 1a) On the bases of the carried out research it can be concluded that there is no significant effect of health care insurance knowledge on switching health insurance. Also taken into account was the variable being better off with new health insurance. This variable divides the people who didn't do enough research to find the right health insurance versus the people who did. Unfortunately this was also proven insignificant. The last attempt was to create a new variable: people who collected information about health insurance versus people who didn't collect any information. This new variable had no significant effect on switching health insurance. For now the hypothesis has not been proven.
2. (Hypothesis 1b)The variable switching health insurance had no significant effect on payment problems. The variable being better off with the new health insurance was also taken into account but had also a not significant effect on payment problem. Fortunately there was another variable which could help prove the theory: having a repayment plan with the health insurance provider. When an insured party has payment problem they don't have to pay a fine, but they have to when they have a repayment plan. Switching health insurance has a significant effect on having a

repayment plan. People who have switched health insurance are less likely to have a repayment plan.

(Hypothesis 1a + 1b) Knowledge + Switching health insurance has an effect on payment problems. Binary logistic regression showed knowledge having a significant effect and switching health insurance having an insignificant effect on payment problems. People who have more knowledge about health insurance are less likely to have payment problems. This doesn't prove the hypothesis but proves a new hypothesis, people with good health insurance knowledge are less likely to have payment problems.

3. (Hypothesis 2) Financial situation has a significant effect on payment problem. People who have a shortage in cash flow or just make ends meet are more likely to have payment problems. The people who have a cash flow shortage are also more likely to have payment problems. This should prove the hypothesis, but it has not taken into account having a repayment plan with the health insurer. The financial situation had no significant effect on having a repayment plan. The hypothesis has been proved and disproved.
4. (Hypothesis 3) Gender, age, education and health all had a not significant effect on switching health insurance. Logistic binary regression and interaction variables were used to find any connection between demography and switching health insurance, but all variables were not significant. The hypothesis has not been proven.
5. (Hypothesis 4) Education and health had a significant effect on having payment problems. Better educated people were better off compared to lower educated. Healthy people were better off compared to unhealthy people. Age had no significant effect on payment problems. The relationship of age with payment was proven with the help of logistic binary regression. Older people are less likely to have a payment problem compared to younger people. The Hypothesis has been proven

The figure below offers an overview of the proven and disproven hypothesis.

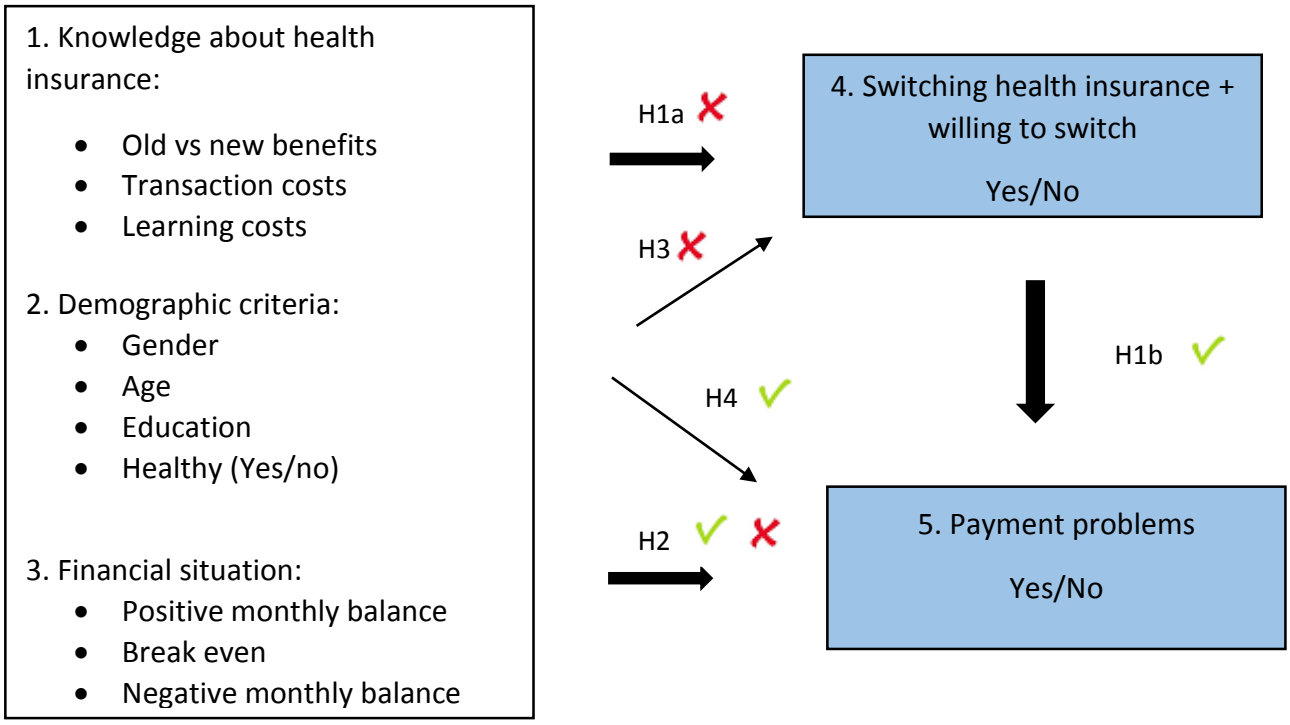


Figure 3: Conceptual model results

This research offers much more information besides answers on the mean questions. These findings relate to what kind of healthcare topics customers know most of? What kind of tools respondents use to find information about health care? The reason why people switch health insurance and what the most suitable health insurance is. The most important findings can be summarized for each topic.

- What do people know about health insurance? The average scores are between the Likert score of 3.9 and 5. The respondents seem to know the most about what their additional insurance covers and the least about what kind of collectivity discounts are available. The Likert score itself also tells something about the average knowledge of the respondents which is a 4.4. If you had to give the respondents a grade for a healthcare knowledge exam, they will score a 6.3 which is a passing grade. Future research can determine if this is enough to find a suitable health insurance.
- What kind of tools do the respondents use to find information about health insurance? The most important finding is that people gather most of their information online via the website of the health insurer and via health care provider comparison websites. 56% used health insurer websites and 52% of the respondents used comparison websites. Surprisingly just 26% of the respondents answered not having used any tool, which means they have not

gathered any information. 151 Of the 360 has switched health insurance which is 42%. This means that 32% of the respondent have gathered information about health insurance, but decided not to switch. Other tools are used 2.5% or less and not worth mentioning.

- Reasons why people switch health insurance. The main reason to switch health insurance is a financial reason. 42% of the switched respondents switch for a better premium (which means a cheaper premium) and 22% switch for a collectivity program (which means a discount). 20% Switch for more additional insurance (an insurance which offers more benefits).
- The most suitable health insurance. Premium and own risk are the most important criteria when selecting a new health insurance. Free choice of hospital/clinic, dental and physio are preferred but are far less important. The most chosen health insurance option is the most expensive with the lowest own risk, free choice of hospital/clinic and physio + dental insured. The respondents are willing to pay more for security.

This research also disproves some findings found in other papers.

1. The choice overload problems for lower educated people which was proven in the paper "the micro foundations of competition and choice in the public sector" doesn't apply for this research (Jilke, 2015). This research targeted other public sectors like energy, water and telecom. The health care sector is comparable to these sectors with 1 year contracts and multiple providers, which should result into comparable result, but this paper proves that choice overload has an insignificant effect on switching health insurance.
2. The paper "the effect of CQ-information on the choice of health care provider" has also not been proven in this paper (L.H.H.M. Boonen, 2009). The variable knowledge had an insignificant effect on switching health insurance which contradicts the theory people with better knowledge (CQ-information) concerning health insurance are more likely to switch health insurer.

Recommendations

The following recommendations can be formulated on the findings:

- People who choose the right health insurance are less likely to have payment problems. They should be informed that switching health insurance can help solve future payment problem, but they have to do be informed properly before they choose a new health insurance.
- The main reason people choose a new health insurance is focused on getting a discount or less premium. Health insurance are getting more expensive every year which means less will be covered if you switch for a cheaper insurance. People should be made aware of this.
- The payment problem seem to have a relation with a bad financial situation, but having a payment plan with the insurer isn't related. Solving this problem is not a matter of giving extra compensation to the less fortunate. A special lone with less interest compared the fine of 130% can be more effective. The people with problems are also able to switch health insurer this way.
- The healthcare problem clearly has a relationship with demographic criteria. The data can be used to isolate the most vulnerable group. Health insurance providers might be able to intervene in time before real payment problems occur, by letting them switch to an insurance which covers more. They can offers this group also a special collectivity contract.

References

ANP. (2014, 12 15). *Zorgpremies.* Retrieved from Nu.nl: http://www.nu.nl/zorgverzekering/3953862/zorgpremie-bedraagt-in-2015-gemiddeld-97-euro.html

Bharwana, T. K. (2006). *Impact of Service Quality on Customers' Satisfaction.*

Brandpepper. (2014). *Hoe mannen en vrouwen het internet gebruiken*. Retrieved from Brandpepper.nl: http://www.brandpepper.nl/hoe-mannen-en-vrouwen-het-internet-gebruiken/

CBS. (2014). *Statweb*. Retrieved from cbs.nl: http://statline.cbs.nl/StatWeb/publication/?DM=SLNL&PA=7461BEV&D1=0&D2=0&D3=a&D4=l&VW=T

CBS. (2015, 4 22). *Consumentenvertrouwen, economisch klimaat en koopbereidheid.* Retrieved from http://statline.cbs.nl: http://statline.cbs.nl/StatWeb/publication/?DM=SLNL&PA=7388PCR&D1=a&D2=461,512,529&HDR=G1&STB=T&VW=T

D. Duijmelinck MSc, P. W. (2013). *Overstapgedrag en risicoselectie op de zorgverzekeringsmarkt.*

Donker, M. (2007). De Eerste Ervaringen Met Het Nieuwe Zorgstelsel. *Zorg en financiering*, 10-15.

Esveld, K. v. (2013). *Zorgverzekering: Verschil basisverzekering en aanvullende verzekering?* Retrieved from hoyhoy.nl: http://www.hoyhoy.nl/blog/zorgverzekering-verschil-basisverzekering-aanvullende-verzekering/

GGN. (2014). *Minder dan de helft van de Nederlanders komt goed rond*. Retrieved from GGN.nl: https://www.ggn.nl/zakelijk/actueel/2014/minder-dan-helft-nederlanders-komt-goed-rond

HoyHoy. (2015). *zorgverzekeringen vergelijken*. Retrieved from hoyhoy.nl: http://www.hoyhoy.nl/zorgverzekering/vergelijken/

Independer. (n.d.). *18 jaar worden en je zorgverzekering*. Retrieved from independer.nl: http://www.independer.nl/zorgverzekering/info/studenten/18-jaar-worden.aspx

Independer. (2014). *De basisverzekering in Nederland.* Retrieved from independer.nl: http://weblog.independer.nl/zorgverzekering/basisverzekering/#1

Independer. (2015). *Zorgverzekeringen 2015*. Retrieved from independer.nl: https://www.independer.nl/zorgverzekering/

Jilke, D. S. (2015). *The microfoundations of Competition and Choice in Public Service.*

L.H.H.M. Boonen, T. L.-A. (2009). *Het effect van CQ-informatie op de keuze voor een zorgverzekeraar.*

Rijksoverheid. (n.d.). *Wat gebeurt er als ik de premie van mijn zorgverzekering niet betaal?* Retrieved from rijksoverheid.nl: http://www.rijksoverheid.nl/onderwerpen/zorgverzekering/vraag-en-antwoord/wat-gebeurt-er-als-ik-de-premie-van-mijn-zorgverzekering-niet-betaal.html

Schippers, m. d. (2015). *Antwoorden op kamervragen van de Kamerleden Leijten (SP) en Van Gerven (SP) over het explosief stijgend aantal mensen dat het eigen risico niet meer kan betalen.* Den Haag: Ministirie van Volksgezondheid, Welzijn en Sport.

Steekproefcalculator. (n.d.). Retrieved from Steekproefcalculator.com: http://www.steekproefcalculator.com/steekproefcalculator.htm

Vektis. (2014). *Zorgtermometer, verzekerden in beweging 2014.* Retrieved from http://www.independer.nl/zorgverzekering/info/overstapmonitor.aspx

Vreede, N. d. (2014, 12 4). Eigen risico niet meer te betalen. *Algemeen Dagblad*, p. 1.

Zorgwijzer. (2015). *Zorgvergelijker 2015*. Retrieved from zorgwijzer.nl: http://www.zorgwijzer.nl/zorgvergelijker

Appendix

Interview questions:

Kennis over gezondheidzorg:

1. Op een schaal van 1 tot 7 wat is uw mening over de volgende stellingen:

	Dit weet ik helemaal niet		Dit weet ik precies
Vraag 1: Weet u wat de basis verzekering vergoed?	O	O O O O O	O
Vraag 2: Weet u welke ziekenhuizen uw zorgverzekering vergoed?	O	O O O O O	O
Vraag 3: Weet u welke collectiviteiten kortingen er door zorgverzekeraars worden aangeboden?	O	O O O O O	O
Vraag 4: Weet u het verschil tussen restitutiepolis en naturapolis?	O	O O O O O	O
Vraag 5: Weet u waarvoor u aanvullend verzekerd bent	O	O O O O O	O

2. Heeft u afgelopen jaren (2013-2015) een van de volgende middelen geraadpleegd op het gebied van zorgverzekeringen?
   - Ik heb geen middelen raad gepleegd
   - Zorgverzekering vergelijkers (independer.nl, hoyhoy.nl, zorgwijzer.nl etc.)
   - Websites van Zorgverzekeraar
   - Een zorg consultant
   - Assurantiebureau/ tussenpersoon
   - Een ander middel, namelijk….

Huidige zorgverzekering

3. Wat voor een zorgverzekering heeft u?
   - Basis verzekering
   - Aanvullende verzekering

4. Wat is het eigen risico van uw zorgverzekering?
   - Minimaal (€375)
   - Verhoogd (€475-€775)
   - Maximaal verhoogd (€875)

5. Bent u in de periode 2012-2014 veranderd van zorgverzekering?
   - Ja
   - Nee

6. (Indien veranderd) Bent u (voor uw gevoel) beter af met uw nieuwe verzekering?
   - Ja
   - Nee

7. (Indien veranderd) Waarom bent u veranderd van zorgverzekering?
   - Goedkopere Premie
   - Collectiviteitskorting bij nieuwe verzekering
   - Meer aanbod in de aanvullende zorgverzekering
   - Anders, namelijk ……

8. Zou u van zorgverzekering veranderen indien u het volgende aanbod wordt gedaan:

**Bij deze vraag wordt bedoelt dat u als persoon veranderd van zorgverzekering en niet uw huishouden. Verder gaat het hier over een verandering van zorgverzekering en niet van zorgverzekeraar. De zorgverzekeringen die hier worden aangeboden kunnen onder dezelfde zorgverzekeraar vallen.*

Zorgverzekering aanbod 1
- Eigen risico €875
- **Geen** vrije keus van ziekenhuis of zorgaanbieder
- **Geen** Tandarts of Fysio verzekerd
- Prijs: €66,00 per maand

Zorgverzekering aanbod 2
- Eigen risico €575
- **Geen** vrije keus van ziekenhuis of zorgaanbieder
- **Wel** Tandarts of Fysio verzekerd
- Prijs: €88,00 per maand

Zorgverzekering aanbod 3
- Eigen risico €575
- **Wel** vrije keus van ziekenhuis of zorgaanbieder
- **Geen** Tandarts of Fysio verzekerd
- Prijs: €88,00 per maand

Zorgverzekering aanbod 4
- Eigen risico €575
- **Wel** vrije keus van ziekenhuis of zorgaanbieder
- **Wel** Tandarts of Fysio verzekerd
- Prijs: €100,00 per maand

Zorgverzekering aanbod 5
- Eigen risico €375
- **Geen** vrije keus van ziekenhuis of zorgaanbieder
- **Geen** Tandarts of Fysio verzekerd
- Prijs: €88,00 per maand

Zorgverzekering aanbod 6
- Eigen risico €375
- **Geen** vrije keus van ziekenhuis of zorgaanbieder
- **Wel** Tandarts of Fysio verzekerd
- Prijs: €100,00 per maand
-

Zorgverzekering aanbod 7
- Eigen risico €375
- **Wel** vrije keus van ziekenhuis of zorgaanbieder
- **Geen** Tandarts of Fysio verzekerd
- Prijs: €100,00 per maand

Zorgverzekering aanbod 8
- Eigen risico €375
- **Wel** vrije keus van ziekenhuis of zorgaanbieder
- **Wel** Tandarts of Fysio verzekerd
- Prijs: €120,00 per maand

Naar welke van de volgende 8 zorgverzekeringen zou u willen overstappen?

Overstappen naar aanbod 1	o Ja	o Nee
Overstappen naar aanbod 2	o Ja	o Nee
Overstappen naar aanbod 3	o Ja	o Nee
Overstappen naar aanbod 4	o Ja	o Nee
Overstappen naar aanbod 5	o Ja	o Nee
Overstappen naar aanbod 6	o Ja	o Nee
Overstappen naar aanbod 7	o Ja	o Nee
Overstappen naar aanbod 8	o Ja	o Nee

Financiële situatie

9. Hoe beschrijft u uw financiële situatie?
- Ik heb aan het eind van de maand geld over
- Ik kom elke maand precies rond
- Ik kom aan het eind van de maand wel eens geld tekort

10. Heeft u in de periode 2012-2015 problemen gehad met het betalen van uw zorgverzekering of eigen risico?
- Ja
- Nee

11. (indien ja)Heeft u in de periode 2012-2015 een betalingsregeling van uw zorgverzekering gehad?
- Ja
- Nee

Demografie

12. Geslacht:
- Man
- Vrouw

13. Leeftijd:
- 18-25
- 26-35
- 36-45
- 54-55
- 56-65
- 65+

14. Opleiding:
- Vmbo en lager
- Havo, vwo
- MBO
- HBO
- Universiteit

15. Gezondheid:
- Goede gezondheid
- Matige gezondheid
- Slechte gezondheid

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