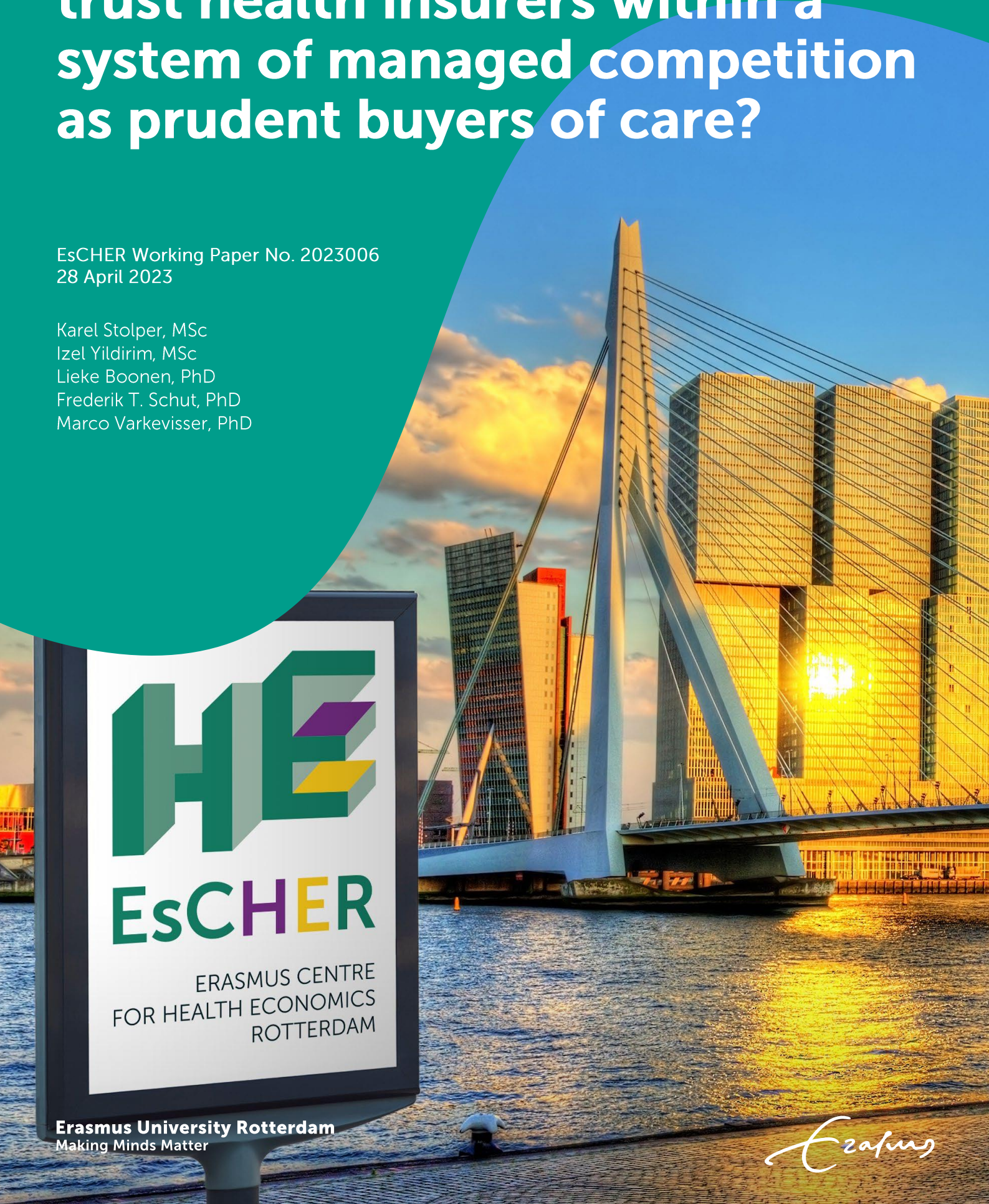
Do consumers perceive and trust health insurers within a system of managed competition as prudent buyers of care?

EsCHER Working Paper No. 2023006
28 April 2023

Karel Stolper, MSc
Izel Yildirim, MSc
Lieke Boonen, PhD
Frederik T. Schut, PhD
Marco Varkevisser, PhD



Title
Do consumers perceive and trust health insurers within a system of managed competition as prudent buyers of care?

Authors
Karel Stolper, MSc, Erasmus School of Health Policy & Management (ESHPM)
Izel Yildirim, MSc, Equalis Strategy & Modeling
Lieke Boonen, PhD, Equalis Strategy & Modeling
Frederik T. Schut, PhD, Erasmus School of Health Policy & Management (ESHPM)
Marco Varkevisser, PhD, Erasmus School of Health Policy & Management (ESHPM)

Corresponding authors:
Karel Stolper, Erasmus School of Health Policy & Management (ESHPM), Erasmus University Rotterdam, stolper@eshpm.eur.nl
Izel Yildirim, Equalis Strategy & Modeling, Izel.Yildirim@equalis.nl

Keywords
Managed competition, health insurance system, prudent buyer of care, trust

JEL classification
I11; I13; I18

Cite as
Stolper, K.C.F., Yildirim, I., Boonen, L.H.H.M., Schut, F.T., & Varkevisser, M. (2023). Do consumers perceive and trust health insurers within a system of managed competition as prudent buyers of care? EsCHER Working Paper Series No. 2023006, Erasmus University Rotterdam. Available from: https://www.eur.nl/en/research/escher/research/working-papers

Erasmus Centre for Health Economics Rotterdam (EsCHER) is part of Erasmus University Rotterdam.
Want to know more about EsCHER? Visit www.eur.nl/escher
Want to contact EsCHER? E-mail escher@eur.nl

Interested in more EsCHER Working Papers? Download from www.eur.nl/escher/research/workingpapers

Do consumers perceive and trust health insurers within a system of managed competition as prudent buyers of care?

Karel Stolper[1], Izel Yildirim[1], Lieke Boonen, Frederik T. Schut & Marco Varkevisser

1) The first two authors contributed equally to this paper and are joint first authors

Abstract

In healthcare systems based upon the principles of managed competition, health insurers are expected to act as prudent buyers of care. Consumers are expected to switch between insurers based upon the performance of insurers in this role. Yet, the Dutch experience shows that trust of consumers in health insurers is low and that switching consumers focus primarily on price. The question arises if consumers do in fact perceive and trust insurers as prudent buyers of care. We addressed this question by using a mixed-method approach. The results show that most people know that insurers buy healthcare and feel that the purchasing tasks suit their role. They even have reasonable, though fragile, trust in the purchasing competencies of the insurer. However, the results also revealed that consumers have insufficient information to cast a judgement about insurers as purchasers and incorrectly think that insurers are commercial organisations. Hence, improving the public information about insurers and their purchasing role seems to be crucial. Given the inherent complexity in the system, it remains to be seen if this objective can be reached in the (near) future. For that reason policymakers should also consider additional measures to encourage that insurers will take integral purchasing responsibility.

1. Introduction

In countries such as Germany, Switzerland and the Netherlands, the healthcare system is based upon the principles of managed competition. In these systems, health insurers are expected to act as prudent buyers of care on behalf of their enrolees. Enrolees are allowed to choose an insurer based on the insurer's ability to buy good quality health care at the lowest price possible. However, the Dutch experience indicates that overall consumer trust in health insurers is low and that consumers focus primarily on price when buying health insurance (Bes et al. 2013, Groenewegen, Hansen, and De Jong 2019, Maarse and Jeurissen 2019). Hence, the important question arises if consumers really perceive and trust health insurers as prudent buyers of care. We address this question by using a mixed-method approach of focus groups and a survey. The Dutch situation provides an interesting setting for studying the purchasing role of insurers since the Netherlands is commonly perceived as a frontrunner in implementing managed competition in healthcare (Jeurissen and Maarse 2021).

Our study contributes to the current literature by focusing specifically on consumer perceptions of private insurers' healthcare purchasing role in the context of managed competition. Although many studies focus on consumer trust in health insurers, literature on whether and how this is related to their purchasing role is lacking. This is an important omission because a key feature of the managed competition model is that consumers choose an insurer based on their perception of the ability of this insurer to act in their interest as prudent buyer of care (Enthoven and van de Ven 2007). If consumers do not perceive health insurers to be prudent buyers of care and/or do not trust health insurers in this role, insurers will not be effectively motivated to act this way.

2. Background

In the Dutch health system with managed competition, insurers are obliged to offer a legally defined standardized benefit package (basic health plan). They also must accept all applicants, irrespective of their health risk, at a community rated premium (i.e., insurers must charge the same premium for everyone with the same health plan). Insurers are free to contract healthcare providers selectively but have a legal 'duty of care', implying that they

must provide adequate, timely and sufficient care. To reduce incentives for risk selection, the government compensates health insurers ex-ante for the risk profiles of their customers through a risk equalisation system. On a separate market, consumers can also buy supplementary insurances to cover health care that is not covered by the basic health plan, primarily consisting of physical therapy and dental care for adults. Buying a basic health plan is mandatory for consumers whilst buying supplementary insurance is voluntary.

In 2022, there were 20 risk bearing health insurers in the Dutch insurance market, which were part of 10 independent insurance concerns. The four largest concerns had a joint market share of about 85 per cent. All four large concerns and most other insurers find their roots in former sickness funds, are not-for-profit and organised as cooperatives (Kroneman et al. 2016). For most insurers their 'social mission' – the moral obligation to act upon the public goals of the system – is an important driver (Stolper et al. 2019). At the same time, insurers cannot ignore the financial incentives within the system. Even though the Dutch system of risk equalisation is generally considered to be one of the most sophisticated in the world, evidence shows that to some extent it is still profitable for insurers to attract healthy people and unprofitable to attract unhealthy people (McGuire, Schillo, and van Kleef 2020, van Kleef et al. 2019, Croes et al. 2018, Stolper et al. 2022).

Once a year, during the 'switching season' (a fixed, 6-week open enrolment period at the end of the year) consumers are free to switch between insurers (Minister of Health 2004). The percentage of customers that switches between insurers has been stable for years, averaging between 6 and 8 per cent (NZa 2021). Younger people switch considerably more than older people. Switching behaviour is primarily motivated by price and, to a much lesser extent, by the coverage of supplementary insurance. Quality of contracted capre is not a factor of significance in a consumer's choice of a health insurer (Holst, Brabers, and de Jong 2021). Exact information on which providers are contracted by the health insurers is often unavailable during the switching season since negotiations between insurers and providers tend to carry on until the end of the switching season or even later.

From the literature it follows that the overall trust of consumers in health insurers is low. Maarse and Jeurissen (Maarse and Jeurissen 2019) provide a comprehensive overview of these studies and suggest that the lack of trust is institutional – i.e. something insurers have to live with. Explanations range from a lack of information, a negative attitude towards

competition in healthcare and resistance to interference in the patient/physician relation. Additionally, the perception that health insurers have commercial goals and therefore face a conflict of interest between making a profit and providing good care also plays a role (Bes, Wendel, and de Jong 2012, Hoefman, Brabers, and De Jong 2015). Trust in health insurers is considerably lower than trust in healthcare providers. Whereas in 2022 92 per cent of the Dutch population trust GPs and 77 per cent have trust in hospitals, only 26 per cent expressed that they trust health insurers (Meijer 2022, Hoefman, Brabers, and De Jong 2015). Interestingly, people's trust in their own health insurer is substantially higher than trust in health insurers in general (57 per cent vs 26 per cent in 2014). Various studies made clear that the lack of trust hampers the role of health insurers to act as purchasers of care and therefore is one of the reasons why Dutch health insurers are hesitant to engage in selective contracting (Boonen and Schut 2011, Jeurissen and Maarse 2021, Maarse and Jeurissen 2019, Groenewegen, Hansen, and De Jong 2019).

3. Methods

3.1 Design

Our study used a mixed methods approach to investigate if consumers perceive and trust a health insurer as a prudent buyer of care. We started our research by organising two focus groups with Dutch consumers. We opted for two focus groups because we wanted to be able to compare the results. These focus groups aimed to establish a first, conceptual understanding of what consumers know about the purchasing role of health insurers and about the level of trust they have in this role. We shared an open invitation for both focus groups on various platforms and used our personal networks to recruit participants. We accepted all applications from Dutch adults with health insurance until the intended number of participants was reached. The set-up of the focus groups was semi-structured, and the sessions lasted around 1.5 hours. Two of us moderated the sessions using a topic guide (see Appendix I) and one researcher was present as an observer.

The insights of the focus groups allowed us to formulate tentative conclusions about how consumers perceive the insurers' purchasing role and whether they trust insurers in performing this role. Based on these insights and the literature, we designed a survey with

multiple choice and Likert scale questions (see Appendix II). The survey consisted of 6 different sections, being: 1) background characteristics, 2) knowledge of the healthcare system, (3) perception of the purchasing role, 4) trust in the purchasing role and, while not the focus of this study, 5) switching behaviour. For the last three sections, we developed a standardised framework in which we divided the insurer's purchasing role into twelve distinct purchasing tasks (see Box 1).

Box 1: the 12 purchasing tasks
1. Purchase care and medicines for a low price
2. Purchase care and medicines of good quality
3. Set criteria for quality of care that providers supply
4. Inform policyholders about price and quality of the purchased care
5. Determine the care needs of the policyholder population
6. Determine from which providers services are (not) fully reimbursed
7. Ensure that enough care is available on time
8. Ensure that care is available in the area
9. Take into account policyholder preferences
10. Stimulating prevention in healthcare (e.g., quitting smoking)
11. Take research and developments about evidence-based medicine into account
12. Play a role in the concentration of highly specialized care in fewer hospitals

For each of these tasks, we asked respondents whether they were familiar with these purchasing tasks, perceived the tasks as an appropriate part of the purchasing role, trusted insurers with the tasks and would take these tasks into account when making a choice for a health insurer. The duration of the survey was around 10 to 15 minutes, and most questions were closed. We issued the survey to a large panel representative for the Dutch population managed by a professional market research bureau (Kantar). Before we send out the survey to this panel, we tested it among a small number of persons to ensure that all questions were unambiguous.

3.2 Analysis

We used the 'thematic network approach' to analyse the data of the focus groups (Attride-Stirling 2001). Both sessions were recorded and transcribed verbatim. Two members of our team coded the transcripts, using ATLAS.ti as research software. To avoid bias and establish inter-coder reliability, all data was coded twice and differences in coding were discussed until a consensus was reached. Codes were clustered into broad categories that emerged from the data. Through interpretation of the themes within these categories and subsequent group discussion in our team, we identified the most relevant insights within the qualitative data.

The survey data was analysed using both descriptive statistics and multiple linear regression analysis. For the regression analyses, we created two composite data items as outcome variables: 'perception of the purchasing role' and 'trust in the purchasing role'. Both variables consisted of the answers to questions concerning the twelve purchasing tasks of insurers. For 'perception', respondents were asked to indicate on a five-point scale for each of the twelve purchasing tasks to what extent they think this task fits the purchasing role of a health insurer. We measured the results per task separately and took the sum of the scores per respondent as outcome variable. Likewise, for 'trust', we measured the level of trust of respondents on a five-point scale for each of the twelve purchasing tasks and took the sum of scores as outcome variable.

The selection of explanatory variables was based on the focus groups' results, expert judgement, and indications of possible drivers of trust and perception that we found in the literature. We included age, mental health, and healthcare system knowledge and familiarity because we expected them to have a positive effect on trust (Balkrishnan et al. 2003, Balkrishnan et al. 2004, Goold and Klipp 2002, Goold, Fessler, and Moyer 2006). Information asymmetry, conflicting interests and (mis)perception about the role of the insurer were included given an expected negative effect on both trust and perception (Groenewegen, Hansen, and De Jong 2019, Goold and Klipp 2002, Bes, Wendel, and de Jong 2012, Hoefman, Brabers, and De Jong 2015). A high level of trust in one's own health insurer, healthcare professionals or the healthcare system as a whole and years of enrolment with a health insurer were included because we expected a positive association with both trust and perception (Bes et al. 2013, Maarse and Jeurissen 2019, Balkrishnan et al. 2003, Goold,

Fessler, and Moyer 2006, Gabay and Moore 2015). In our final models, we only included those explanatory variables that added predictive power (see Table 4). To select these variables, we used hierarchical regression analysis.

Most of the explanatory variables are either dichotomous or measured on a scale ranging from three to six points. Healthcare system knowledge is measured based on five true or false statements about the Dutch healthcare system and set up as a composite variable consisting of the total number of correct answers to the statements. For the variables 'familiarity with purchasing role' and 'importance of purchasing role in choice behaviour', respondents were asked to indicate on a three- and five-point scale respectively for each of the twelve purchasing tasks if they are (somewhat) familiar or unfamiliar with the purchasing tasks and to what extent the purchasing role could play an important role in their choice behaviour. The mean of the scores for all the twelve purchasing tasks together was taken to measure mean familiarity and mean importance of the purchasing role. Note that the latter variable is not included in the regression models but is only used for descriptive statistics. Furthermore, to properly build the regression models, several of the explanatory variables were recoded. That is, small answer categories were merged and 'do not know' answers were removed whenever uninterpretable.

4. Results

4.1 Focus groups

In total, 16 consumers participated in our focus groups, distributed evenly amongst the two groups. Participants were aged between 25 and 74, were slightly higher educated than average and varied qua intensity of care use. In general, participants indicated that they considered the purchasing role of insurers a difficult topic to discuss. Participants sometimes needed a little help from the moderators to understand the subject matter. After some additional explanation, participants were more or less able to formulate what they expected the purchasing role of health insurers to be. Sometimes, these expectations were in accordance with the actual purchasing tasks that health insurers have. In other instances, participants appeared to have expectations of the purchasing tasks that did not align with reality (e.g., determining the benefits to be covered by the basic insurance policy).

Unfamiliarity with the purchasing role was a central theme in the focus groups. Most participants were aware that insurers purchase healthcare but indicated having a limited notion of what the purchasing role encompasses. They also made clear that they have insufficient information to assess whether health insurers are adequate (i.e., able to meet customer preferences) in performing their role as a purchaser of care.

Various participants proactively indicated that a lack of transparency about how insurers purchase care hinders them to form an informed opinion about the effectiveness of the purchasing role. Because of this, participants found themselves unable to say if insurers could be trusted in their purchasing role, and neither could they incorporate this aspect into their choice behaviour. Finally, several participants mentioned that they perceived (financial) conflicts of interest between insurers and insured and therefore doubted whether insurers always would act in the interest of their enrolees.

4.2 Survey

In total, 708 participants responded to our survey, constituting a response rate of 45 per cent. Table 1 provides an overview of the background characteristics of the sample. Compared to the general Dutch population the sample has a representative distribution on sex, age, and physical health. The sample has a slightly lower share of people with low education, a lower share of people with a poor or fair self-reported mental health and a higher share of people who switched between health insurers in 2021.

Table 1: background characteristics of the survey sample (n=708)

	Category	N (sample)	% (sample)	% (Dutch population)
Sex	Female	362	51%	51%
	Male	346	49%	49%
Age	18-24 years	61	9%	11%
	25-34 years	104	15%	16%
	35-44 years	112	16%	15%
	45-54 years	133	19%	18%
	55-64 years	124	18%	17%
	65 years and older	174	25%	24%
Education	Low	82	12%	16%
	Intermediate	334	47%	44%
	High	292	41%	40%
Mental health	Poor	4	1%	15%[1]
	Fair	46	6%	
	Good	336	47%	85%
	Very good	197	28%	
	Excellent	125	18%	
Physical health	Poor	16	2%	19%
	Fair	119	17%	
	Good	361	51%	81%[1]
	Very good	149	21%	
	Excellent	63	9%	
Switched health insurer (2021/2022)	No	613	87%	93%
	Yes	91	13%	7%[2]
	Do not know	4	1%	0%
Switching frequency in last 5 years	Never	426	60%	N/A
	Once	176	25%	N/A
	Multiple times, not every year	83	12%	N/A
	Every year	13	2%	N/A
	Do not know	0	0%	N/A

Note. [1]Retrieved from Centraal Bureau voor de Statistiek 2021. [2]Retrieved from Monitor zorgverzekeringen 2021.

Tables 2 and 3 present the outcome and control variables included in the regression models as well as the descriptive statistics of the separate survey questions. Interestingly, almost all respondents (94 per cent) are (somewhat) aware that health insurers purchase health care on behalf of their enrolees. When confronted with the twelve purchasing tasks, 72 per cent of the respondents (taking the average score across the twelve tasks) indicated being (somewhat) familiar with these tasks. Of the respondents, 66 per cent perceived these tasks as appropriate to the purchasing role, while 23 per cent were neutral about this. Only a minority (11 per cent) considered the purchasing tasks to be inappropriate.

Trust in the listed purchasing tasks is somewhat lower and seems to be fragile. Only a minority of the respondents has (very) much trust in insurers acting as purchasers on their behalf (on average 19 per cent across all purchasing tasks), while a considerable minority (28 per cent) responds having little to no trust in this role. The largest group (44 per cent) reports having reasonable trust, suggesting that their trust in this role may be fragile. The general trust in insurers of our sample is relatively high (62 per cent has reasonable to (very) much trust) compared to the literature we discussed in paragraph 2 (Meijer 2022, Hoefman, Brabers, and De Jong 2015). This difference is expected to be due to the fact that the answer category ‘reasonable’ is included in our study, while the biennial survey used in the study we referred to only included the categories '(very) much’, ‘(very) little’ and ‘no opinion’.

An important result, in line with the results of the focus groups, is that only few respondents (7 per cent) think that insurers are transparent about the way they purchase care. Most of the respondents (57 per cent) (totally) disagree with the statement that insurers are transparent about their purchasing activities and a third respond neutrally to this question. Another important finding that confirms findings from the focus groups is that a large majority (69 per cent) incorrectly think that Dutch health insurers are commercial, profit-driven organisations (Table 3).

Finally, a notable finding presented in Table 3 is that most consumers (62 per cent) indicate that the purchasing role could be an important factor when choosing a health insurer (positively correlated with age and trust).

Table 2: descriptives of regression models' outcome variables (n=708)

	Category	n	%	Mean	SD	Min	Max	Operationalization
Perception of the purchasing role (model 1)	(Totally) agree	466	66%	32.95	6.80	2	48	5-point scale; composite data item as total score of 12 tasks ranging from 0 to 48
	Neutral	165	23%					
	(Totally) disagree	77	11%					
Trust in the purchasing role (model 2)	(Very) much	135	19%	20.40	9.25	0	48	5-point scale; composite data item as total score of 12 tasks ranging from 0 to 48
	Reasonable	314	44%					
	Little - no	196	28%					
	Do not know	63	9%					

Note. The descriptive statistics of perception and trust regarding the twelve purchasing tasks separately are presented in Appendix III. The answer 'do not know' was not included in calculating the composite data item of trust.

Table 3: descriptive statistics of explanatory and separate variables (n=708)

	Category	n	%
Awareness of purchasing role	Aware	460	65%
	Somewhat aware	202	29%
	Unaware	46	6%
Familiarity with purchasing role	Familiar	262	37%
	Somewhat familiar	248	35%
	Unfamiliar	198	28%
Importance of purchasing role in choice behaviour	(Very) important	440	62%
	Neutral	210	30%
	(Very) unimportant	58	8%
Opinion statement (1) 'Health insurers find it more important to purchase the care you need than to save money'	Totally agree	40	6%
	Agree	98	14%
	Neutral	285	40%
	Disagree	207	29%
	Totally disagree	78	11%
Opinion statement (2) 'When contracting providers, health insurers pay more attention to costs than to quality of care'	Totally agree	107	15%
	Agree	265	37%
	Neutral	246	35%
	Disagree	77	11%
	Totally disagree	13	2%

Opinion statement (3) 'Health insurers are transparent about how they purchase care'	Totally agree	12	2%
	Agree	39	6%
	Neutral	255	36%
	Disagree	283	40%
	Totally disagree	119	17%
Opinion statement (4) 'Health insurers are commercial (profit-oriented) companies'	Totally agree	201	28%
	Agree	292	41%
	Neutral	177	25%
	Disagree	24	3%
	Totally disagree	14	2%
Opinion statement (5) 'Health insurers pay enough attention to the interests of patients'	Totally agree	12	2%
	Agree	100	14%
	Neutral	373	53%
	Disagree	162	23%
	Totally disagree	61	9%
Healthcare system knowledge (number of correct answers to statements about the healthcare system)	0 correct	40	6%
	1 correct	55	8%
	2 correct	107	15%
	3 correct	144	20%
	4 correct	193	27%
	5 (all) correct	169	24%
Trust in health insurers in general	None	53	7%
	Little	206	29%
	Reasonable	374	53%
	Much	59	8%
	Very much	5	1%
	Do not know	11	2%
Satisfaction with current health insurer	Very satisfied	183	26%
	Satisfied	380	54%
	Neutral	137	19%
	Dissatisfied	6	1%
	Very dissatisfied	2	0%

Table 4 presents the results of our regression models. The results of the first model, about the perception of the purchasing role, show that agreeing with opinion statement 1 (believing that for insurers buying the care you need is more important than saving costs) is associated with a higher likelihood of perceiving the purchasing tasks of insurers as appropriate. As expected, a positive perception of the appropriateness of the purchasing

role of insurers is associated with a higher level of trust in this role. In addition, older people (aged over 55 years) clearly have a more positive perception of the purchasing role of insurers than younger people. The results of the second model show that those who trust insurers in general and those who think that insurers pay enough attention to consumers' interests are also more likely to have trust in insurers' purchasing role. Furthermore, we found that people who believe that health insurers are transparent about how they purchase care (opinion statement 3), have more knowledge about the health care system in general and are more familiar with the purchasing tasks, ceteris paribus have more trust in the purchasing role of the insurer. These findings suggest that being well-informed about the way insurers purchase care is constitutive for trust in the purchasing role of insurers. We also found that being female and having switched insurers every year during the past 5 years is negatively associated with having trust in the purchasing role of insurers. Finally, people with good or excellent physical health also are found to have more trust in insurers' purchasing role.

Table 4: results of regression model 1 and model 2

	Model 1: perception of purchasing role		Model 2: trust in purchasing role	
	β	SE	β	SE
Constant	0.13	1.52	14.51***	1.71
Opinion statement 1: Health insurers find it more important to purchase the care you need than to save money	0.95***	0.37	0.66	0.44
Opinion statement 2: When contracting providers, health insurers pay more attention to costs than to the quality of care	-0.44	0.37	-0.37	0.45
Opinion statement 3: Health insurers are transparent about the way they purchase care	-0.39	0.45	1.93***	0.53
Opinion statement 4: Health insurers are commercial (profit-oriented) companies	-0.75*	0.45	0.27	0.53
Opinion statement 5: Health insurers pay enough attention to the interests of patients	0.41	0.44	2.69***	0.52
Healthcare system knowledge	0.21	0.18	0.64***	0.22
Trust in the purchasing role	0.27***	0.03	-	-
Little – no trust in health insurers in general	Reference category			
Reasonable trust in health insurers in general[1]	0.15	0.70	3.95***	0.66
(Very) much trust in health insurers in general	1.30	0.89	7.31***	1.18
Satisfaction with current health insurer	-	-	0.54	0.70
Familiarity with purchasing tasks	-	-	0.25***	0.04
Sex (female)	0.71	0.47	1.74***	0.56
Age 18-24	Reference category			
Age 25-34	0.31	1.01	-0.36	1.21
Age 34-44	-0.08	0.99	0.20	1.18
Age 45-54	-0.11	0.96	-0.72	1.15
Age 55-64	2.14**	0.98	-0.76	1.17
Age 65+	2.64***	0.94	1.23	1.12
Mental health (bad-moderate)	Reference category			
Mental health (good-excellent)	0.69	0.97	-1.73	1.16
Physical health (bad-moderate)	Reference category			
Physical health (good-excellent)	-0.19	0.62	2.36***	0.74
Switched health insurer 2021/2022 (yes)	-0.01*	0.00	0.00	0.01
Switching frequency in last 5 years: never	Reference category			
Switching frequency in last 5 years: once	-0.48	0.56	0.01	0.67
Switching frequency in last 5 years: 2-4 times	-0.74	0.76	-1.18	0.91
Switching frequency in last 5 years: every year	-3.22*	1.79	-4.95**	2.12
Number of observations	676[2]		676	
R^2	0.24		0.37	

*Note. ***p <0.01, **p < 0.05, *p < 0.1. SE = standard error. [1]Similar effects were found for the variables regarding trust in one's own health insurer and trust in the healthcare system as to trust in health insurers in general. Due to multicollinearity, these variables were estimated in separate models. [2]32 observations were removed from the full sample due to missing values or uninterpretable answer categories such as 'do not know'.*

5. Discussion

In the Dutch healthcare system, insurers are expected to act as prudent buyers of care. That is, they should buy good quality health care at the lowest price possible on behalf of their customers. In reality, however, overall trust in insurers is low and quality of care does not play a significant role when consumers buy health plans (Maarse and Jeurissen 2019, Holst, Brabers, and de Jong 2021). The aim of our study was to find out if consumers perceive and trust the health insurers as prudent buyers of care. If this would not be the case, a key element of the health care system – being the idea that consumers 'vote with their feet' by choosing the insurer that in their eyes is most able to act as their purchasing agent – will not work as it was designed to work.

When it comes to perception, the findings from both our focus groups and the survey show that most people do in fact know that insurers buy healthcare on their behalf. Additionally, the survey showed that most people, when confronted with a list of potential purchasing tasks, feel that these tasks suit the role of health insurers and even have reasonable trust in the purchasing competencies of the insurer, although this trust seems to be fragile. Moreover, our survey results made clear that consumers are in principle inclined to incorporate how insurers fulfil this purchasing role in their health plan choice which is an important precondition for the managed competition to function as intended.

However, the results of the focus groups and the survey also revealed that consumers report insufficient information about the content and merits of the purchasing role of health insurers. Most of the participants in our study indicate that health insurers are not transparent about the way they purchase care. When asked, consumers make clear that because of this lack of information they are not able to cast a judgement about the capabilities and success of health insurers as purchasers of care. Additionally, many respondents believe health insurers to be commercial profit-driven organisations. In their eyes, this constitutes a potential conflict of interest for the insurer while purchasing care.

Hence, a lack of transparency and a perceived conflict of interest seem to be the biggest obstacles for insurers to function as prudent buyers of health care. This conclusion is strengthened by the interaction found in our data, showing that (i) being better informed about the Dutch healthcare system in general and the purchasing role of insurers specifically

and (ii) having confidence that the insurer acts in the interest of consumers correlates positively with trust in the purchasing role of insurers.

At first glance, the implications of our findings are straightforward. For policymakers and health insurers, our conclusions should be a motivation to improve transparency on how the insurers' purchasing role is fulfilled. This means first and foremost that consumers should be able to understand the implications of the choices that insurers make as purchasers of care. At the beginning of the open enrolment period – i.e., the time window in December-January when people can switch health plans – it should be clear which providers are contracted, what agreements are made between the insurer and the provider and which additional benefits the insurer as the purchaser of care has to offer to its enrolees. Secondly, it should be easier for consumers to (1) critically assess the quality of healthcare contracted by the insurers and (2) compare it to the quality of contracted care of competing offers. To achieve the former, insurers and providers need to find a way to provide clarity on the outcome of their negotiations before the switching season starts. And insurers and intermediaries (e.g., comparison websites) need to translate this outcome in a for consumers comprehensible and accessible way. To achieve the latter, it is of crucial importance to improve the publicly available information on the quality of healthcare. Health insurers, healthcare providers and policymakers should join hands to create access to understandable and reliable quality indicators. These indicators should support consumers when choosing a health plan and give insight into the consequences of choosing one insurer rather than the other. Additionally, insurers could explain better to the public that they have a social mission and are mostly organised as not-for-profit cooperatives. If insurers join hands to convince the public that they are dedicated to the public goals of the health care system, including its financial sustainability, the (mis)perception that there is a conflict of interest could possibly be taken away.

At a second glance, the solution to our finding that consumers find themselves unable to cast a judgement about the merits of the health insurer as the purchaser of care is less obvious. It could be argued that no amount of information will ever enable the consumer to truly evaluate the complicated role of the insurer as a purchaser of healthcare. There is an inherent complexity in the system that makes it very difficult for consumers to assess the merits of healthcare procurement. This complexity is manifest in many of the aspects of the

purchasing tasks but is most visible in the intrinsically challenging concept of quality of healthcare. Quality of healthcare has many dimensions, varying from the quality of the clinical process to the medical outcome and patient satisfaction with the treatment. It is profoundly difficult to measure all these dimensions adequately and bring together the information about these dimensions in a for consumers understandable and accessible way. Let alone bring together all the information on these different dimensions for all the different sorts of care (hospital care, mental care, etc.) that have been contracted by an insurer for a specific health plan. The Dutch progress in creating transparency in the quality of healthcare is encouraging but is by no means enough to expect that somewhere in the near future this kind of composite quality indicators on the level of a health plan will be available (Nederlandse Zorgautoriteit (NZa) 2017, Barros et al. 2016).

Another inherent difficulty to support public trust in the purchasing role of insurers is that insurers have to monitor healthcare costs and efficiency to keep premiums affordable, while individual patients do not experience the marginal cost of healthcare consumption due to low co-payments. Hence, for patients there are concentrated benefits but diffused costs. This implies that for an individual patient, the trade-off between (high) marginal benefits and (low) marginal cost is different than for insurers who experience high marginal costs and limited marginal benefits (especially when the risk equalization system does not adequately compensate for chronically ill patients). Hence, some of the purchasing decisions that health insurers make will be beneficial for the common interest of all enrolees (or even for the healthcare sector in general) but disadvantageous for the specific interests of individual patients. This tension can be eased by better information about the purchasing role and the quality of care that is purchased and by improving risk equalization but can never be fully solved.

For policymakers and health insurers, these inherent complications imply that the current situation, in which consumers are not able to fully apprehend the merits of insurers' purchasing role, should be considered (semi) permanent for at least the near future. That means that consumers evaluating health insurers mainly on price and thereby incentivising insurers to focus on healthcare spending is to be considered as a given for the coming years. This requires additional measures from policymakers to ensure that health insurers will take integral purchasing responsibility and give more consideration to the quality and accessibility

of healthcare. They could, for example, stimulate insurers to participate in national quality programs and/or oblige insurers to collaborate on concentration of care. For insurers, these insights require continuously searching for a delicate balance between their broad social mission on the one hand and market incentives to focus solely on cost containment on the other. Intensified collaboration among health insurers aimed at improving quality of healthcare without engaging in anticompetitive practices therefore seems desirable.

In the meantime, organising a systematic, consistent, and intensive long-term collaborative effort by all relevant parties to improve transparency towards consumers on the role and performance of insurers as purchasers of care is crucial for making the managed competition model work as it was designed to be.

References

Attride-Stirling, Jennifer. 2001. "Thematic networks: an analytic tool for qualitative research." *Qualitative research* 1 (3):385-405.

Balkrishnan, Rajesh, Elizabeth Dugan, Fabian T Camacho, and Mark A Hall. 2003. "Trust and satisfaction with physicians, insurers, and the medical profession." *Medical care*:1058-1064.

Balkrishnan, Rajesh, Mark A Hall, Stephen Blackwelder, and Donald Bradley. 2004. "Trust in insurers and access to physicians: associated enrollee behaviors and changes over time." *Health services research* 39 (4p1):813-824.

Barros, Pedro Pita, Werner BF Brouwer, Sarah Thomson, and Marco Varkevisser. 2016. Competition among health care providers: helpful or harmful? : Springer.

Bes, Romy E, Sonja Wendel, Emile C Curfs, Peter P Groenewegen, and Judith D de Jong. 2013. "Acceptance of selective contracting: the role of trust in the health insurer." *BMC health services research* 13 (1):375.

Bes, ROMY, SONJA Wendel, and JUDITH de Jong. 2012. "Het vertrouwensprobleem van zorgverzekeraars." *ESB* 97 (4647):676-7.

Boonen, Lieke HHM, and Frederik T Schut. 2011. "Preferred providers and the credible commitment problem in health insurance: first experiences with the implementation of managed competition in the Dutch health care system." *Health Economics, Policy and Law* 6 (2):219-235.

Croes, Ramsis, Katalin Katona, Misja C Mikkers, and Victoria Shestalova. 2018. "Evidence of selection in a mandatory health insurance market with risk adjustment."

Enthoven, Alain C, and Wynand PMM van de Ven. 2007. "Going Dutch—managed-competition health insurance in the Netherlands." *New England Journal of Medicine* 357 (24):2421-2423.

Gabay, Gillie, and Dahlia Moore. 2015. "Antecedents of patient trust in health-care insurers." *Services Marketing Quarterly* 36 (1):77-93.

Goold, Susan Dorr, David Fessler, and Cheryl A Moyer. 2006. "A measure of trust in insurers." *Health Services Research* 41 (1):58-78.

Goold, Susan Dorr, and Glenn Klipp. 2002. "Managed care members talk about trust." *Social science & medicine* 54 (6):879-888.

Groenewegen, Peter P, Johan Hansen, and Judith D De Jong. 2019. "Trust in times of health reform." *Health Policy* 123 (3):281-287.

Hoefman, Renske Johanna, AEM Brabers, and JD De Jong. 2015. "Vertrouwen in zorgverzekeraars hangt samen met opvatting over rol zorgverzekeraars."

Holst, L, AEM Brabers, and JD de Jong. 2021. "Ook in 2021 geeft 7% aan te zijn gewisseld van zorgverzekeraar." *Utrecht: Nivel*.

Jeurissen, Patrick, and Hans Maarse. 2021. "The market reform in Dutch health care: results, lessons and prospects."

Kroneman, M, Wienke Boerma, M van den Berg, P Groenewegen, J de Jong, and E van Ginneken. 2016. "Netherlands: Health System Review." *Health systems in transition* 18 (2):1-240.

Maarse, Hans, and Patrick Jeurissen. 2019. "Low institutional trust in health insurers in Dutch health care." *Health Policy* 123 (3):288-292.

McGuire, Thomas G, Sonja Schillo, and Richard C van Kleef. 2020. "Reinsurance, repayments, and risk adjustment in individual health insurance: Germany, the Netherlands, and the US marketplaces." *American Journal of Health Economics* 6 (1):139-168.

Meijer, M.A., Brabers, A.E.M. en Jong, J.D. de. 2022. Barometer Vertrouwen in de Gezondheidszorg. Utrecht: Nivel.

Minister of Health. 2004. Explanatory Memorandum Health Insurance Act. ‘s Gravenhage: Sdu Uitgevers.

Nederlandse Zorgautoriteit (NZa). 2017. Contractering gepast gebruik. In *Gepast gebruik in het inkoopbeleid van zorgverzekeraars* Utrecht: NZa.

NZa. 2021. Monitor zorgverzekeringen 2021. Utrecht.

Stolper, Karel CF, Lieke HHM Boonen, Frederik T Schut, and Marco Varkevisser. 2019. "Managed competition in the Netherlands: Do insurers have incentives to steer on quality?" *Health Policy* 123 (3):293-299.

Stolper, Karel CF, Lieke HHM Boonen, Frederik T Schut, and Marco Varkevisser. 2022. "Do health insurers use target marketing as a tool for risk selection? Evidence from the Netherlands." *Health Policy* 126 (2):122-128.

van Kleef, Richard, René van Vliet, Frank Eijkenaar, and Wynand van de Ven. 2019. "Compenseer zorgverzekeraars beter voor verlies op chronisch zieken." *Economisch-Statistische Berichten*.

Appendix I – Focus group topic guide

1. Welcome

- Digital walk-in 10 minutes before the start of the focus group.
- Start recording.

2. Introduction focus group

- Agenda focus group.
- Purpose of the focus group.
- Background information focus group.
- Personal introduction of participants

Individual opening question 1: *Who are you and what do you think is the job of the health insurer?*

Individual opening question 2: *Were you previously familiar with the purchasing role of health insurers?*

3. Start of group conversation

Question 1: *What do you understand by the purchasing role of health insurers?*

Various keywords of the input given by participants are written on a online white board and shared with the group if necessary to guide the conversation.

Guiding questions:

- What does the purchasing role entail according to the participants? Which aspects are important?
- According to policyholders, what is important about healthcare purchasing and do they see this in practice?
    - Do the other participants agree?
- Do the participants find the following aspects (important) parts of the purchasing role? *Back-up question if people do not mention certain aspects (from literature/research) at all.*
    - Ensuring that the quality of the purchased care is high
    - Ensuring that care is purchased at a reasonable price
    - Purchasing according to the preferences of policyholders – taking into account the composition of the insured population
    - Selective contracting – for example, they do not contract all hospitals but only a limited number

  - Include waiting times in healthcare purchasing
  - Waiting list mediation
- Do the participants see the health insurer as the right person to fulfil the purchasing role? Why or why not?
- According to the participants, is there another (better) party that could take on healthcare procurement? Why?

Question 2: *How much trust do you have in the purchasing role of health insurers?*

Guiding questions:
- Do you have trust in institutions in general? E.g. banks, pension funds, government?
- Do you have trust in health insurers in general?
- Do you have trust in your own health insurer?
- Do you have trust in the health insurer as a healthcare purchaser? Alternatively: how much trust do you have that you will receive the care you need?

Aspects of purchasing role that have been brought forward by participants are presented on a whiteboard.

- In which aspects of the purchasing role do you have trust or no trust?
- What determines the degree of trust that the participants have?
- Does your opinion change when we talk about your own health insurer?

Question 3: *Did the way in which the health insurer purchases health care play a role in your choice of a health insurer?*

Guiding questions:
- Is the purchasing role something you take into account when you choose a health insurer?
- Did (the trust in) the purchasing role play a role in the choice of the (current) insurer?
- How do you take it into account?

4. End of group conversation

Optional closing questions: *How could trust be increased? How could the health insurer fulfil the purchasing role better/differently?*

- Drawing general conclusions with the entire group.
- Are there any comments/additions?
- How did the participants experience the group conversation?

Appendix II – Survey

Introduction

Dear Sir or Madam,

Thank you for participating in this study.

This research aims to gain insight into your expectations about how the health insurer purchases care for you and the trust you have in this purchasing role. This helps us to better understand the point of view of policyholders in the Netherlands.

Completing the questionnaire takes about 12 minutes. You decide whether you want to participate in this study and can, if you wish, terminate your participation at any time. Your data is handled reliably and the results are processed anonymously.

1: Questions about health insurance characteristics

In the next section we ask you questions about your health insurer and insurance.

1. With which health insurer are you currently insured?

- a.s.r.
- Aeviate (Eucare)
- Anderzorg
- Besured
- Bewuzt
- CZ
- CZdirect
- De Friesland Zorgverzekeraar
- Ditzo
- DSW
- FBTO
- Hema
- Interpolis
- inTwente
- IZA
- IZZ
- Jaaah
- Just
- Menzis
- Nationale-Nederlanden
- OHRA
- ONVZ
- PMA
- PNOzorg
- Promovendum
- Pro Life
- Salland
- Stad Holland
- UMC
- United Consumers VGZ
- Univé
- VGZ
- VinkVink
- VvAA
- ZEKUR
- ZieZo
- Zilveren Kruis
- Zorg en Zekerheid
- Zorgdirect
- I don’t know

2. **What type of policy do you have with your current health insurer?**
   - Restitution policy
   - In-kind policy
   - Combination policy
   - I don't know

3. **Are you participating in a group contract (for example through your employer, sports club or trade union)?**
   - Yes
   - No
   - I don't know

4. **Do you have a supplementary health insurance in addition to your basic insurance?**
   - Yes
   - No
   - I don't know

5. **Have you opted for a voluntary deductible?**
   - Yes
   - No
   - I don't know

6. **How satisfied are you with your current health insurer?**
   - Very satisfied
   - Satisfied
   - Neutral
   - Dissatisfied
   - Very dissatisfied

7. **Have you ever had a problem with your health insurer?**
   - No, never

- Yes, about the service provision
- Yes, about the reimbursement of care
- Yes, about something else; namely... [insert open field]

2: Questions about health insurance knowledge and opinion statements

In this section we ask what you know about the role of health insurers.

1. Are you aware that health insurers purchase care on behalf of their policyholders (i.e. make agreements with healthcare providers about the care to be provided)?

- I'm aware of that.
- I'm somewhat aware of that.
- I'm not aware of that.

2. Can you indicate to what extent you are aware that the following tasks are part of the purchasing role of health insurers?

Tasks	Familiar	Somewhat familiar	Unfamiliar
Purchase care and medicines for a low price	☐	☐	☐
Purchase care and medicines of good quality	☐	☐	☐
Set criteria for quality of care that providers supply	☐	☐	☐
Inform policyholders well about price and quality of the purchased care	☐	☐	☐
Determine the care needs of the policyholder population (all policyholders of an insurer)	☐	☐	☐
Determine from which providers services are (not) fully reimbursed	☐	☐	☐
Ensure that enough care is available on time	☐	☐	☐
Ensure that care is available in the area	☐	☐	☐
Take into account policyholder preferences	☐	☐	☐
Stimulating prevention in healthcare (e.g. quitting smoking)	☐	☐	☐

Take into account research and developments related to proven care	☐	☐	☐
Play a role in the concentration of highly specialized care in fewer hospitals (such as establishing one national treatment centre for children with cancer)	☐	☐	☐

3. Can you indicate to what extent you agree with the following statements?

	Totally agree	Agree	Neutral	Disagree	Totally disagree
Health insurers find it more important to purchase the care you need than to save money	☐	☐	☐	☐	☐
When contracting providers, health insurers pay more attention to costs than to quality of care	☐	☐	☐	☐	☐
Health insurers are transparent about the way in which they purchase care	☐	☐	☐	☐	☐
Health insurers are commercial (profit-oriented) companies	☐	☐	☐	☐	☐
Health insurers pay enough attention to the interests of patients	☐	☐	☐	☐	☐

4. Can you indicate whether you think the following statements are true or not?

	True	Not true	I don't know
Health insurers do not have to conclude contracts with all healthcare providers	☐	☐	☐
Treatment provided by non-contracted providers must always be fully reimbursed by health insurers	☐	☐	☐
Health insurers must accept everyone for basic health insurance	☐	☐	☐
Health insurers determine what is included in the basic benefit package	☐	☐	☐
Health insurers are obliged to sell supplementary health insurance to anyone who wants it	☐	☐	☐

3: Questions about trust in general

In this section we ask you questions about your trust in different organizations and individuals.

How much trust do you have in…?	Very much	Much	Reasonable	Little	None	I don't know
The government?	☐	☐	☐	☐	☐	☐
Financial institutions such as banks, pension funds and insurers?	☐	☐	☐	☐	☐	☐
The healthcare system?	☐	☐	☐	☐	☐	☐
Health insurers in general?	☐	☐	☐	☐	☐	☐
Your own health insurer?	☐	☐	☐	☐	☐	☐
Healthcare providers such as general practitioners, medical specialists and physiotherapists?	☐	☐	☐	☐	☐	☐

4: Questions about the purchasing role and trust in this

Since the introduction of the Health Insurance Act in the Netherlands, health insurers have been given the legal task of purchasing care for their policyholders. This means that health insurers make agreements with healthcare providers such as hospitals and general practitioners about the price, quality and quantity of care. Health insurers can also choose to offer no contract to certain healthcare providers.

In the next section we will ask questions about how you as a policyholder view this purchasing role of health insurers and whether you trust the health insurer in this.

1. To what extent do you agree that the following tasks fit the purchasing role of health insurers?

Tasks	Totally agree	Agree	Neutral	Disagree	Totally disagree

Purchase care and medicines for a low price	☐	☐	☐	☐	☐
Purchase care and medicines of good quality	☐	☐	☐	☐	☐
Set criteria for quality of care that providers supply	☐	☐	☐	☐	☐
Inform policyholders well about price and quality of the purchased care	☐	☐	☐	☐	☐
Determine the care needs of the policyholder population (all policyholders of an insurer)	☐	☐	☐	☐	☐
Determine from which providers services are (not) fully reimbursed	☐	☐	☐	☐	☐
Ensure that enough care is available on time	☐	☐	☐	☐	☐
Ensure that care is available in the area	☐	☐	☐	☐	☐
Take into account policyholder preferences	☐	☐	☐	☐	☐
Stimulating prevention in healthcare (e.g. quitting smoking)	☐	☐	☐	☐	☐
Take into account research and developments related to proven care	☐	☐	☐	☐	☐
Play a role in the concentration of highly specialized care in fewer hospitals (such as establishing one national treatment centre for children with cancer)	☐	☐	☐	☐	☐

2. Are there any other tasks that you think belong to the purchasing role of health insurers?

- Yes, namely ... [insert open field]
- No

3. Do you think the health insurer is the right party to purchase the care?

- Yes (go to question 5a)
- No (go to question 4 and then to 5b)
- I don't know (go to question 6)

4. <u>If question 3 = No</u>; Which party do you think is more suitable for purchasing care?

- Government
- Healthcare providers (e.g. doctors, pharmacists)
- Employer
- The patients themselves
- I don't know
- Otherwise, namely ... [insert open field]

5a: <u>If question 3 = Yes</u>; What is the main reason why you think the health insurer is the right party to buy care?

- Because of my experiences with health insurers
- Because of the objective that I think health insurers have
- Because of the tasks that health insurers have
- Because of the interests of health insurers
- Because of the expertise of health insurers on healthcare procurement
- Because of the transparency of health insurers about the agreements they make with healthcare providers
- Otherwise, namely ... [insert open field]

5b: What is the main reason why you feel that the health insurer is not the right party to buy care?

- Because of my experiences with health insurers
- Because of the objective that I think health insurers have

- Because of the tasks that health insurers have
- Because of the conflicting interests of health insurers
- Due to the lack of expertise of health insurers on healthcare procurement
- Due to the lack of transparency of health insurers about the agreements they make with healthcare providers
- Otherwise, namely ... [insert open field]

6. How much trust do you have in health insurers carrying out the purchasing tasks properly?

Task	Very much	Much	Reasonable	Little	None	I don't know
Purchase care and medicines for a low price	☐	☐	☐	☐	☐	☐
Purchase care and medicines of good quality	☐	☐	☐	☐	☐	☐
Set criteria for quality of care that providers supply	☐	☐	☐	☐	☐	☐
Inform policyholders well about price and quality of the purchased care	☐	☐	☐	☐	☐	☐
Determine the care needs of the policyholder population (all policyholders of an insurer)	☐	☐	☐	☐	☐	☐
Determine from which providers services are (not) fully reimbursed	☐	☐	☐	☐	☐	☐
Ensure that enough care is available on time	☐	☐	☐	☐	☐	☐
Ensure that care is available in the area	☐	☐	☐	☐	☐	☐
Take into account policyholder preferences	☐	☐	☐	☐	☐	☐

Stimulating prevention in healthcare (e.g. quitting smoking)	☐	☐	☐	☐	☐	☐
Take into account research and developments related to proven care	☐	☐	☐	☐	☐	☐
Play a role in the concentration of highly specialized care in fewer hospitals (such as establishing one national treatment centre for children with cancer)	☐	☐	☐	☐	☐	☐

5: Questions on consumer choice behaviour

Every year you have the opportunity to choose a different health insurer or health insurance policy. Perhaps you have changed or you have chosen to stay with your current insurer. The following questions are about this choice.

In the next section, we will ask you questions about whether the tasks of the purchasing role of health insurers and the trust in this have influenced your choice of a health insurer.

1. Did you change health insurance during the last transition season 2021/2022?

- o Yes
- o No
- o I don't know

2. How many times have you changed your health insurance in the past five years?

- o Never
- o 1 time
- o Several times, but not every year
- o Every year
- o I don't know

3. Which parts of the purchasing role could be important to you when making a choice for health insurance?

Tasks	Very important	Important	Neutral	Unimportant	Very unimportant
Purchase care and medicines for a low price	☐	☐	☐	☐	☐
Purchase care and medicines of good quality	☐	☐	☐	☐	☐
Set criteria for quality of care that providers supply	☐	☐	☐	☐	☐
Inform policyholders well about price and quality of the purchased care	☐	☐	☐	☐	☐
Determine the care needs of the policyholder population (all policyholders of an insurer)	☐	☐	☐	☐	☐
Determine from which providers services are (not) fully reimbursed	☐	☐	☐	☐	☐
Ensure that enough care is available on time	☐	☐	☐	☐	☐
Ensure that care is available in the area	☐	☐	☐	☐	☐
Take into account policyholder preferences	☐	☐	☐	☐	☐
Stimulating prevention in healthcare (e.g. quitting smoking)	☐	☐	☐	☐	☐
Take into account research and developments related to proven care	☐	☐	☐	☐	☐
Play a role in the concentration of highly specialized care in fewer	☐	☐	☐	☐	☐

hospitals (such as establishing one national treatment centre for children with cancer)					

4. How much influence has your trust in the way health insurers purchase care had on the choice of your current health insurer?

- A lot
- Many
- Reasonable
- Few
- No
- I don't know

6: Personal characteristics

In the next section we ask you several questions about yourself.

1. Are you a man or a woman?

- Man
- Woman
- Otherwise

2. What is your year of birth?

[insert drop-down list]

3. What is your highest completed education?

- Low
- Intermediate
- High

4. How would you assess your physical health in general?

- Excellent
- Very good
- Good

- Fair
- Poor

5. How would you assess your <u>mental health</u> overall?

- Excellent
- Very good
- Good
- Fair
- Poor

6. How much care do you use?

- None
- Very little
- Little
- Much
- Very much

<u>Closing</u>

Thank you for completing this questionnaire.

Appendix III – Descriptive statistics

Table 5: descriptive statistics of twelve purchasing tasks regarding the perception of appropriateness of these tasks (n=708)

	(Totally) agree	Neutral	(Totally) disagree
Purchase care for a low price	52%	26%	22%
Purchase care of good quality	78%	16%	7%
Set criteria for quality of care	79%	16%	5%
Inform policyholders about price and quality	80%	17%	3%
Determine care needs of policyholder population	49%	34%	17%
Determine from which providers services are reimbursed	39%	32%	29%
Ensuring that care is available on time	77%	18%	5%
Ensure that care is available in the area	79%	17%	5%
Taking into account policyholder preferences	75%	22%	3%
Stimulating prevention in healthcare	70%	24%	5%
Taking into account research and developments	71%	24%	4%
Playing a role in the concentration of highly specialized care	42%	33%	25%

Table 6: descriptive statistics of twelve purchasing tasks regarding trust in the proper performance of these tasks (n=708)

	(Very) much trust	Reasonable trust	Little - no trust	Do not know
Purchase care for a low price	26%	46%	20%	7%
Purchase care of good quality	17%	52%	24%	7%
Set criteria for quality of care	26%	46%	21%	6%
Inform policyholders about price and quality	10%	36%	48%	6%
Determine care needs of policyholder population	13%	46%	31%	10%
Determine from which providers services are reimbursed	17%	41%	34%	9%
Ensuring that care is available on time	18%	46%	27%	8%
Ensure that care is available in the area	20%	47%	25%	7%

Taking into account policyholder preferences	14%	40%	38%	8%
Stimulating prevention in healthcare	28%	44%	18%	10%
Taking into account research and developments	20%	46%	22%	12%
Playing a role in the concentration of highly specialized care	20%	40%	24%	15%

Erasmus University Rotterdam
Erasmus Centre for Health Economics Rotterdam
Burgemeester Oudlaan 50
3062 PA Rotterdam, The Netherlands
T +31 10 408 8555
E escher@eur.nl
W www.eur.nl/escher