Managed Competition in the Netherlands - Out of Fashion or Work in Progress?

A study on the role of insurers as third-party purchasers of healthcare

Karel Stolper

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The cover is designed by Klazien Stolper-Beute. It represents the constantly evolving and imperfect organization of the healthcare system. It shows that, although the system remains a work in progress with much room for improvement, patients rely on it every day.

Managed Competition in the Netherlands - Out of Fashion or Work in Progress?
A study on the role of insurers as third-party purchasers of healthcare

Gereguleerde marktwerking in Nederland – uit de mode of werk in uitvoering?
Een studie naar de rol van zorgverzekeraars als inkopers van zorg

Thesis

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PREFACE

It is 16 years ago when I first walked into the building of a large health insurer, just two years after the major reform of the healthcare system. I was a consultant, tasked with drafting a commercial strategy for that insurer, which now had to compete in this new landscape.

From that moment on, I was intrigued by the healthcare system. A sophisticated, tightly regulated economic construct, full of promises about improving access, affordability, and quality of care. Yet also fraught with controversy - questions about whether the market belonged in healthcare and whether health insurers, positioned to play a crucial role, were up to the task. To many healthcare providers and much of the public, insurers seemed like anonymous, incapable, and profit-driven entities - the root of many of the sector's problems.

My fascination only grew in the years thereafter, in which I advised many more health insurers and eventually joined one of them. What truly gripped me was the stark contrast between the academic perspective and the public debate. This became especially clear during my time in London for an executive master's in health economics. A distinguished professor lectured enthusiastically about the Dutch healthcare system, praising it as a model. At the same time, back in the Netherlands, a political crisis unfolded over a controversial piece of legislation that strengthened the role of health insurers. The resistance to giving health insurers a bigger role was so serious that it nearly brought down the government.

At that moment, I decided that I wanted to find some answers. After all, I was spending a large part of my professional life working for health insurers. Was I doing the right thing? In the years that followed, I became associated with ESHPM and began academic research to explore one central question: does our healthcare system—with its central role for health insurers—work as intended? This dissertation contains the answers we found.

My academic quest has been an entirely collaborative effort. Lieke Boonen, Erik Schut and Marco Varkevisser have been by my side at every step. It has been both a privilege and great pleasure to work with you. Thanks also to my colleagues, with whom I had countless discussions about the healthcare system. Your thoughts have been inspiring. Quite a few of my friends work in healthcare provision and their critical challenges and questions sharpened my thinking. The same goes for my family, with a special thanks to my father. Our conversations and your work as general practitioner and researcher

have been a great inspiration. Finally, Klazien – you know that none of this is possible without you.

‘Don’t do it boy, nobody reads these things’, said an old university librarian wearily when one of my supervisors told him years ago that he was writing his dissertation. I have no illusions about the truth of that remark. But somehow I do hope that this work will contribute to a more nuanced and less polarised debate about the future of the healthcare system.

Chapter I

General introduction

1. BACKGROUND

In large parts of the world, countries face similar serious challenges in their healthcare systems. Already for a long time, their healthcare costs have been rising faster than their GDP, enlarging the share of spend on healthcare within the national budget. At the same time, they face vast demographic changes causing an ageing population and a shrinking workforce at the same time. As a result, the prevalence of health conditions associated with ageing, such as osteoporosis, cardiovascular diseases and other chronic diseases, increases while the availability of healthcare professionals to treat these patients decreases. Due to both developments, countries risk a further acceleration of healthcare spending growth and possibly a deterioration of the performance of the healthcare system (WHO 2022, Gocke 2023).

In the context of these challenges, governments must make hard choices and trade-offs between costs, (equal) access to and quality of healthcare. If a government aims to contain healthcare costs, concessions must be made on access to and/or quality of healthcare. Conversely, if a government wants to maximise access or quality, there will be consequences for the already rising healthcare costs. An optimal allocation of resources and efficient coordination of activities within the healthcare system is crucial to make these choices – though always difficult - as easy as possible and help the government to deal with these upcoming challenges. It ensures that assets are used as efficiently as possible, and that the full potential of its healthcare system is utilised.

The pursuit of optimal allocation of resources and efficient coordination of activities has a long history. In many developed countries, the first step in healthcare reform was the promotion of universal coverage and equal access. During this phase, the mutual aid societies that are the predecessors of current health insurers came into existence. Partly because of this development, healthcare spending in the average OECD country rose rapidly. In a response to this growth, governments introduced various solutions aimed at cost containment, such as budget rationing. From the late 1980s, in the search for mechanisms that would improve the efficiency of the system, governments started to incorporate market-based elements in their healthcare systems (Cutler 2002, Van de Ven et al. 1994).

In an effort to do this in a comprehensive and effective way, countries such as Germany, Israel, Switzerland and the Netherlands, introduced the idea of competing ‘third party purchasers’ within a system of ‘managed competition’. This idea is based upon the insight that a regular market in the context of healthcare is bound to fail. Several characteristics of the healthcare market, such as information asymmetry between the physician and the patient and the resulting agency role of the physician in relation to the patient, imply that regular

market dynamics with the physician as supplier and the patient as buyer will not function properly (Arrow 1963). Alain Enthoven (1978) proposed an alternative setting, in which the government structures a competitive market amongst private health insurers. In this market, the insurers - acting within a strict regulatory framework to ensure equity and solidarity - serve as prudent buyers of healthcare on behalf of their enrolees. The core idea is that the discussed market failures are mitigated by transferring purchasing power from consumers to health insurers, thereby ensuring sufficient countervailing buying power towards providers. The premise is that insurers, equipped with professional expertise and collective bargaining power, are better positioned to negotiate with healthcare providers than consumers. Consumers, in turn, are empowered with the possibility to evaluate the performance of insurers and switch between them, incentivising insurers to purchase the best healthcare at the most competitive prices (Enthoven 1978, Enthoven and Van de Ven 2007).

This dissertation studies the preconditions for and practical experiences with the managed competition model in the context of the Dutch healthcare system. It contributes to existing knowledge by (i) focussing specifically on the role of health insurers as healthcare purchasers, (ii) analysing their incentives and behaviour, and (iii) placing the resulting empirical findings in a broader, theoretical context. Studying the Dutch experience is first of all relevant for the Dutch setting itself. It might provide insights that lead to improvement of the Dutch system and could answer a question that is increasingly asked within the Dutch public debate: does managed competition between health insurers help to meet the (future) challenges facing the healthcare system? However, given that the Netherlands is widely perceived as a frontrunner in implementing this type of healthcare system and many countries could learn from the Dutch experience (Van de Ven et al. 2013a, Jeurissen and Maarse 2021), it is also relevant for other countries.

2. STUDY SETTING

The idea of managed competition is applied to a major part of the Dutch healthcare system. This part of the system is regulated by the Health Insurance Act (*Zorgverzekeringswet*), hereafter abbreviated as HIA, and mainly deals with curative medical care like hospital care, mental care, and primary care. Other types of care, such as long-term care, social support and mental health support for children and adolescents, are covered in other parts of the system in which insurers are not positioned as competing third-party purchasers. As discussed, managed competition implies that private health insurers are expected to act as prudent buyers of care on behalf of their customers. Hence, within the HIA, competing healthcare insurers purchase care for their enrolees and consumers can make an annual choice for one of these insurers.

The insurers must abide by a strict regulatory framework that is designed to guarantee equal access and solidarity within the system. To start with, the benefit package that insurers have to offer is determined by the government and thus does not differ among insurers. Selective contracting of healthcare providers is allowed but subject to legal conditions, such as the requirement that access to non-contracted providers may not be hindered, implying that most of the cost of non-contracted providers must be reimbursed[1]. Furthermore, insurers have a 'duty of care', meaning that they have to ensure sufficient and timely access to healthcare for their enrolees. This instrument prevents insurers from offering low-priced health plans with a very restrictive provider network that cannot guarantee patients access to adequate care within a reasonable distance and time frame. It also enforces health insurers to take responsibility for their enrolees and make sure that patients receive the healthcare that they are entitled to. Maximum acceptable waiting times are stipulated in national guidelines (*Treeknormen*), which are monitored by the Dutch Healthcare Authority. Waiting lists have been substantially reduced during the past decades but are increasingly reemerging as healthcare providers have to deal with growing capacity problems (Nederlandse Zorgautoriteit (NZa) 2023b, Schut and Varkevisser 2013).

Consumers are obliged to buy a basic health insurance policy from one of the competing health insurers. Compliance to this obligation is very high, only a small minority (ca. 1%) of the Dutch inhabitants do not have health insurance (VWS 2022). Once a year, during a fixed open enrolment period, consumers are free to switch between insurers or choose a different insurance plan from their current insurer. On average, around 7% of the Dutch inhabitants switch between health insurers per year (Nederlandse Zorgautoriteit (NZa) 2023a). Insurers must apply the principle of 'open enrolment', meaning that they have to accept all applicants at the same conditions. Furthermore, insurers are obliged to use community rating which makes it impossible to differentiate in premium for the same healthcare plan between consumers. On an independent market with minimal regulation, insurers can offer voluntary supplementary insurances to cover healthcare not included in the benefit package of the basic health insurance, such as physiotherapy and dental care for adults. The vast majority of the Dutch population buys supplementary insurance, although this percentage is slowly declining, from 85,7 percent in 2013 to 82,5 in 2023 (Vektis 2023).

1 Despite this limitation, there is in theory still ample room for differentiation between the health plans that insurers offer. The most generous health plans could contract all providers, while less generous health plans could contract only a selective network of providers. In practice, however, differences between health plans are limited (Nederlandse Zorgautoriteit (NZa) 2023a).

A possible problem in competitive health insurance markets with the obligation to apply community rating and open enrolment, like in The Netherlands, is that health insurers engage in risk selection. If regulators are not able to neutralise this perverse incentive, the market will not function efficiently and fairly (Glazer and McGuire 2000). Insurers could devise specific marketing strategies to attract only customers that are expected to use little healthcare, or they could refrain from contracting the providers that are important to patients. To neutralise this incentive, the Dutch system features an elaborate system of risk equalisation. Using multiple characteristics, like age, gender, region, source of income and utilisation of healthcare during the previous years, the system predicts the healthcare costs per patient. This information is used to ex ante equalise the financial consequences of the differences in customer base between the health insurers (Van Kleef, Eijkenaar, et al. 2019, Van de Ven et al. 2023). The Dutch risk equalisation system is generally considered to be one of the most sophisticated in the world (McGuire and Van Kleef 2018). However, up to 2023 there were still segments of consumers that were predictably profitable or unprofitable for an insurer. Chronic patients, for instance, were known to be financially unattractive while people with a voluntary deductible were known to be overcompensated by the risk equalisation system (Van Kleef, Van Vliet, et al. 2019, Croes et al. 2018). Recently, the risk equalisation has been improved with the use of 'constrained regression' which is expected to reduce this problem significantly (VWS 2023a, Van Kleef et al. 2023).

3. CENTRAL AIM AND OUTLINE

This dissertation aims to provide a perspective for future development of Dutch health insurers' role as competing 'third-party payers'. The overarching research question for all subsequent chapters can be formulated as follows: does competition between Dutch health insurers work as originally intended and, if not or not completely, what can be done to improve the role of insurers in the healthcare system?

The following chapters, each from a different angle, all contribute to answering the question formulated above. Chapter 2 takes the consumer perspective, wondering if consumers do in fact perceive and trust health insurers as prudent buyers of care on their behalf. Chapter 3 focusses on the perspective of the insurers, asking if insurers in daily practice experience the incentive to steer on quality of healthcare. Chapter 4 studies actual behaviour of insurers, trying to find out which type of customers insurers try to attract. Chapter 5 investigates whether, and if so how, health insurers within a system of managed competition cooperate to improve the quality of healthcare. All these chapters are based on empirical research and have been or will be published by

academic journals. Hence, they can be read independently and therefore will provide some overlapping descriptive information about the study setting in the introduction sections. To conclude this dissertation, chapter 6 brings the empirical findings together and reflects on the overall conclusion, comparing the model of managed competition with other possible coordination mechanisms. Based on these reflections, recommendations and implications are discussed for the future role of health insurers in the healthcare system.

Chapter 2

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

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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 et al. 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).

The central aim of our study is to find out if consumers perceive and trust the health insurer as a prudent buyer of care. 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. There are many previous studies that focus on consumer trust in health insurers. We will discuss these in section 2. However, the specific link between consumer trust and consumer perception of the purchasing role is included in only one previous study (Hoefman et al. 2015). Yet 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. Using recent data and a more sophisticated conceptual model of health insurers' purchasing role can contribute to improving healthcare systems with managed competition. Our study aims to do so and builds upon previous studies by updating, broadening and refining the insights available from the current literature.

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 ensure access to adequate, timely and sufficient care for their clients. 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 et al. 2020, Van Kleef, Van Vliet, 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 (Nederlandse Zorgautoriteit (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 care is not a factor of significance in a consumer's choice of a health insurer (Holst et al. 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. Moreover, consumers with lower education or a lower income are more likely to have a low 'health insurance literacy', implying that they are more likely to have difficulty choosing and using a health insurance policy (Holst et al. 2022).

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 et al. 2012, Hoefman et al. 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 et al. 2015). Furthermore, people's trust in their own health insurer is slightly higher than in other health insurers (van der Hulst et al. 2023). 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 et al. 2019).

3. METHODS

3.1 Overall study design

Our study used a mixed methods approach, beginning with focus groups and followed by a survey, to investigate whether consumers perceive and trust a health insurer as a prudent buyer of care and to examine which factors are associated with perception and trust levels. We chose this approach considering the challenging nature of the research topic, i.e., health insurance is a low interest product for consumers and consumer knowledge of the concepts that we intended to measure could be limited. We used the focus groups to explore the key concepts and deepen our insight in consumers understanding of the subject matter. The combination of the qualitative data gathered from the focus groups and the available literature were instrumental in crafting the survey questions, helping us to formulate the right questions and thereby enhance the validity of the survey instrument. The survey allowed us to quantify the prevalence of our focus group findings across a larger and more representative sample. Furthermore, based on the survey data we constructed two latent variables about perception of and trust in the purchasing role of health insurers and performed a regression analysis to examine which factors are associated with the constructed perception and trust levels.

3.2 Focus groups

In contrast to previous studies, our research focussed specifically on the purchasing role of health insurers. To do so, it was essential to explore how we could conceptualise the purchasing role in a for consumers understandable way. Therefore, we organised two different focus groups with Dutch consumers. We chose for two groups because

we wanted to be able to compare the results. Through these focus groups we could establish a preliminary, 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 (between 6 to 10 people per focus group) 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.

We used the 'thematic network approach' to analyse the data of the focus groups (Attride-Stirling 2001). Both sessions were recorded and transcribed verbatim. Using ATLAS.ti as research software, two members of our team coded the transcripts. 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 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. They also enhanced our insight in consumer understanding of basic concepts such as the purchasing role of insurers in general and the government's role in determining the benefits covered by the basic health plan. Furthermore, the focus group discussions made clear how the use of concrete examples can enhance consumer comprehension of insurers' role as healthcare purchasers.

3.3 Survey

Based on the insights from the focus groups and the literature, we designed an online survey with multiple choice and Likert scale questions (see Appendix II). In April 2022, we issued the survey to a large panel representative for the general Dutch adult population managed by a professional market research bureau (Kantar). For participation in this panel, Kantar approached and selected the individuals, ensuring maximum representation of the general Dutch population based on age, sex, education level, and region. The duration of the survey was around 10 to 15 minutes, and most questions were closed. Before sending out the survey to this panel, we tested it among a small number of persons to ensure that all questions were unambiguous.

Box 1: The twelve purchasing tasks

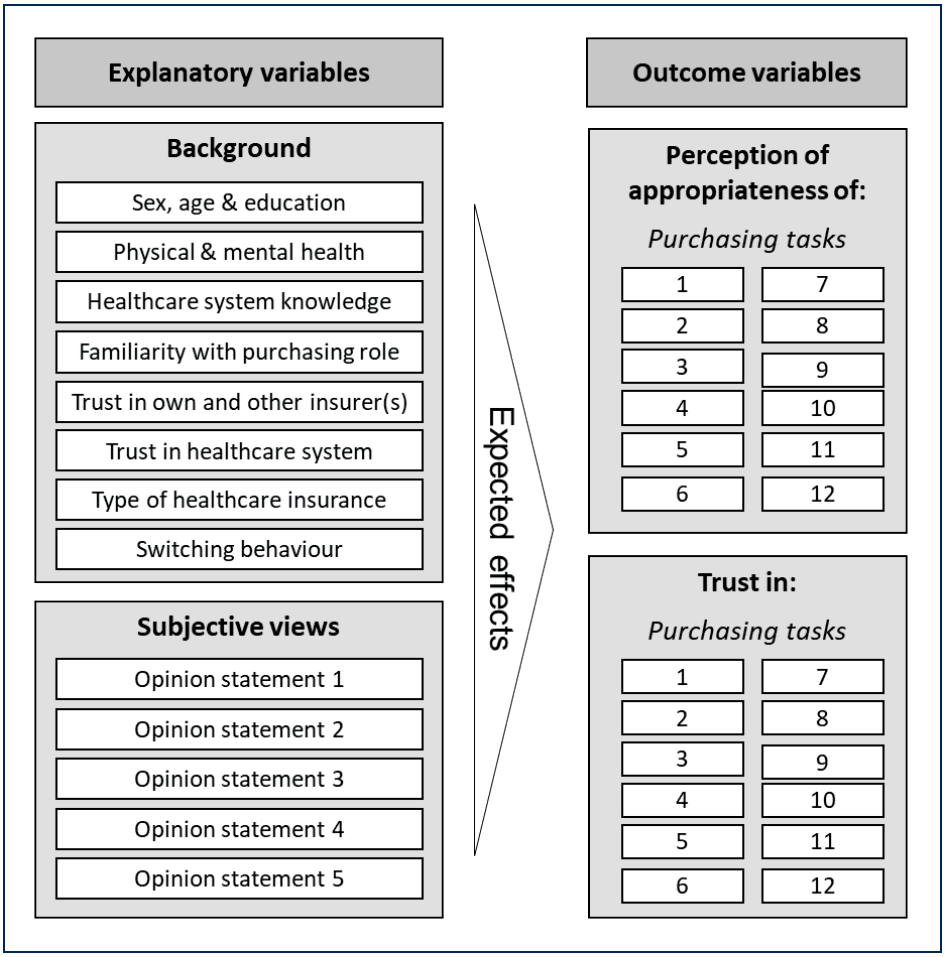
1. Purchase care and medicines for a low price
2. Purchase care and medicines of good quality
3. Set criteria for quality of care that providers supply
4. Inform policyholders about price and quality of the purchased care
5. Determine the care needs of the policyholder population
6. Determine from which 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

We identified 12 different purchasing tasks of health insurers from the statutory duties of health insurers (as described in the Dutch Health Insurance Act), the existing literature and policy documents, as well as from expert judgement of the authors (see Box 1). For each of these tasks, we asked respondents whether they were familiar with these purchasing tasks, whether they perceived these tasks as an appropriate part of the purchasing role, and to what extent they trusted insurers with these tasks. In addition, we asked respondents whether they would take these tasks into account when choosing a health insurer. Next, we asked respondents about possible drivers of trust in and perception of the purchasing role of health insurers, which we derived from the focus group results and the literature (see Appendix III for an overview). Specifically, in addition to some general background characteristics (age, level of education), we asked respondents about their physical health, mental health as well as knowledge and familiarity of the healthcare system because these variables are likely to be related to their perception of and trust in the purchasing role of health insurers (Balkrishnan et al. 2003, Balkrishnan et al. 2004, Goold and Klipp 2002, Goold et al. 2006). For the same reason we included questions about the level of trust in one's own health insurer, healthcare professionals or the healthcare system as a whole and the satisfaction with their current health insurer (Bes et al. 2013, Maarse and Jeurissen 2019, Balkrishnan et al. 2003, Goold et al. 2006, Gabay and Moore 2015). Finally, we added five opinion statements in order to assess individuals' subjective views about the purchasing role. By including these statements, we aimed to measure underlying beliefs about health insurers (e.g., whether they were believed to be transparent and serving patients' interests) to deepen our insight into the root causes of specific perceptions and generally low trust levels in insurers. See Box 2 for the five opinion statements and Box 3 for a conceptual model of the explanatory variables and outcome variables.

Box 2: The five opinion statements

1. Health insurers find it more important to purchase the care you need than to save money
2. When contracting providers, health insurers pay more attention to costs than to quality of care
3. Health insurers are transparent about the way in which they purchase care
4. Health insurers are commercial (profit-oriented) companies
5. Health insurers pay enough attention to the interests of patients

Box 3: Conceptual model of explanatory variables and outcome variables



3.4 Regression analysis

The survey data was analysed using both descriptive statistics and multiple linear regression analysis. For the regression analyses, we constructed two latent outcome variables to measure respondents 'perception of the purchasing role' and 'trust in the purchasing role' based on their answers to the survey questions about the perceived appropriateness of, and trust in insurers performing the 12 identified purchasing tasks. 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 (ranging from 0 to 4) 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 – after combining 'totally agree' and 'agree' as well as 'disagree' and 'totally disagree' into two joint answer categories – 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 - after combining 'very much' and 'much' as well as 'little' and 'totally disagree' into two joint answer categories - took the sum of scores as outcome variable. Respondents who answered "don't know" to questions about trust in some of the purchasing tasks were assumed as having "no trust" in these specific tasks, i.e., these answers were coded as zero. Since the number of responses for which this applies is small, this assumption does not affect our results. In addition, 32 respondents (5%) reporting that they did not know having trust in any of the 12 purchasing tasks, were excluded from the regression analysis because their level of trust could not be interpreted. This clearly is an outlier group, since almost all other respondents answered most or all of the questions about trust (see Table 2 below).

Using factor analysis, we tested both the construct validity and internal consistency (or reliability) of both outcome variables (factors). We found that all items load highly on both factors (almost all factor loadings exceeding 0.45), confirming the construct validity of the scales (see Appendix IV). Hence, both scales accurately reflect the construct they are intended to measure. In addition, for both construct variables we found high Cronbach's alpha values (0.86 and 0.97 for perception and trust, respectively) indicating that response values for each respondent across the twelve task items are consistent.

All explanatory variables were derived from the survey questions and are either dichotomous or measured on a scale ranging from three to six points. Physical health and mental health are self-assessed and measured on a five-point scale (Doiron et al. 2015). 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 to merge small answer categories.

In our final regression models, we only included those explanatory variables that added predictive power (see Table 4). To select these variables, we used hierarchical regression analysis. To take into account multicollinearity between explanatory variables and possible overlap with outcome variables, correlation analysis was used on the entire dataset to measure the degree of association between variables.

3.5 Ethics

Informed consent was obtained from all participants prior to their involvement in both the focus groups and the survey. Participants were provided with detailed information regarding the purpose, procedures, and potential risks and benefits of their participation. They were assured of confidentiality and the right to withdraw from the study at any time without consequence. Only those who provided explicit consent proceeded to participate in the research activities.

4. RESULTS

4.1 Focus groups results

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 what follows, we describe the results of both focus groups together since there was no notable difference in results between the two groups.

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 health plan).

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 even though some participants indicated that they would be willing to do so. 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 best interest of their enrolees.

4.2 Survey results

In total, 708 participants responded to our survey, constituting a response rate of 45 per cent. 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 (see Appendix III).

Table 1 presents the descriptive statistics of the composite outcome variables on perception and trust.

Table 1: descriptives of regression models' outcome variables (n=708) [1]

	Category	Mean %	Mean	SD	Min	Max	Operationalization
Perception of the purchasing role (model 1)	(Totally) agree	66%	32.95	6.80	2	48	5-point scale (0 to 4); composite data item as total score of 12 tasks ranging from 0 to 48
	Neutral	23%					
	(Totally) disagree	11%					
Trust in the purchasing role (model 2)	(Very) much	19%	21.36[1]	8.31[1]	0	48	5-point scale (0 to 4); composite data item as total score of 12 tasks ranging from 0 to 48
	Reasonable	44%					
	Little - no	28%					
	Do not know[1]	9%					

[1] *Respondents who answered "don't know" to some questions about trust in the various purchasing tasks were assumed as having "no trust" in these specific tasks, i.e., these answers were coded as zero; 32 respondents answering "do not know" to all statements were excluded from the regression analysis and from calculating the mean and SD of the trust variable (these figures are based on n=676)*

As shown, on average trust in the listed purchasing tasks is lower than the perceived appropriateness of these tasks. Whereas 66 per cent of the respondents (taking the average score across the twelve tasks) perceived these tasks as appropriate to the purchasing role, 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.

In Table 2 for both composite outcome variables the survey responses per task for the various answer categories are specified. Respondents report the lowest agreement about the appropriateness of the purchasing tasks 'determining from which providers care is reimbursed' and 'playing a role in care concentration'. Still, these purchasing tasks load quite highly on the perception variable (see Appendix IV).

Table 2: Descriptive statistics of perception of appropriateness and of trust in performance of twelve purchasing tasks (n=708)

Purchasing tasks health insurers		Perception of appropriateness			Trust in performance			
		(Totally) agree	Neutral	(Totally) disagree	(Very) much trust	Reasonable trust	Little/ No trust	Don't know
1	Purchase care for a low price	52%	26%	22%	26%	46%	20%	7%
2	Purchase care of good quality	78%	16%	7%	17%	52%	24%	7%
3	Set criteria for quality of care	79%	16%	5%	26%	46%	21%	6%
4	Inform policyholders about price and quality	80%	17%	3%	10%	36%	48%	6%
5	Determine care needs of policyholder population	49%	34%	17%	13%	46%	31%	10%
6	Determine from which providers services are reimbursed	39%	32%	29%	17%	41%	34%	9%
7	Ensuring that care is available on time	77%	18%	5%	18%	46%	27%	8%
8	Ensure that care is available in the area	79%	17%	5%	20%	47%	25%	7%
9	Taking into account policyholder preferences	75%	22%	3%	14%	40%	38%	8%
10	Stimulating prevention in healthcare	70%	24%	5%	28%	44%	18%	10%
11	Taking into account research and developments	71%	24%	4%	20%	46%	22%	12%
12	Playing a role in the concentration of highly specialized care	42%	33%	25%	20%	40%	24%	15%

Table 3 presents the descriptive statistics of the explanatory variables. 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. The general trust in insurers of our sample is relatively high as 62 per cent of the respondents has reasonable to (very) much trust compared to the literature discussed in section 2 (Meijer 2022, Hoefman et al. 2015). This difference may be due to the fact that the answer category 'reasonable' was not an option in the survey of the study we referred to, which only included the categories '(very) much', '(very) little' and 'no opinion'.

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%

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

	Category	n	%
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%

An important result, in line with the results of the focus groups, is that only few respondents (8 per cent) agree that insurers are transparent about the way they purchase care (opinion statement 3). Most of the respondents (57 per cent) (totally) disagree with this statement. Another important finding that confirms findings from the focus groups is that a large majority (69 per cent) thinks that Dutch health insurers are commercial, profit-driven organisations, while almost all health insurers are not-for-profit entities (opinion statement 4). Finally, a notable finding is that 62 percent of the respondents indicate that the purchasing role could be an important factor when choosing a health insurer (which is positively correlated with age and trust).

4.3 Results regression analysis

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 sug-

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	-[2]	-	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

Table 4: results of regression model 1 and model 2 (continued)

	Model 1: perception of purchasing role		Model 2: trust in purchasing role	
	β	SE	β	SE
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: multiple times, but not every year	-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[3]	676		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]A single hyphen (-) means that this variable was not taken into account as an explanatory variable. [3]32 observations were removed from the full sample concerning respondents answering 'do not know' for trust with regard to all twelve purchasing tasks, making their level of trust in the purchasing role uninterpretable.*

gest 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.

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 et al. 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 most of 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 and makes studying perception of and trust in the purchasing role even more relevant.

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 both the focus groups and the survey indicate that health insurers are not transparent about the way they purchase care. We know from the focus groups that because of this lack of information consumers 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. As we learned from the focus groups, in the eyes of consumers 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 our findings that both (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 correlate 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 collaborate to convince the public that they are dedicated to the public goals of the health care system, including its financial sustainability, the prevalence of the (mis)perception that there is a conflict of interest could possibly be diminished.

When doing all the above, policy makers and insurers should be aware of the needs of groups with low health literacy skills. These groups will find it difficult to find, interpretate and apply (digital) information. The solution, it seems, is not to provide more information but to provide better information and explore new, possibly non-digital, ways to reach out to these individuals.

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 all consumers 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, especially for consumers with low health insurance literacy skills. 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 comparable quality indicators at the provider level is encouraging (primarily at the hospital level) but this information is still fragmented and cannot be translated into reliable and comprehensible composite quality indicators at the health plan level measuring the quality of the contracted provider network and procurement arrangements (Nederlandse Zorgautoriteit (NZa) 2017a, Barros et al. 2016).

Another inherent difficulty to support public trust in the purchasing role of insurers is that insurers must 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. 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.

The authors acknowledge several limitations of this study. First, we recognize the potential for selection bias in the focus groups, although this was mitigated through conscious participant selection. In addition, slight differences between the demographic composition of the survey sample and the broader Dutch population might also have biased our results, although we believe these variations are unlikely to substantially alter our findings about consumer perceptions and trust in the puwrchasing role of health insurers. Moreover, variations in people's experiences with health insurers may affect their perception of and trust in the purchasing role of health insurers. Although, we have included several proxies to account for these differences we cannot rule out the possibility that these differences may have affected our results.

The strength of our study is the combination of qualitative and quantitative research and the specific focus on the purchasing role of the health insurers. This allowed us to reveal that most consumers are aware of the purchasing role of health insurers and have reasonable, though fragile, trust in it. They are even inclined to incorporate this in their switching behaviour but have insufficient information to cast a judgement about it.

Overall, from our study it follows that organising a systematic, consistent, and intensive long-term collaborative effort by all relevant parties to improve transparency on the role and performance of insurers as purchasers of care is crucially important for improving consumers' trust and the performance of this purchasing role by insurers. The findings presented in this paper are not only relevant for the Dutch healthcare system but also for many other countries, such as Germany, Israel, and Switzerland, relying on consumer choice to incentivize competing third-party payers to act as prudent purchasers of care.

Chapter 3

Managed competition in the Netherlands: do insurers have incentives to steer on quality?

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ABSTRACT

In healthcare systems based on managed competition, insurers are expected to negotiate with providers about price, quantity, and quality of care. The Dutch experience shows that this expectation may be justified with regard to price and quantity, but for quality the results are less conclusive. To examine the incentives insurers face for enhancing quality of care, we conducted in-depth interviews with CEOs and organised separate focus groups with purchasers and marketers of five Dutch health insurers. Jointly these insurers account for more than 90 percent of the market. We distinguished three categories of both positive and negative incentives to steer on quality: social, competitive and financial incentives. The overall picture emerging is that insurers are caught in a struggle between positive and negative incentives, with CEOs being more positive about the incentives to steer on quality than purchasers and marketers. At present, the social mission perceived by insurers seems to be their most important driver to invest in quality enhancement. However, whether or not the role of the social mission is sustainable in a competitive market remains unclear. Improving publicly available information on quality therefore seems to be crucially important for reinforcing the positive as well as counteracting the negative incentives insurers face with respect to enhancing quality of care.

1. INTRODUCTION

In countries with healthcare systems based on some form of managed competition (e.g. Germany, Switzerland, the Netherlands, and the US) insurers are expected to act as prudent buyers of care on behalf of their insured. To this end, insurers are incentivized to contract providers that offer good quality care at the lowest possible price. Evidence about whether and how insurers are able and willing fulfilling this role, however, is scarce.

The Netherlands provides an interesting setting for investigating the role of health insurers, because it is widely perceived as a frontrunner in implementing managed competition in healthcare (Van de Ven et al. 2013b). The available evidence suggests that in contractual negotiations with healthcare providers Dutch health insurers put much emphasis on cost containment. They enforced large price reductions for generic drugs (Visser et al. 2013, Boonen et al. 2010), and effectively negotiated lower prices for e.g. hospital care physiotherapy and mental healthcare (Nederlandse Zorgautoriteit (NZa) 2014). In the first years after the 2006 reforms, the effect on national spending was limited because price reductions were compensated by increasing utilization. After 2012, however, insurers shifted their focus to negotiating expenditure caps and the growth of healthcare expenditure started to decline. Although this shift was also motivated by mounting pressure from the government to contain cost, the conclusion that health insurers so far have been increasingly successful in cost containment seems justified (OECD/European Observatory on Health Systems and Policies 2017, Ruwaard et al. 2014, VWS 2017b).

When it comes to improving healthcare quality, however, the role of insurers as purchasing agents is much less convincing. There is ample evidence that quality so far has only played a limited role in insurer-provider negotiations (OECD/European Observatory on Health Systems and Policies 2017, Maarse et al. 2016, Ruwaard et al. 2014, Nederlandse Zorgautoriteit (NZa) 2014). One of the explanations is the lack of a clear, transparent and broadly accepted take on quality of care. There is limited consensus on appropriate quality indicators and measurement methods and the required data are often not publicly available (KPMG 2014). But it is not clear if this lack of consensus and transparency can fully explain the limited role of quality in contractual negotiations between insurers and providers. A key question thus is whether insurers experience sufficient incentives to steer on quality.

To find an answer to this question, we investigated how Dutch health insurers perceive their incentives to steer on quality of care. However, rather than taking the insurer as

unit of observation, we distinguish three main groups of internal stakeholders within insurers that are directly or indirectly involved in insurers' decisions about purchasing strategies: executives, purchasers and marketers. Specifically, we examined whether these different groups of stakeholders within insurers share the same view and experience the same incentives with regard to steering on quality. We investigated this by (i) conducting in-depth interviews with the CEOs of insurance companies, and (ii) organizing focus group discussions with employees of these companies that are primarily responsible for purchasing and marketing.

This paper contributes to the literature by deepening the understanding of the role of insurers in a system of managed competition. Our study provides direct insight in insurers' motives rather than deriving this from system outcomes or theoretical reasoning. It also improves our understanding of the dynamics within an insurer by disentangling the motives of different groups of internal stakeholders within the insurer that are directly or indirectly involved in strategic purchasing decisions. To the best of our knowledge, this is the first study of insurer motives based on interviews and focus group discussions with key representatives from health insurers. The results may be relevant for countries in which third party purchasers are expected to act as prudent buyers of care on behalf of a defined population.

In section 2 we briefly describe the background and context of the Dutch healthcare system. Section 3 discusses the methods we used and data we analysed. Section 4 presents the results, which are discussed in the concluding section 5.

2. BACKGROUND AND CONTEXT

After its major reform in 2006, the Dutch healthcare system is based upon the principles of managed competition. Central to the system is the idea that private health insurers, competing within social constraints, act as prudent buyers of healthcare on behalf of their enrolees (Enthoven and Van de Ven 2007). In this system, all insurers are obliged to offer consumers the same standardized basic benefits package that is determined by the government. Insurers are allowed to contract healthcare providers selectively, as long as they fulfil their legal obligation to guarantee the provision of sufficient and adequate care. In addition to selective contracting, insurers have other possibilities to motivate their enrolees to visit preferred providers, for example through patient guidance services (e.g. by assigning quality labels or by waiting list mediation) or by giving patients financial incentives to choose specific providers (e.g. by requiring less co-payments). Consumers can annually switch to another health insurer or health plan

(typically health insurers offer various heterogeneous health plans). Insurers have to charge the same premium to each applicant for the same health plan (i.e. mandatory community rating) but are allowed to offer (i) a premium discount up to 10% in case of a group contract and (ii) an unrestricted premium discount when people opt for a voluntary deductible. To minimise the incentive for risk selection and create a level playing field, a sophisticated system of risk equalisation has been developed that compensates insurers ex ante for differences in the risk profile of their customers. For benefits not covered by mandatory insurance, there is a separate market for supplementary insurance (Van de Ven and Schut 2009, Enthoven and Van de Ven 2007, Minister of Health 2004).

Recently, there has been much debate about selective contracting. An important provision in the Health Insurance Act (i.e. article 13) stipulates that insurers have to pay a reimbursement when patients make use of a non-contracted provider. The Dutch Supreme Court ruled that this reimbursement may not be so low that it acts as a barrier for patients to use this provider. This limits the possibilities of insurers to effectively enforce the use of contracted providers and therefore weakens the instrument of selective contracting. In December 2014, the Dutch government proposed an amendment of article 13 of the Health Insurance Act that intended to remove this restriction on selective contracting. However, the proposed amendment was blocked by the Senate and as a result the court rulings still holds (Van de Ven 2017).

In 2017, there were 24 health insurers active in the Dutch health insurance market. Since most of these insurers are part of a larger group, there are 9 independent health insurance concerns. The four largest concerns (Achmea, VGZ, CZ and Menzis) cover 88% of the total Dutch population (Nederlandse Zorgautoriteit (NZa) 2017b). Most insurers find their roots in former sickness funds, founded by e.g. medical associations, local communities and labour unions (Kroneman et al. 2016). As a result, most insurers are still not-for-profit and organised as a cooperation.

3. METHODS AND DATA ANALYSIS

3.1 Design and participant recruitment

This study employed a qualitative approach to investigate the incentives insurers face with regard to steering on quality. To collect research data, we conducted semi-structured face-to-face interviews with CEOs. We also organized two focus group discussions, one with representatives from insurers' purchasing division (hereafter referred to as 'purchasers') and one with representatives from insurers' marketing division (hereafter referred to as 'marketers'). CEOs were interviewed because they are likely to have

the most influence on an insurer's purchasing strategy. We opted for semi-structured interviews because this research method is most suitable for studying highly developed expertise (Wiel 2017). We involved the purchasers and marketers because they are responsible for daily activities. We brought them together in focus groups because we wanted to ensure that wide ranging ideas would emerge, and common or contradictory experiences would be shared and debated (Pope et al. 2002).

We invited all four large health insurance companies and a selection of the small health insurers to participate (hereafter referred to as 'insurers'). Participants were invited based upon their position within the health insurance company. The selection has been based upon judgement of the researchers and has been extended using 'snowball sampling'.

3.2 Interview and focus group methodology

The aim of the interviews was to find out what incentives CEOs experience when it comes to steering on quality. The interviews lasted approximately 1.5 hours each and were conducted by one member of our research team. At the beginning of the interviews, we asked CEOs to reflect freely on positive and negative incentives. We used a topic list (see Appendix 3.1) to keep the conversation going when needed or steer the conversation back in the direction of incentives and quality of healthcare. New topics were added to the topic list based on the participants' responses.

The aim of the focus group discussions was to find out (i) if employees involved in daily operations would experience the same incentives as CEOs, and (ii) if the overall strategy is translated in actual behaviour on an operational level. The focus groups were also semi-structured and lasted slightly more than two hours each. We used a topic guide that included the relevant issues (see Appendix 3.2), based on the outcomes from the interviews with the CEOs. Participants were allowed to digress from this topic list to ensure that all incentives were addressed. Both focus groups were moderated by the same two members of our research team. The other two members of our team were present as an observer.

3.3 Analysis

We analysed the data using the 'thematic network approach' as described by Attride-Stirling (Attride-Stirling 2001). All interviews and focus groups have been transcribed verbatim. The texts were coded, using the qualitative data analysis and research software *ATLAS.ti*. Based on expert judgement, prior to analysing the data the research team composed a code book. During the process, codes were adjusted and supplemented, applying an iterative and circular process until data saturation was achieved. Coding has been executed by a team of four researchers. To avoid bias, all data was coded

twice, each time by a different researcher. Results were compared and differences were discussed until consensus was reached on the definite codes that were attributed to the data. Next, we clustered the codes into broad categories of interrelated incentives that emerged from the data. The classifications into main and subcategories of incentives are also based on consensus reached in extensive discussions among the researchers.

After coding and grouping of codes, we were able to make various analyses to identify themes and patterns. To get an impression of the relative importance of the various incentives, we counted the number of codes per incentive and per cluster of incentives for each of the stakeholders separately and for all participants together.

4. RESULTS

All four large insurers and one of the five small insurers were willing to contribute to our study. Jointly these insurers represent more than 90% of the Dutch health insurance market. All the CEOs of the five participating insurers were willing to give an interview, two of them choose to also involve a colleague in their interview. The focus group with purchasers was composed of six participants, i.e. four general purchasing policymakers and two hospital care purchasers, from five different insurers. The focus group with marketers was composed of five participants, all active in both consumer and corporate market segments, from three different insurers. In total eighteen participants from five different insurers participated in our study.

4.1 Thematic analysis

From the data we identified 14 incentives (7 positive and 7 negative incentives) that insurers face when considering to steer on quality. We clustered these incentives into three broad categories (see Table 1). The first category encompasses the driving forces

Table 1. Categories and incentives

(+) indicates positive incentive, (-) indicates negative incentive

Licence to operate	Competitive advantage	Financial results
Social mission (+) Legal obligation (+) Negative role perception (-) Legal hurdles (-)	Patient guidance (+) Need for transparancy (+) Consumer preferences (+) Employer preferences (+) Reputational risks (-) Consumer indifference (-) Lack of transparancy (-) Patients insensitivity to steering (-)	Positive business case (+) Negative business case (-)

around the social responsibility of insurers, i.e. incentives that relate to the role and (lack of) legitimacy of health insurers as purchasing agents. We labelled this category as "license to operate". Competitive incentives to steer on quality (or to refrain from it) are clustered in a second category and are related to increasing market share. This category is labelled as "competitive advantage". The third category of incentives we distinguish – labelled as "financial results" – is related to the presence (or absence) of a financial business case of steering on quality.

In Table 2, we provide an overview of the frequency with which the incentives in these categories are mentioned by the different internal stakeholders. The overall picture emerging is that insurers are caught in a struggle between positive and negative incentives, with negative incentives slightly dominating. Financial incentives seem to play a secondary role relative to the other two categories of incentives to steer on quality. Furthermore, we found several interesting differences in incentives experienced by the various internal stakeholders within the insurers. In general, for CEOs the positive and negative incentives seem to balance each other, while for purchasers and marketers the negative incentives seem to be more important. Purchasers are especially negative about the potential competitive advantage of steering on quality.

We also observed some differences between insurers. Most significantly, there was a strong difference in role perception between the four large insurers and the small insurer. Stakeholders from the large insurers were convinced that steering on quality is an essential task of a health insurer. By contrast, stakeholders from the small insurer emphasized that quality is a matter between patient and physician in which a health insurer should not interfere. We also discerned subtle differences between the major insurers reflecting their respective purchasing policies. For instance, one of the insurers interprets steering on quality as avoiding unnecessary care, whereas other insurers have a much broader interpretation of quality..

When we look more closely to the various incentives within each of the three categories, more interesting differences can be observed. These are discussed below.

Table 2. Relative frequency in which the various categories of incentives were mentioned (in percentages and total also in absolute numbers)

Internal stakeholders	*Categories of positive incentives*				*Categories of negative incentives*				Total percentage	Total number of quotes
	Licence to operate	Competitive advantage	Positive Financial results	Total positive categories	Lack of licence to operate	Competitive disadvantage	Negative financial results	Total negative categories		
Purchasers	21	4	12	37	15	30	18	63	100	73
Marketers	9	27	4	40	24	34	2	60	100	108
CEOs	22	23	9	53	18	25	3	47	100	241
Mean	17	18	8	43	19	30	8	57	100	422

4.2 Licence to operate

All participants spoke extensively about the notion that the licence to operate as a health insurer is given to them by society. We discerned two positive and two negative incentives in this category that balance each other in frequency mentioned (see Table 3).

Table 3. Relative frequency in which the incentives related to insurers' license to operate were mentioned (in percentages)

Internal stakeholders	*Positive incentives*			*Negative incentives*		
	Social mission	Legal obligation	Total positive incentives	Negative role perception	Legal hurdles	Total negative incentives
Purchasers	18	3	21	5	10	15
Marketers	7	2	9	8	16	24
CEOs	15	7	22	4	14	18
Mean	13	4	17	6	13	19

Social mission is the most frequently mentioned positive incentive for steering on quality. This concerns the key role that insurers are given in the Dutch healthcare system. As one of the CEOs said:

"I'm here for the public good, our social role. That's my mission, my responsibility. That's where I will be judged upon, after ten years". Participant 7

To some extent, insurers see themselves as part of the public system rather than private enterprises. Insurers feel having a social duty to fulfil, and improving quality of care is part of that duty. Occasionally, participants linked the social mission to the legal obligation of insurers to steer on quality. The Health Insurance Act explicitly mentions the responsibility of insurers to look after the quality of care. Hence, as some participants argued, it is not a matter of being incentivised or not, it's the legal obligation of insurers to promote quality of healthcare.

At the same time, participants highlighted the hurdles they face when they try to execute that mission or obligation. The most important hurdle insurers identify is the legal restriction on selective contracting as explained in section 2 (i.e. the reimbursement entitlement included in Article 13 of the Health Insurance Act), making it difficult to obstruct access to low-quality providers. As one of the participants said:

"Article 13, that's a fundamental flaw. Article 13 should have been changed, then our position would be much stronger, we could really make choices. But it did not happen". Participant 7

Some participants went even further and questioned the role of insurers in the domain of healthcare quality. Despite the perceived social mission to enhance quality of care, these participants expressed doubts whether steering on quality is a task that suits the insurer and whether insurers would be able to obtain a position in this domain. The medical profession, according to these participants, has its own responsibility to improve quality. Insurers should not interfere with that responsibility.

The overall picture is a struggle between the obligation to act upon the expectations of society and the limited room offered to fulfil these expectations. This struggle is experienced by all different internal stakeholders within the insurer. All groups experience a strong positive incentive to steer on quality based on their social mission. In addition, all participants argue that in practice they face several legal hurdles that prohibit the execution of their social mission.

4.3 Competitive advantage

Based on the data derived from the interviews and focus groups we discerned eight specific incentives related to potential competitive (dis)advantages for insurers to steer on quality. Table 4 shows the relative frequency with which these incentives were mentioned.

Table 4. Relative frequency in which incentives related to the perceived competitive advantage of steering on quality were mentioned (in percentages)

Internal stakeholders	*Positive incentives*					*Negative incentives*				
	Patient guidance	Need for transparancy	Consumer preferences	Employer preferences	Total positive incentives	Patients insensitivity to steering	Lack of transparancy	Consumer indifference	Reputational risks	Total negative incentives
Purchasers	0	3	1	0	4	4	16	5	4	30
Marketers	8	7	5	6	27	4	16	7	7	34
CEOs	9	8	4	1	23	4	7	7	8	25
Mean	6	6	3	3	18	4	13	7	6	30

The data shows a struggle between the competitive pro's and con's that come with steering on quality. On balance insurers seem to perceive more competitive risks than benefits emanating from steering on quality.

An important disadvantage that participants frequently mentioned is 'lack of transparency', referring to the common observation that quality of care is ill-defined and that there is a lack of publicly available reliable indicators. For virtually all sorts of care there is much debate about what constitutes quality and how it should be measured (KPMG 2014, Nederlandse Zorgautoriteit (NZa) 2017a). Steering on quality is therefore a difficult enterprise for insurers, given that practically all decisions can (and most likely will) be debated. In addition, participants frequently referred to consumer indif-

ference to explain why an insurer would refrain from steering on quality. Consumers are mainly interested in the price of a health plan, participants explained, and are much less interested in the efforts of an insurer to improve quality of care. Hence, doing so has limited added value to the competitive profile of an insurer and avoiding the topic could save a lot of energy and resources. Additionally, participants made clear that steering on quality involves reputational risks. Consumers don't trust insurers, participants explained, and think that their initiatives to steer on quality only serves the interests of the insurer (Nederlandse Zorgautoriteit (NZa) 2017a, Bes et al. 2013). Several participants extensively described how their initiatives to improve quality of care were consequently misinterpreted by the public and described the reputational risks that were involved. One CEO vividly sketched the dilemma he faced when he felt morally obliged to end the contract with certain low quality providers:

"We went into this with the thought: this can cost us 100.000 customers". Participant 4.

Occasionally, participants mentioned that they perceived no advantage in steering on quality because of patient's insensitivity to steering. An insurer has very limited influence on a patient's choice for healthcare providers, according to these participants, because most often there is a referral from another healthcare provider (e.g. GP). This may mitigate the effectiveness of insurers' efforts to steer patients to certain providers.

We found interesting differences between the purchasers on the one hand and CEOs and marketers on the other. The purchasers almost only talked about the potential competitive disadvantages of steering on quality. Marketers and CEOs also perceive these risks but at the same time mentioned potential competitive advantages as well. For instance, both CEOs and marketers emphasized the importance of 'patient guidance'. An insurer can present itself as a guide that helps the patient to find the provider with the highest quality of care and thereby discern itself from other insurers. This distinction can create a competitive advantage. As one of the participants of the focus group with marketers said:

"When a policy holder finds us, and asks our help with case management etc., you see a large increase in the satisfaction about our services". Participant 18

Also, participants of the focus group with purchasers pointed out that creating transparency on healthcare quality is essential to protect market share, especially when an insurer limits access to certain providers based on quality criteria.

"We need to be able to explain why we make choices that a hospital doesn't like. Indeed, if a patient is informed that we did not buy enough care (from a specific hospital), the reason why needs to be clear". Participant 10.

Furthermore, some CEOs and marketers also mentioned that consumer and employer preferences can be an incentive to steer on quality. Even though most consumers focus on the premium, some also expect an insurer to steer on quality. Steering on quality could result in an improved competitive profile towards these consumers. Similarly, initiatives to improve quality of care can be an important selling point in acquiring employer-based group contracts.

Overall, for those responsible for purchasing the competitive risks of steering on quality clearly outweigh the competitive advantages. For CEOs and marketers the overall picture is less negative, but on balance there does not seem to be a compelling competitive advantage for insurers to steer on quality of care.

4.4 Financial results

Participants also discussed the financial impact of steering on quality (see Table 1). On the positive side, participants argued that improving quality can avoid costs. According to CEOs and purchasers, a substantial share of the care that is provided is inappropriate and does more harm than good. Examples that are mentioned are prostatectomies or mastectomies, which are known to be unnecessary in some cases. By making sure that these unnecessary interventions are avoided, insurers could at the same time reduce spending and improve quality.

On the negative side, participants from the purchasing divisions argued that the positive business case for steering on quality is still purely theoretical. As one participant asserted:

"There are many opportunities when it comes to quality but it won't be an investment. To put it bluntly; it will not lead to a lower premium, rather a higher one". Participant 12.

The reason given for the absence of a positive business case is that possible gains often lie very far in the future and are highly uncertain. Furthermore, many gains are immaterial – such as a better quality of life – or may turn out to be financially negative, such as additional life years gained in poor health.

Interestingly, CEOs primarily emphasized the positive business case. Purchasers, in contrast, referred more often to the negative business case, suggesting that the expectations of the CEOs might be too optimistic.

5. DISCUSSION

In healthcare systems based on managed competition, insurers are expected to contract providers that offer good quality care at the lowest possible price. To what extent insurers actually meet this expectation, however, is unclear. In Dutch healthcare system, managed competition was introduced more than a decade ago. Many preconditions of the managed competition model have been fulfilled (Van de Ven et al. 2013b). Therefore, the Netherlands provides an interesting setting to investigate more in depth whether and how insurers have taken up the expected role as prudent purchasers of care. To date, the available evidence suggests that health insurers have been increasingly effective in containing cost. However, so far the role of quality in insurer-provider negotiations has been quite limited (Nederlandse Zorgautoriteit (NZa) 2014, Ruwaard et al. 2014, Maarse et al. 2016).

In this study, we investigated whether insurers experience incentives to steer on quality and whether the various stakeholders within an insurer experience similar or different incentives. Our study is the first study that offers a comprehensive overview of insurers' incentives for steering on quality, directly obtained from insurers themselves. Furthermore, it is also the first study to investigate the different incentives faced by the responsible actors within insurers (i.e. CEOs, purchasers and marketers).

5.1 Key lessons and limitations

A key finding of our study is that the Dutch system of managed competition offers insurers ambiguous incentives to steer on quality, with negative incentives slightly dominating. The most frequently mentioned reasons for insurers to refrain from steering on quality are legal hurdles and the lack of transparency about healthcare quality. The perceived social mission – the moral obligation to act upon the public goals of the system – appears to be the most important positive incentive. Our findings may explain why insurers so far had limited focus on quality in their contractual negotiations with providers.

We also conclude that the different stakeholders within an insurer have diverging views on the incentives they face. For CEOs, the positive and negative incentives both play an important role. By contrast, however, purchasers and marketers primarily point at the

negative incentives as the dominant determinants. Purchasers seem to have little affinity with possibilities to strengthen the competitive profile of an insurer through steering on quality, whereas marketers and CEOs perceive various competitive advantages. Our findings may explain why healthcare providers, when negotiating contracts, sometimes report a discrepancy between the expressed views of the CEOs (e.g. in the media) and the actual contracting practices by the insurers' purchasing divisions. It may also explain why consumers do not perceive much difference between insurers with regard to the health plans' quality of care.

A possible weakness of our study is that participants could have given politically correct or strategic answers. Just because the license to operate is so important, particularly CEOs may have deliberately emphasized social responsibility. We tried to minimize this potential bias, by comparing the answers of CEOs to those given by various employees of the same companies in a different setting (i.e. focus groups). Furthermore, all participants were informed we would not report any statements that could be linked to individual respondents. Another possible limitation is the background of the purchasers, given that their purchase domain (primary care, secondary care, mental healthcare, etc.) may bias their answers. We tried to minimize this by inviting purchasers with a general responsibility for insurers' purchasing policies.

5.2 Implications

Our study has important implications for policymakers. A major challenge in any healthcare system is to provide third party purchasers with the right incentives to steer on quality of care. As the Dutch experience shows, managed competition is not automatically a sufficient driver for third party payers. Currently, the incentives for price competition seem to be much stronger than those for quality competition. To date, the negative incentives to enhance quality are at least partly offset by the social responsibility to enhance quality of care, which is broadly perceived by all health insurers. This may be due to the fact that all Dutch health insurers are non-profit organisations, and almost all CEOs have actively witnessed the major reform of the system in 2006. They know what the public goals of the reform were, and act upon it to prove that the system is working. But what will happen if new CEOs, with different perspectives on the insurer's mission, take over the wheel and/or insurers would become more profit-oriented? This question is particularly interesting given that in 2018 the first foreign, for-profit insurer entered the Dutch market (Nederlandse Zorgautoriteit (NZa) 2017b). If the perceived social mission becomes less pronounced, the negative incentives to steer on quality may become dominant. Therefore, reinforcing positive and counteracting the negative incentives seems to be crucially important. One way to do this, is improving the publicly available information on quality. In this perspective, improving access to meaningful, reliable and

understandable quality indicators that effectively support consumers in their choice of providers and health plans is important. Empirical evidence shows that a significant proportion of patients is willing to change their behaviour because of quality information, and that insurers can successfully steer patients with the combined use of quality information and financial incentives (Aggarwal et al. 2017, Frank et al. 2015, Sinaiko and Rosenthal 2014). Hence, improved quality information may reduce the negative incentives to steer on quality, such as reputational risks, lack of transparency and consumer disinterest. It could also strengthen positive incentives, such as consumer trust in selective contracting and the competitive advantage of investing in quality improvement. Eventually this might even make it politically feasible for the government to remove the prevailing legal restriction on selective contracting. The road towards increased transparency of quality can take many forms. In addition to industry-sponsored voluntary disclosure and government-enforced mandatory disclosure, private third party certifiers might adopt disclosure regimes to satisfy market demand for quality information (Dranove and Jin 2010). In the Netherlands, since 2014 the National Health Care Institute has been assigned with the task to provide universal access to comprehensible and reliable information about quality of care, e.g. by implementing the ICHOM standards in cooperation with healthcare providers and health insurers (Kelley 2015, VWS 2017a).

For insurers, our findings imply that a better alignment of incentives for different internal stakeholders is urgently needed. One way to achieve this, is by altering the way insurers are typically organized. Instead of the traditional and common way of organizing different core functions (e.g. marketing and purchasing) in separate divisions), insurers could be organized along the lines of the most important market segments. Both marketers and purchasers could be part of a multidisciplinary team tailoring purchasing activities towards the needs of a specific market segment. In this setting, purchasers would collaborate with marketers in order to find out what the needs of specific market segments are and use this information as input for their negotiations with providers. This organizational redesign may increase the value of insurers' activities in the domain of quality and therefore may contribute to changing the current primarily price driven health insurance market into a market in which quality will play a more prominent role.

6. CONCLUSION

In the current Dutch healthcare system based on managed competition, insurers face conflicting incentives to steer on quality of care. Furthermore, the incentives for the various internal stakeholders within insurers are not properly aligned. To enhance insurers' ability and legitimacy to steer on quality, improving the publicly available information

on quality seems to be of crucial importance. The system would also benefit if insurers would seek more alignment within their organisations in order to tailor their purchasing activities more towards enhancing quality of care.

Chapter 4

Do health insurers use target marketing as a tool for risk selection? Evidence from the Netherlands

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ABSTRACT

In healthcare systems based on managed competition, enrolees can choose between insurers who are positioned as prudent buyers of care on their behalf. To avoid risk selection, insurers are compensated through a system of risk equalisation. The Dutch system of risk equalisation is generally considered to be one of the most sophisticated in the world. Empirical evidence, however, shows there are still consumer segments that are profitable for insurers. To examine whether insurers use target marketing for attracting these segments, we assessed promotional material used by Dutch insurers during the switching season of 2019. Our findings provide preliminary evidence that large insurers with different brands primarily use their sub brands as strategic vehicles to improve their competitive positions by targeting these brands at financially favourable groups and price sensitive buyers. By contrast, the more visible main brands are targeted at a much broader spectrum of consumer groups to display the insurer's social character. Only a minority of insurers' marketing expressions are targeted at actual users of care. Despite continuous improvements in the risk equalisation system, on average this group is still unprofitable for insurers. From a health policy perspective, further improvements are key to motivate health insurers to target their efforts at improving care for the chronically ill and to eliminate incentives for risk selection.

1. INTRODUCTION

In several countries (part of) the healthcare system is based on the principles of managed competition. Insurers are then positioned as prudent buyers of care on behalf of their enrolees. Enrolees can choose between insurers and insurers compete to attract and retain the favour of enrolees. To avoid risk selection, insurers in such markets are compensated through a system of risk equalisation accounting for differences in the risk profiles of their enrolees. However, no system of risk equalisation is perfect. That is, from the insurer's perspective, some people still generate predictable losses while others generate predictable profits. This leaves room for insurers to improve their financial results by risk selection. Despite the sophisticated system of risk equalisation, this is also true in the Netherlands (Van Kleef, Eijkenaar, et al. 2019, Van Kleef, Van Vliet, et al. 2019, Nederlandse Zorgautoriteit (NZa) 2020, 2019).

Our study aims to find out whether in the Netherlands health insurers use target marketing to attract customer segments with a profitable risk profile. We do so by directly assessing a representative sample of the promotional materials used by Dutch insurers in the public media aimed at attracting enrolees during the switching season (i.e. the last 6 weeks) of 2019. The Dutch healthcare system provides an interesting setting for studying the conduct of health insurers because it is commonly perceived as a frontrunner in managed competition with a highly sophisticated system of risk equalisation (McGuire and Van Kleef 2018, Van de Ven et al. 2013a).

Our study provides direct insight in insurers' behaviour in a competitive health insurance market rather than deriving expected behaviour from theoretical reasoning or assumed behaviour from system outcomes. As far as we know, this is the first study examining the use of marketing tools by health insurers for targeting financially attractive risk groups within a system of managed competition. The results of our study are relevant for all countries with a social health insurance scheme that is carried out by competing health insurers while risk equalisation is imperfect.

2. BACKGROUND

2.1 The Dutch healthcare system

Since a major reform in 2006, the healthcare system in the Netherlands is based upon the principles of managed competition. The central idea is that private health insurers, competing within regulatory constraints, act as prudent buyers of healthcare on behalf of their enrolees (Enthoven and Van de Ven 2007). Competition amongst insurers is a crucial

element of the system as it provides insurers with incentives to serve their enrolees with the best price, quality, and service. Competition is driven by the fact that consumers, for whom health insurance is mandatory, are free to switch from insurer and/or health plan during a fixed, annual 6-weeks period at the end of each calendar year ('switching season'). Competition is, however, also strictly regulated to guarantee universal equal access to basic health services. Insurers are obliged to offer a legally defined comprehensive standardized benefit package, apply community rating (i.e. charge the same premium for the same health plan for all enrolees) and accept all applicants during the switching season (open enrolment). For healthcare that is not covered by the mandatory insurance plan, primarily dental care for adults and physical therapy, there is a separate market where supplementary insurance is offered. In 2020, supplementary insurance is bought by 83% of the Dutch population (3). All health insurers offer both basic and supplementary insurance, and people almost always buy both types of insurance from the same insurer.

An important challenge in competitive social health insurance markets with community-rated premiums and open enrolment is to minimise insurers' incentives for risk selection. If regulators are not able to do so, the market may face fairness issues or function inefficiently (Glazer and McGuire 2000). Insurers could, for example, refrain from contracting specific providers that are most important for patients who are financially unattractive. To counteract risk selection, an elaborate system of risk equalisation was developed. This system uses multiple characteristics to predict healthcare costs, such as age, gender, region, source of income and spending on healthcare during the previous years (Van Kleef, Eijkenaar, et al. 2019). The Dutch risk equalisation system is generally considered to be one of the most sophisticated in the world (McGuire and Van Kleef 2018). However, despite continuous improvements, evidence shows there are still segments of consumers that are profitable or unprofitable for an insurer. For example, chronic patients are known to be undercompensated while people opting for a voluntary deductible are overcompensated by the risk equalisation scheme (Van Kleef, Van Vliet, et al. 2019, Croes et al. 2018). Hence, it could be profitable for health insurers to use marketing tools for attracting or disinteresting certain segments of consumers. The Dutch Healthcare Authority (NZa), which is responsible for monitoring a proper functioning of the health insurance market, found indications of risk selection in the Dutch market for health insurance (Nederlandse Zorgautoriteit (NZa) 2019, 2016). It is, however, not clear whether this is the result of intentional behaviour of insurers or an unintended consequence of the current structuring and functioning of the Dutch health insurance market.

2.2 Market structure

To understand the way in which Dutch health insurers could use marketing techniques as a tool for risk selection, it is important to provide insight in the way the supply side

of the Dutch health insurance market is structured. In 2019, there were 11 insurance concerns active in the Dutch health insurance market. The four largest concerns had a combined market share of 85.9% (Nederlandse Zorgautoriteit (NZa) 2019). Most of the concerns consist of multiple health insurers – defined as separate risk-bearing legal entities with an autonomous licence to operate. In 2019, there were in total 24 health insurers in the Dutch market. The majority of these insurers have multiple insurance brands – defined as commercial identities without legal status – under which they engage with enrolees. In 2019 we counted in total 34 health insurance brands in the Dutch market. Four of these brands are publicly linked (by carrying the same name) to the largest health insurer within each of the 4 large insurance concerns (Achmea, VGZ, CZ and Menzis). In this paper, we call these brands 'main brands'. More often, brands belong to an insurer within one of the four major concerns but are not publicly linked to it. Sometimes, the connection with the concern or the insurer is visible to a consumer (called 'brand endorsement') but as often the link is not directly visible to a consumer. We call all these brands 'sub brands' and counted 17 of them in 2019. Finally, there are brands that link visibly or less visibly to one of the smaller insurance concerns. We call these brands 'small brands' and counted 13 in 2019. Most brands offer multiple health insurance plans (or contracts/policies). In total, during the switching season of 2019 consumers could choose between 55 health insurance plans (excluding supplementary insurance plans) (Nederlandse Zorgautoriteit (NZa) 2019, 2020).

Figure 1 gives a visual representation of the supply side of the health insurance market. For reasons of simplicity, we did not include underwriting constructions – in which a health insurer authorizes a third party to sell health insurance policies on its behalf – in this figure.

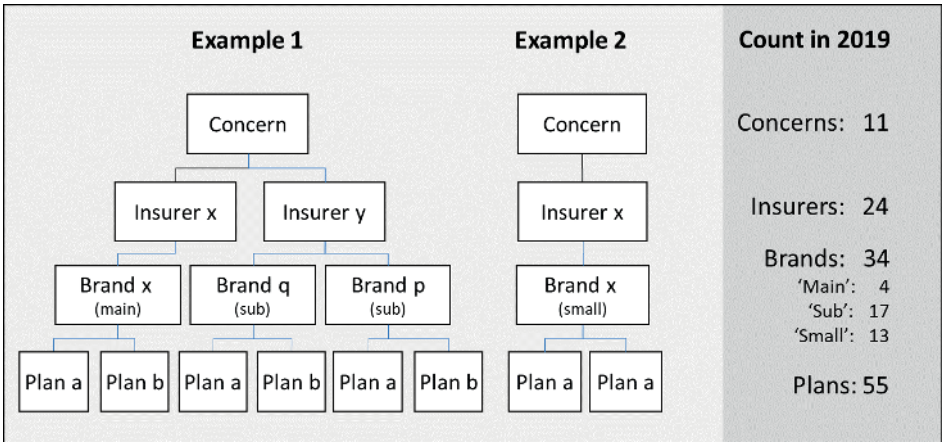

Figure 1: supply side structure in the Dutch health insurance market

Most insurers within the system are rooted in former sickness funds (Kroneman et al. 2016). As a result, the majority of them are not-for-profit and driven by a 'social mission' (Stolper et al. 2019). In order to support this social mission, the insurers jointly published an action plan called 'In perfect health ('Actieplan Kern-gezond') (ZN 2015). Among other things, they agreed that their social responsibility implies a restraint use of marketing instruments. However, the agreement did not include anything specific about target marketing. Overall, total spending on marketing decreased from almost €40 mln in 2014 to almost €30 mln in 2018 (Nederlandse Zorgautoriteit (NZa) 2019).

2.3 Target marketing

In this paper we define target marketing as the intentional application of marketing techniques to attract or disinterest specific segments of consumers. In principle, all marketing instruments – such as product, price, distribution, and promotion – can be used for target marketing. The scope of this study is limited to promotional activities of Dutch health insurers and their brands in public media. This includes traditional promotional items, like television commercials, and various forms of online promotion. The latter can be divided in 'search' (e.g. Google advertisements) and 'non search' (e.g. bannering) (Ratliff and Rubinfeld 2010). It also includes commercial websites of insurers that are used to sell health insurance policies. It excludes product adjustments, pricing strategies and distribution techniques, and also promotional items from independent distribution partners. It also excludes marketing activities directed at employers or other entities offering group contracts.

Given the context of the Dutch healthcare system, there are two reasons why a health insurer could choose to apply target marketing. The first reason is that insurers may want to accommodate specific preferences of targeted consumer segments. In that case, the insurer examines the preferences of consumers (segments) and translates these into additional services like patient guidance or into contractual arrangements with (specific) care providers. The latter could be about quality of care or about tailoring care to the specific needs of the target population (e.g. disease management programs). Insurers could also choose to contract all available healthcare providers to cater to the preferences of those consumers that value free choice of provider. Alternatively, insurers could choose to contract providers only restrictively to accommodate people who are primarily price sensitive. Either way, by doing so insurers improve their proposition towards consumers and thereby attract new enrolees and retain existing enrolees. Moreover, in the case of contractual arrangements based on specific needs, insurers could increase the efficiency of care since the care is better tailored to the needs of the target group, which could lead to lower cost. This way of target marketing aligns with the original intentions of the Dutch healthcare reform (Minister of Health 2004).

The second reason why insurers could engage in target marketing is to improve their financial results through risk selection. As discussed, even the sophisticated Dutch risk equalisation system is not able to eliminate all selection incentives for health insurers. Therefore, health insurers have a financial incentive to use marketing techniques to target favourable risk groups and avoid marketing efforts that may attract unfavourable risk groups. This way of target marketing is legally not prohibited but is certainly at odds with the original intention of the system of managed competition. More specifically, it undermines the solidarity that policy makers aimed to secure with open enrolment, community rating and risk equalisation (Minister of Health 2004). As noticed in several studies, health insurers may use supplementary insurance as a tool for risk selection in basic health insurance, although in practice only a few insurers applied selective underwriting for some supplementary insurance products (Willemse-Duijmelinck et al. 2017, Roos and Schut 2012). In addition to selective underwriting, health insurers could also use target marketing for supplementary insurance products to select favourable risk groups for basic insurance. However, since all health insurers offer basic and supplementary health insurance as a joint product, their marketing activities are not specifically focused on supplementary insurance. Still, they may highlight specific supplementary benefits like physical therapy.

3. RESEARCH METHODS

3.1 Design and methodology

Our study employed mixed methods to investigate if insurers use target marketing as a tool for risk selection. We started our research with a review of the literature to find out which consumer segments are known to be either financially favourable or unfavourable for insurers, given the prevailing Dutch risk equalisation system. Parallel, we collected a large sample of promotional materials during the switching season of 2019. Our research team collected this data by performing repeated scans of a multitude of online places (e.g. platforms like Facebook and Instagram). We made sure to visit both places known to be interesting for advertisers as well as random places, to avoid a selection bias. Additionally, we entered and proceeded in the online sales funnels of all insurers and their brands to allow digital cookies to be installed on our devices so that we would become eligible for online targeting and retargeting. Promotional material that appeared on our devices in between the regular scans, possibly as a result of (re) targeting, were also collected. We continued this process until no new information was discovered and therefore data saturation was achieved. Afterwards, we performed a 'member check' by asking all Dutch insurers if the collected expressions constituted a

representative sample of their marketing efforts and asked them to complement our material if needed.

Additionally, we conducted a number of semi-structured interviews with representatives from the four largest insurance concerns (covering 85.9% of the population) to gain insight in the context and the bigger picture behind the collected data (see Appendix 4.1 for the topic list). For these interviews, we selected people that were both directly responsible for marketing campaigns and senior enough to answer our questions on behalf of the organisation (mostly directors). Other insurers were given the opportunity to provide background information by email.

3.2 Analysis

To create a 'model' for assessing the collected promotional items, we filtered, grouped, and classified all findings from the literature study into a coherent list of possible target segments (see section 4.1 below). Next, we organised all promotional material obtained from the scans into a structured database and coded every item with some background information. We pairwise divided the database within our research group and performed an assessment of the two subsets of the promotional items on strong or weak indications of target marketing directed at the possible target segments that we identified. Hence, all researchers studied a selection of the promotional items that we collected and established per item if, in their eyes, the item visually or verbally addresses specific groups (for example, a visual of someone receiving medical treatment could be interpreted as an indication of marketing targeted at 'care users'). To avoid bias, all items were scored twice, each time by a different researcher. Results were compared and differences were discussed until consensus was reached.

The method that we used to analyse the interviews was based on the inductive 'thematic network approach' (Attride-Stirling 2001). All interviews were recorded and henceforth transcribed verbatim. Coding was conducted by the first and second author. Both authors coded all data so that all text was coded twice (resulting in 68% consensus). Afterwards, differences in coding were compared and discussed until 100% consensus was reached on the final codes to apply on the data. Based upon analysis of the coded data and ensuing group discussion within the research team, we identified the most important themes and patterns within the interview data.

4. RESULTS

4.1 Literature study

In the literature, we found 20 relevant publications about over- and undercompensated subgroups by the Dutch risk equalisation system (see Appendix 4.2). Publications that are known to be outdated given recent changes in the Dutch risk adjustment system were excluded from our review. In these publications, 30 groups of consumers were identified as financially attractive or unattractive from the perspective of an insurer (see Appendix 4.3. We classified these 30 groups on the following criteria: 1) type (financially favourable or not favourable from an insurers perspective), 2) group size (smaller or large than 10.000 possible enrolees), 3) targetability (indicating whether a marketing campaign directed on this group is reasonably conceivable) and 4) financial impact (less or more than €500 under– or overcompensation by the risk equalisation system per year person). Appendix 4.4 provides more details on the classification.

Groups that are both small and have a low financial impact were excluded given that, according to actuarial experts consulted by the research team, the potential benefits are too small and uncertain for insurers to engage in target marketing. Subgroups that do not qualify for target marketing were also excluded (see Appendix 4.5 for an explanation). This left us with 18 groups: 7 favourable and 11 non-favourable. Next, we clustered groups with similar characteristics into larger ones, resulting in 9 different segments which insurers can target to improve their financial results. We added the group 'care users' to this list because health insurers may want to attract people with specific diseases

Table 1: Overview of the selected segments for our analysis

	Group	Favourable/ Non-Favourable	Explanation
1	Healthy people	F	People with a good (self-reported) health
2	Low premium seekers	F	People that seek a health plan with a low premium
3	Season labourers	F	Foreigners that come to the Netherlands for season labour
4	Unhealthy people	NF	People with a bad (self-reported) health
5	Pregnant women	NF	Women who are expecting a child
6	Low-income people	NF	People with a less than median income
7	Free choice seekers	NF	People seeking a health plan without restrictions on the choice for a healthcare provider
8	Ethnic minorities	NF	People with a non-Dutch ethnic background
9	Frequent foreign care users	NF	People that frequently use care outside the Netherlands
10	Care users	NF	People that use healthcare on a regular basis

(e.g. diabetes) for which they have contracted specific care providers or arranged specific disease programs (e.g. diabetes management programs). We labelled this group as non-favourable given the large overlap with the groups that are undercompensated by the risk equalisation system. Table 1 provides an overview of the 10 selected subgroups for which we analysed all promotional materials collected.

4.2 Promotional material

In total, we collected 233 promotional items from Dutch health insurers during the switching season of 2019. Most of these items were collected by the research team. Additionally, some items were mentioned by the insurers in response to our member check. The 233 collected items originated from 27 different brands (of the existing 34 brands), encompassing the 4 main brands, 13 sub brands and 9 small brands. These brands belonged to 18 of the 25 insurers, covering 10 of the 11 concerns. Together, the brands of which we collected promotional items represent almost 90% of the market in terms of market share. Most of the brands which are absent in our sample are known not to engage in active marketing on a national scale, e.g. because the brand is too small or because the brand focusses on other ways of acquisition (such as tenders for group contracts). When asked, the insurers confirmed that the collected items constituted a representative sample of all the promotional material that they used during the switching season.

Our assessment of the promotional items resulted in 325 'indications' of target marketing, signalling either a strong or a weak indication of the promotional item being targeted at one of the 10 subgroups that we identified as financially favourable or unfavourable for insurers. Some promotional items appeared to be targeted at multiple subgroups. As an example: a television commercial can be targeted at both healthy and unhealthy people if multiple messages and/or visuals are combined within the commercial. Hence, in the table below the number of indications can exceed the number of items.

Table 2: Number of promotional items and number of indications of target marketing found per type of insurance label and type of item

	Type of brand (# items / # indications)			
Type of item	**Main**	**Small**	**Sub**	**Total**
Commercial	7 / 15	2 / 3	3 / 2	12 / 20
Online ads (non search)	11 / 14	62 / 92	68 / 90	141 / 196
Online ads (search)	8 / 4	12 / 8	36 / 47	56 / 59
Webpage	4 / 6	5 / 10	15 / 34	24 / 50
Total	*30 / 39*	*81 / 113*	*122 / 173*	*233 / 325*

Table 2 gives an overview of both the number of promotional items collected and the number of indications of target marketing found per type of marketing item. Weak and strong indications are combined in this table as this distinction did not provide meaningful additional insights. The analysis shows that most of the items that we collected are online ads (197 items, both search and non-search). This finding aligns with our expectations, since online marketing is known to be dominant in both number of marketing items and budget used. Only a small minority of 12 items are television commercials, which is logical given the high costs per item. Most indications for targeting are found amongst the non-search online ads (196 indications) and originate from small brands and sub brands.

Table 3 gives an overview of the number and percentage of indications found per possible target group for the various types of brands. This analysis shows that most of the indications of target marketing are targeted at favourable subgroups (64%). However, a considerable number of the indications were targeted at unfavourable subgroups (36%), of which 'free choice seekers' (17%) and 'care users' (8%) were the largest ones.

Especially sub brands primarily target favourable subgroups (68%) whereas main brands divide their attention evenly between favourable and unfavourable subgroups (49% vs. 51%). This effect is even more pronounced if the subgroup 'free choice seekers' is left out of the analysis. An argument for leaving out this subgroup could be that some insurers seem to seek publicity on this theme out of principle (i.e. proclaiming adherence to the principle of guaranteeing unrestricted free provider choice rather

Table 3: Number and percentage of indications found for target marketing per type of brand

			Type of brand (# items / % indications)			
		Groups	Main	Small	Sub	Total
Favourable	1	Healthy people	9 / 23%	41 / 36%	42 / 24%	92 / 28%
	2	People seeking a low premium	10 / 26%	32 / 28%	75 / 43%	117 / 36%
	3	Season labourers	0 / 0%	0 / 0%	0 / 0%	0 / 0%
		Total favourable	*19 / 49%*	*73 / 65%*	*117 / 68%*	*209 / 64%*
Unfavourable	4	Unhealthy people	6 / 15%	4 / 4%	0 / 0%	10 / 3%
	5	Pregnants	4 / 10%	1 / 1%	15 / 9%	20 / 6%
	6	Low incomes	1 / 3%	2 / 2%	0 / 0%	3 / 1%
	7	Free choice seekers	1 / 3%	20 / 18%	35 / 20%	56 / 17%
	8	Different ethnic background	1 / 3%	0 / 0%	0 / 0%	1 / 0%
	9	Users of foreign care	0 / 0%	0 / 0%	0 / 0%	0 / 0%
	10	Care users	7 / 18%	13 / 12%	6 / 3%	26 / 8%
		Total unfavourable	*20 / 51%*	*40 / 35%*	*56 / 32%*	*116 / 36%*
		Total	**39 / 100%**	**113 / 100%**	**173 / 100%**	**325 / 100%**

than thematically building marketing campaigns around this proposition) (Stolper et al. 2019). When excluding this subgroup, 85% of the indications found for sub brands target favourable subgroups, whereas the indications found for main brands remain evenly divided between favourable and unfavourable groups. Further analysis of sub brands shows that this effect is mostly the result of promotional material targeted at 'price seekers' (43%).

Small brands take a position in between sub - and main brands, being less strongly targeted at favourable subgroups than sub brands but more than main brands.

4.3 Interviews

We conducted 4 interviews, each with 2 professionals from one of the 4 largest Dutch health insurance concerns. The 8 participants were responsible or accountable for marketing campaigns for one or more of the brands of their insurer at the time of the interview. Asked for their view on target marketing, all the participants explained that targeting is an inherent aspect of marketing. Marketeers, they argued, create value propositions. These value propositions are based upon the preferences of specific groups of consumers. Naturally, when these value propositions are brought to the market, the marketing efforts will be directed at the groups for which these value propositions are created. In the words of one of the participants:

"The advantage of target marketing is that you can offer something that is of interest for the consumers. (…) It is how society works nowadays, people expect you to know them." - Participant 2

Participants also strongly claimed that target marketing is not used to focus on subgroups that are financially attractive for an insurer, although some insurers admit that targeting financially unfavourable subgroups is not likely either. Yet, most participants indicated that insurers strive towards a customer base that reflects the market average and that this ambition influences their campaigns. As one of the participants put it:

"We do not select specific risk groups and accept everyone, that is how the Dutch system is supposed to work. (…). Of course, we look to the value of enrolees but only to strive towards a balanced customer base, one that reflects society." – Participant 1

Finally, participants indicated that marketing expressions during the annual switching season are not representative for their overall marketing strategy. Marketing efforts during the switching season are tailored towards switchers and thus towards price-seekers, participants explained. But a large and growing part of the marketing efforts of insurers

takes place out-of-season and is not focussed on these groups. One of the participants articulated this theme as follows:

"There is a strong shift towards out-of-season communication in which we focus on our social mission. This communication aims to convey the essence of our strategy which is to improve quality, cost containment and accessibility of care." – Participant 3

Overall, the different interviews provide a remarkably consistent picture of the views of the four largest insurers, suggesting that they reason in similar ways about the rationale and moral boundaries of target marketing.

5. DISCUSSION

5.1 Key findings

Our findings indicate that, based on the 2019 switching season, marketing efforts by Dutch health insurers are targeted at both financially favourable and unfavourable consumer groups. The largest share of promotional material is targeted at financially attractive groups, which indicates that risk selection may be an important driver for insurers' target marketing efforts. However, among the targeted favourable groups, the group of 'low price seekers' is the most prominent one. As switchers in the Dutch health insurance market are typically very price sensitive, since price is the main driver for consumers to switch health insurers (Duijmelinck et al. 2015, CBS 2021), it is not clear that risk selection is the primary motive. An insurer may also focus on 'low price seekers' in order to increase its market share, rather than to attract favourable risks.

Interestingly, our results also show that the four largest insurers primarily use their sub brands for attracting financially favourable groups. This suggests that the more visible main brands are used to display the 'social character' of insurers (Stolper et al. 2019), paying attention to both favourable and unfavourable groups, whereas the sub brands are used as strategic vehicles to improve competitive positions.

Another interesting finding is that several insurers also direct substantive marketing efforts at groups that tend to be undercompensated by the risk equalisation scheme. The reasons why insurers do so may differ per target group and per insurer. For example, a significant amount of promotional material is targeted at the unfavourable subgroup of 'free choice seekers'. The rationale for this may be threefold. First, people who are attached to free provider choice may be willing to pay a higher premium, as health plans with unrestricted provider networks are typically more expensive. Hence, attracting this

group may be still be beneficial for the insurer despite being undercompensated by the risk equalisation scheme. Second, some small insurers and some sub brands of large insurance concerns seem to use these marketing efforts to emphasize that guaranteeing free provider choice is key to their mission as an insurer. Third, Insurers could also target free choice seekers because unrestricted provider choice is valued by a substantial subgroup of the population (CBS 2021). As this subgroup appears to be willing to pay a higher premium for policies with free provider choice, this may also compensate (part of) the predictable losses on this subgroup.

When asked during the interviews, all insurers argue that they do not intend to engage in risk selection. However, they do acknowledge being aware of the financial consequences of attracting or disinteresting certain groups of consumers. They indicate that they strive towards a balanced customer base, one that reflects the demographics of the total society. Additionally, they stress that their marketing behaviour during the annual switching season is different compared to their off-season marketing behaviour.

5.2 Strengths and limitations

The most important strength of our research is that we directly studied actual behaviour of insurers rather than indirectly through consulting insurers or experts on risk selection. To date, systematic research and empirical evidence about target marketing by health insurers is lacking. Another strength is our focus on the 'switching season', since particularly during this period the stakes are high.

The most important limitation of our study is that we only studied one marketing tool (public advertisement) rather than the full array of marketing tools that insurers can use. A second limitation is that we cannot draw conclusions about the impact of the marketing material on the targeted groups, because information about the intensity of the use of the different promotional items is lacking. In our study all promotional items are treated as equally important, whereas in practice the impact of promotional items may differ depending on the media used and the frequency with which the promotional items are deployed. A third limitation is that we focused on the marketing efforts targeted at buyers of individual contracts while a substantial part of the market consists of employer-based group contracts, which are typically targeted 'behind the scenes'. Hence, we could not observe whether insurers targeted specific employers that are likely to have employees with a favourable risk profile. A fourth potential limitation is that participants could have given strategic (politically correct) answers. Of course, we were well-aware of this potential bias when conducting the interviews and interpreting the answers by the respondents. By critically comparing the different answers to the same questions by the four pairs of respondents we tried to further minimize this

potential bias. Finally, our subjective interpretation of the marketing material could be considered a weakness, although we mitigated this by having two researchers assess the material separately after which consensus was sought by extensive discussion if the assessments differed.

6. POLICY IMPLICATIONS

Our main finding that only a minority of insurers' promotional items are targeted at users of care suggests that insurers are hesitant to attract this group. This is at odds with the original intention of the Dutch healthcare system that especially for those people insurers should be incentivised to act as prudent buyers of healthcare (Van der Ven 2021). A plausible reason for the current state of affairs is that this group is likely to be unprofitable for health insurance given the prevailing system of risk equalisation. Hence, insurers have limited financial incentives to distinguish themselves towards consumers by improving (chronic) care because this would make them particularly attractive for this subgroup. This implies that health insurers are not effectively stimulated to fulfil the role of prudent buyer of care as originally intended. Key to solving this problem is to remove the financial barriers for insurers to attract people with (chronic) health problems. To that end the risk equalisation system has to be improved to make people with chronic diseases no longer financially unattractive for health insurers. Promising ways to realize this are the use innovative regression techniques, and high-risk pooling or ex-post compensations for high-risk groups (Van Kleef et al. 2020, McGuire et al. 2020, Van Barneveld et al. 1998). In addition, insurers could come to an agreement about the proper use of marketing instruments. To this end, they could expand their current action plan 'In perfect health' ('Actieplan Kern-gezond') (ZN 2015) by adopting guidelines on acceptable target marketing practices. Alternatively – or even better: additionally – the Dutch healthcare authority could issue guidelines on 'good marketing practices'. Finally, consumers should be made more sensitive to the quality of healthcare providers contracted by health insurers. To this end, the publicly available information on quality of healthcare needs to be improved. This would also make it easier for health insurers to distinguish themselves by offering high quality health plans so that competition in the health insurance market will be less focused on lowering premiums only.

Chapter 5

Cooperation amongst insurers on enhancing quality of care: precondition or substitute for competition?

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ABSTRACT

In healthcare systems based upon managed competition, insurers are expected to negotiate with providers about price and quality of care. The Dutch experience, however, shows that quality plays a limited role in insurer-provider negotiations. It has been suggested that this is partly due to a lack of cooperation among insurers. This raises the question whether cooperation amongst insurers is a precondition or a substitute for quality-based competition. To answer this question, we mapped insurers' cooperating activities to enhance quality of care using a six-stage continuum. The first three stages (defining, designing and measuring quality indicators) may enhance competition, whereas the next three stages (setting benchmarks, steering patients and selective contracting) may reduce it. We investigated which types of insurer cooperation currently take place in the Netherlands. Additionally, we organised focus groups among insurers, providers and other stakeholders to examine their perceptions on insurer cooperation. We find that all stakeholders see advantages of cooperation amongst insurers in the first stages of the continuum and sometimes cooperate in this domain. Cooperation in the next stages is almost absent and more controversial because without adequate quality information it is difficult to assess whether the benefits outweigh the cost associated with reduced competition.

1. INTRODUCTION

In countries with a healthcare system based upon managed competition (e.g. Germany, Switzerland and the Netherlands), insurers are expected to act as prudent buyers of care on behalf of their enrolees. Consumers can choose between competing insurers which are expected to contract high quality healthcare at the lowest price possible in order to maintain or increase their market shares.

The Netherlands is widely perceived as a frontrunner in implementing managed competition in healthcare (Van de Ven et al. 2013b). Studying the role of health insurers in the Netherlands could therefore contribute to a deeper understanding of how the model of managed competition works in practice. Several studies find that quality plays a limited role in insurer-provider negotiations and consumer choices in the Dutch healthcare system (OECD/European Observatory on Health Systems and Policies 2017, Maarse et al. 2016, Ruwaard et al. 2014, Nederlandse Zorgautoriteit (NZa) 2014, Van Kleef et al. 2014, KPMG 2014, Stolper et al. 2019, Holst 2019). Two different types of reasons are proposed for this. First, competition between insurers focuses on price rather than quality of care caused by (a combination of) a lack of reliable quality information, a lack of trust in insurers and/or other market imperfections (e.g. inadequate risk adjustment). Second, competition hinders insurers in steering on quality because it counteracts necessary coordination and discourages investments in quality due to potential free-rider problems, while competition regulation (i.e. antitrust law) limits the legal possibilities for cooperation among insurers.

The first type of reasons posits that insurer competition is primarily focused on price, which may change when insurers and consumers become more aware and sensitive to differences in quality of care. When quality improvements result in lower costs, for instance because of better coordination of care or a reduction of unnecessary treatments, this may not be a problem. Such improvements will then be fostered by price competition. However, quality improvements that are associated with higher costs may be impeded when on the health insurance market price, rather than quality differences, is and remains consumers' main choice determinant. The key problem here is that an important precondition for effective quality competition – the presence of comparable and reliable public information on quality – is not yet fulfilled (Van de Ven et al. 2013b, KPMG 2014). Fulfilling this precondition, however, may well require more cooperation among insurers, e.g. by jointly developing and measuring quality indicators and by requiring the same quality information from healthcare providers. Notice that an extreme way to encourage quality competition is to eliminate the possibility of price competition by regulating prices (Gaynor 2007). This radical option, however, is beyond the scope of

this paper since our study focuses on the current Dutch healthcare system with insurer-provider price negotiations.

The second type of reasons posits that competition on quality by insurers can be counterproductive. To improve quality, insurers should cooperate rather than compete on quality of care, e.g. by jointly setting quality benchmarks or by jointly investing in quality improvement. If this is true, insurer competition may not only obstruct cooperation on quality improvements that result in higher costs but also those that result in lower costs.

From both reasons it follows that cooperation between insurers could contribute to more focus on quality, although the extent and type of cooperation is likely to differ. The underlying question is whether insurer cooperation on quality is a precondition for quality-based competition (as suggested by the first reason) or a substitute for it (as suggested by the second reason).

In this paper, we examine (i) how the various stakeholders in the Dutch system of managed competition perceive the need for cooperation among insurers to enhance quality of care, and (ii) whether and how Dutch health insurers currently cooperate to realize better quality of care. To this end, representatives of the following stakeholders were invited to participate in a qualitative study: health insurers, healthcare providers, patients, and the government (i.e. the Ministry of Health Welfare and Sports, the Authority for Consumers & Markets and the Dutch Healthcare Authority). In addition, we investigated which initiatives are already jointly undertaken by health insurers to enhance quality of care in daily practice.

Our study contributes to the literature by enriching the understanding of health insurers' role and behaviour in a system of managed competition when it comes to enhancing quality of care. Despite the large empirical literature on the relationship between provider competition and quality of care (see for a review of this literature Sivey and Chen, 2019), to date the empirical evidence on the relationship between insurer competition and quality of care is lacking. Hence, the main contribution of our paper is to show (i) how the various stakeholders perceive this relationship and (ii) in which areas they expect cooperation rather than competition might be preferred. The results provide direct insight in the perceptions of the different players within the system. Furthermore, our findings may be relevant for other countries in which insurers or other third-party payers play a role in steering on quality of care because they may assist policymakers in these countries to make better informed decisions about whether or not competition and cooperation among payers should be permitted and, if so, under which conditions.

In the next section, we will discuss the background of the Dutch healthcare system and the role of competition and cooperation within this system. In the third section, we categorize and rank the various activities by insurers to enhance quality of care, and discuss the pros and cons of insurer cooperation for each type of activity and whether this could be harmful to competition. The fourth section discusses our research methods and the following two sections present the results of our study. In the final section, we reflect on our findings and discuss possible implications.

2. BACKGROUND AND CONTEXT

In 2006, the Netherlands introduced a major healthcare reform based upon the principles of managed competition. Central to the reform is the notion that private health insurers, competing within public constraints, act as prudent buyers of healthcare on behalf of their enrolees (Enthoven and Van de Ven 2007). In this system, the government determines a standardized benefit package that insurers are obliged to offer. Selective contracting of healthcare providers is allowed, as long as insurers guarantee that sufficient care is provided. Once a year, during a six week period, consumers can switch from one insurer to another. Insurers are obliged to accept all applicants (open enrolment) and have to charge the same premium to everyone with the same health plan (community rating). There is a sophisticated system for risk equalisation in place that aims to minimise insurers' incentive for risk selection by compensating them ex ante for the different risk profiles of their enrolees (Van de Ven and Schut 2009, Enthoven and Van de Ven 2007, Minister of Health 2004). In 2018, there are 23 health insurers active in the Netherlands. These insurers were part of ten different independent companies. The four largest health insurance companies have a combined market share of 86,5 per cent (Nederlandse Zorgautoriteit (NZa) 2018).

Competition amongst insurers is considered to be a crucial element of the system as it has to incentivize insurers to offer health plans with the best possible price, quality and service (Van de Ven 1996). This does, however, not rule out the possibility of cooperation. Under the Dutch Competition Act, which is based on European Competition Law, agreements between undertakings – including health insurers – are prohibited when these "have the intention to or will result in hindrance, impediment or distortion of competition on the Dutch market or on a part thereof." The Dutch Authority for Consumers & Markets (ACM), who as an independent regulator is responsible for enforcing the rules for fair competition, has confirmed that despite the cartel prohibition certain forms of cooperation are acceptable in a market-based healthcare system. As also explained by the ACM, even anticompetitive cooperative agreements may sometimes be

allowed. Generally this will be the case when the direct benefits outweigh the necessary restrictions on competition, a fair share of those benefits is passed on to consumers, and competition is not completely eliminated.

3. COMPETITION AND COOPERATION ON QUALITY

There is evidence from other markets that cooperation and competition can exist alongside each other in a harmonious way. Bouncken et al. reviewed 89 papers that studied the coexistence of competition and cooperation in different markets and contexts. These cases show that it is possible for competing actors to cooperate on some domains to create value and simultaneously compete on other domains to capitalize on that value (Bouncken et al. 2015). There are, however, no studies of this concept within a healthcare system based upon the principles of managed competition.

To assess which forms of cooperation by insurers to enhance quality of care would fit in a system of managed competition we need to identify which types of cooperation are potentially harmful to competition. To do so, we ranked various activities on which cooperation among insurers might be useful to enhance quality of care using a six-stage continuum in which each stage preferably (though not necessarily) requires the activities of the previous one (see figure 1).

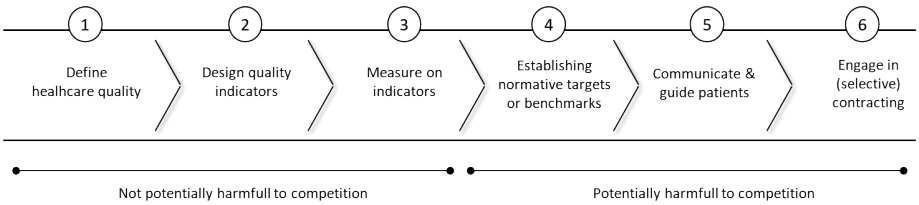

Figure 1. Continuum of activities on which insurers might cooperate to enhance quality of care

Based upon the Dutch and European competition law and standard enforcement practice (as discussed in section 2) joint activities by insurers on the first three stages are not seen as potentially harmful to competition. The Dutch competition authority even explicitly stated that these types of cooperation are acceptable and even beneficial for effective competition in the healthcare system (Nederlandse Mededingingsautoriteit (NMa) 2009). Perceived advantages of these types of cooperation are increased transparency, lower costs (no redundancy), more coherence and more efficiency through better informed consumer choice.

From stage four onwards, joint activities by insurers to enhance quality may become increasingly harmful to competition. For instance, if insurers jointly decide on selective contracting (stage six), non-contracted providers may be effectively excluded from the market. Jointly establishing benchmarks (stage four) or jointly guiding patients to specific preferred providers (stage five), may also effectively reduce the scope for healthcare providers to compete. By these joint activities health insurers may obtain monopsony power, which may eventually reduce quality of care (Herndon 2002). Hence, cooperation amongst insurers in this area (stage 4-6) could lead to suboptimal outcomes because an important driver to improve quality is neutralised.

On the other hand, cooperation in this area may also have meaningful advantages, such as: (i) the reinforcement of insurers' bargaining power; (ii) a higher willingness among insurers to invest in quality improvement due to a reduction of free-rider problems (given that providers typically do not want to discriminate between patients with different insurer contracts); (iii) more transparency (e.g. uniform benchmarks) and a lower administrative burden (e.g. uniform contracting and registration requirements). Additionally, cooperation could mitigate the reputational risks for insurers that actively try to enhance quality of care by setting benchmarks, steering patients or selective contracting. Reputational risk is found to be a negative incentive for insurers to steer on quality (Stolper et al. 2017). If insurers jointly and simultaneously steer on quality, they share these reputational risks, which may increase their willingness to engage in these activities.

Hence, allowing or encouraging cooperation in this domain requires trade off the potential advantages against the potential disadvantages. In specific guidelines for the healthcare sector (Nederlandse Mededingingsautoriteit (NMa) 2010, 2004, Nederlandse zorgautoriteit (NZa) 2010, Autoriteit Consument & Markt (ACM) 2015b, 2016), the Dutch competition authority clarifies that an assessment of the overall effect on consumers is crucial for its decisions whether or not to allow such forms of cooperation. A few cases have indeed been assessed by the competition authority (Autoriteit Consument & Markt (ACM) 2016, 2015a). An example is the evaluation of an insurers' plan for jointly purchasing emergency care. The competition authority judged that "without independent and well supported quality standards for emergency care, insurers are not able to show that the advantages of concentrating emergency care outweigh the disadvantages for patients" (Autoriteit Consument & Markt (ACM) 2014). This judgement shows that the competition authority is willing to make the required trade-off, and thus willing to approve specific forms of cooperation even if they may reduce competition.

4. METHODS AND DATA ANALYSIS

4.1 Design, participant recruitment and focus group methodology

To investigate what insurers, providers and other stakeholders think about cooperation amongst insurers on enhancing quality of care, we organised three different focus groups. One with insurers, one with providers and one with other stakeholders (i.e. representatives from the patient association, the Ministry of Health, and the competition and healthcare authorities). The aim of the focus group with other stakeholders was to include the perspective of 'third parties'; organisations that do not buy or deliver care but have an interest in the outcome of the contracting process between insurers and providers. We opted for focus groups because of the exploratory nature of our study; we expected that this set up would engender a broad discussion in which opposing and supporting ideas would be debated (Pope et al. 2002).

For the first focus groups, we invited the four large insurers and a selection of the small insurers, covering more than 90 percent of the Dutch population. For the second focus group, we invited representatives from 13 provider associations representing the most important provider types (e.g. academic and general hospitals, medical specialists, GPs, etc.). Invitations for the third focus group were directed at the national patient association, the Ministry of Health and two regulators (ACM as the competition authority, and NZa as the healthcare authority). Participants of the focus groups were chosen based upon their position and years of relevant experience. We used snowball sampling to extend the initial list of participants, which was based upon expert selection.

The set-up of the focus groups was semi structured and the duration was around two hours for each focus group. We designed a question list to structure the focus group discussions (see Appendix 5.1) but allowed the participants to deviate from these questions. There were two moderators per focus groups, both members of our research team. The other members of our research team were present as observer.

The focus groups also provided a first selection of current examples of cooperation between insurers on quality of care. To complete this list of cases, we performed an additional document scan on the publications of the insurers' procurement policy. These are available on their websites. We searched the documents for key words related to cooperation amongst insurers in order to find new examples of cooperation. To deepen our understanding of the examples found, we organised follow up telephone interviews with a small selection of the same participants that were invited for the focus groups. We continued this process until no more new examples of cooperation were found.

4.2 Analysis

We used the 'thematic network approach' of Attride-Stirling (Attride-Stirling, 2001) for analysis of the data. During the first step, all data from the focus groups was transcribed verbatim. We coded the text, using ATLAS.ti as research software. Prior to the coding process, the research team set up a code book based upon initial assessment of the relevant topics. We applied an iterative and circular method during the coding process in order to adjust or supplement the code book where needed, and to ensure full data saturation. Coding was executed by a team of four researchers that all coded half of the data. In this way, all data was coded twice, each time by a different researcher. Comparison of results and the ensuing discussion produced consensus on the definite codes that were applied to the data. During the next steps, we clustered the codes into broad categories. Continuous analysis and extensive dialogue amongst the researchers provided the basis for the classification in the different categories. To assess the relative importance of all the different notions that emerged, we counted the number of codes and groups of codes for the three groups of participants and for all the stakeholders together.

After our initial analyses, we performed a member check to improve the internal validity of our study. To do so, we distributed the results of our analyses to the participants of the focus groups. Each participant only received the results of the focus group that he or she participated in. The participants were asked to review our results and to indicate if our representation of their perspective was accurate. In this way, we were able to assess if our interpretation of the perceptions of our participants was correct and complete (Lewis 2015).

The results of the document scan were directly translated into an overview of current examples of cooperation amongst insurers on quality. This overview was distributed amongst all participants of our focus groups as a second member check. Participants were asked to indicate if the overview was, in their eyes, complete and accurate.

4.3 Strengths and limitations

The most important strength of our research is that we studied the perceptions of the participants and combined this with an overview of the current state of affairs. Although perceptions do not always reflect reality they are very real in their consequences. An additional strength is that our study reflects on the problem from different perspectives, including those of the most important stakeholders. A first possible limitation of our study is that participants might be inclined to use the focus groups to send a message to other stakeholders. In that case, they could have been giving strategic answers to our questions. Because of this reason, we chose not to mix up the different stakeholders in the focus groups. Furthermore, we tried to minimise bias by tailoring our questions

towards a system perspective. A second limitation is that not all quality initiatives are described in publicly accessible documents and/or that our participants are not fully aware of all current initiatives to jointly steer on quality. We minimised this risk by carefully selecting participants for the telephone interviews and the second member check, based upon their knowledge of and involvement in quality initiatives. A third possible limitation is that the focus group of providers was composed of people from the various provider associations instead of practising providers. We made this choice because people from thes providers associations may be more representative for the large group of providers than a small – potentially biased – selection of practising providers. Nevertheless, we cannot be sure that the opinions of people from provider assocations best reflect the (common) opinion of individual providers.

5. RESULTS OF THE FOCUS GROUP DISCUSSIONS

Most invited parties were willing and able to participate in the focus group meetings. The insurer focus group included four participants, representing three of the four large insurers and one small insurer (with a combined market share of 66 per cent). The provider focus group consisted of six participants from major provider associations. The focus group with other stakeholders consisted of seven participants from the competition authority, healthcare authority, the Ministry of Health and the national patient association. For the investigation of the current joint initiatives by insurers to enhance quality of care, we scanned 18 publicly accessible procurement policy documents and conducted two telephone interviews. In total, 18 participants representing 15 different organisations participated in our study. Additionally, ten participants responded to one or both of the member checks.

5.1 Thematic analysis

Following the approach outlined above, we identified 11 arguments why insurers should or should not cooperate to improve quality of care. However, some of the arguments against insurer cooperation on quality improvement were not directed at cooperation but rather at insurers interfering with quality as such (regardless of cooperation). We therefore made a distinction between arguments for and against insurer cooperation on quality and arguments against insurer interference with quality. Table 1 provides an overview of the identified arguments.

For each focus group, Table 2 provides an overview of the relative frequencies with which the different arguments were mentioned by the participants. The overall picture is that the different stakeholders have different viewpoints when it comes to interference on

Table 1. Arguments why insurers should our should not (cooperate to) improve quality of healthcare

	Argument	Explanation
Arguments for cooperation on quality by insurers	Uniformity	Cooperation could create uniformity of quality requirements for providers, i.a. resulting in a reduction of the administrative burden for healthcare providers.
	Quality Improvement	Cooperation could improve quality of care
	No competition	Quality of care is not suitable for competition
Arguments against cooperation on quality by insurers	Diminishes distinctiveness	Cooperation diminishes the opportunities for insurers to distinguish themselves
	Causes delay	Cooperation can slow down the process of quality improvement
	Legal barriers	Legal barriers prevent cooperation on quality by insurers
Arguments against interference on quality by insurers	Inappropriate use	Insurers inappropriately use quality information as a contracting instrument instead of as an instrument to improve quality of care
	Lack of knowledge	Insurers lack the knowledge to steer on quality of care
	Market not ready	There are too many barriers in the market (e.g. lack of transparency on quality of care) that need to be solved first
	Inappropriate role	It is not the role of the insurers to steer on quality
	Damages reputation	Interfering with quality of healthcare as such damages the reputation of insurers

Table 2. Relative frequencies in which categories of arguments were mentioned per focus group (in percentages and total also in absolute numbers)

Focus group	Arguments for cooperation	Arguments against cooperation	Arguments against interference	Total percentage	Total # of quotes
Insurers	65	22	13	100	86
Providers	45	9	45	100	55
Other stakeholders	35	15	50	100	34
Mean	49	15	36	100	175

quality and cooperation. Health insurers are clearly more positive about cooperation and interference than the other stakeholders. Providers – and to a lesser extent the other stakeholders - raised very few arguments against cooperation but oscillated between arguments for cooperation and arguments against quality interference as such.

5.2 Arguments in favour of cooperation

All focus groups extensively discussed arguments for cooperation. Table 3 provides a detailed overview of the frequency in which the various arguments were mentioned by each group. As this table shows, uniformity of standards is by far the most frequently mentioned argument in favour of cooperation. Most providers currently experience that individual insurers have their own perspective on quality and develop their own

concepts and projects to improve quality. The resulting variety and multitude in quality requirements bothers providers. In the words of one of the participants:

"Every insurance company has its own toy, its own thing. There is no coordination whatsoever (…) everyone has its own project" – Participant 10 (provider focus group)

The idea is that cooperation amongst insurers could create more uniformity of quality requirements and initiatives. In this way, providers do not have to deal with an unmanageable variety of approaches but can work together with all insurers in a single integrated approach to improve quality of care. Especially providers emphasized this argument, which does not come as a surprise because they are most troubled by the current lack of coordination. However, insurers and other stakeholders also came up with this argument. They recognise the limitation of the current way of working and acknowledge that cooperation could have beneficial effects for all parties involved. Additionally, they made the argument that uniformity could be more efficient because duplicity ("reinventing the wheel") could be avoided.

Apart from uniformity, especially insurers see various other reasons why they should cooperate. Two arguments were broadly discussed during their focus group; quality improvement and the non-competitive nature of quality of care. The first argument concerns the idea that cooperation amongst insurers would in the end lead to better quality of care. The participating insurers expressed a sincere belief that cooperation would speed up the process of quality improvement. The second argument that some insurers brought forward is that quality of care is not something that is suitable to compete on. Quality of contracted care is in their view not a parameter that consumers include in their health plan choice, and providers are not willing to differentiate quality of care depending on the health plan chosen by their patients. Apart from that, insurers also express uneasiness themselves with the idea of competition on quality of care. They feel that improvements of quality of care should be beneficial for all patients and not only for their own customers. Hence, improving quality of care is not primarily done for competitive advantages but for the benefit of all:

"It has social relevance, so it is not something you want to compete on until the very end" – Participant 4 (insurer focus group)

5.3 Arguments against cooperation

We find that especially insurers mention arguments against cooperation (see Table 3), while providers and other stakeholders focus more on arguments against interference with quality as such (which we will discuss in section 5.4). Insurers mention three dif-

Table 3. Relative frequencies in which arguments were mentioned (in percentages)

	Arguments	Insurers	Providers	Other stakeholders	Mean
For cooperation	Uniformity of standards	28	38	29	32
	Quality improvement	22	7	3	11
	No competition	15	0	3	6
	Total	65	45	35	49
Against cooperation	Causes delay	3	0	0	1
	Diminishes distinctiveness	7	0	6	4
	Legal barriers	12	9	9	10
	Total	22	9	15	15
Against interference	Inappropriate use	0	16	0	5
	Damages reputation	7	0	6	4
	Market not ready	0	9	35	15
	Role uncertainty	6	20	9	12
	Total	13	45	50	36

ferent reasons against cooperation. The most important drawback of cooperation that insurers – and to a lesser extent providers and other stakeholders – perceive is the legal uncertainty about what types of cooperation will (not) be allowed by the competition authority. Insurers argue that in daily practice this uncertainty poses a significant barrier because the competition authority does not provide clear and unambiguous answers about the acceptability of initiatives to cooperate. This is why insurers refrain to cooperate in practice:

"They (regulators, ed.) never provide clarity. That is the whole problem. In fact they say: 'Sure, you can cooperate. But if a healthcare provider makes an objection, we don't know what will happen'. They simplify the whole thing, that's the point. – Participant 3 (insurer focus group)

Providers added that they sometimes feel that insurers use this argument as an excuse for the lack of cooperation:

"I think that many obstacles – whether they are real or not - are being sought in anti-competitive legislation" – Participant 7 (provider focus group)

The argument that cooperation may diminish insurers' distinctiveness and therefore their incentives to improve quality of care was only marginally discussed. Insurers and other stakeholders mentioned the argument but did not reflect extensively on the idea. Therefore, this does not seem to be perceived as a strong argument against cooperation.

5.4 Arguments against interference

When asked why insurers should not cooperate, providers and other stakeholders frequently offered arguments against insurers' interference with quality as such (see Table 3 for frequencies). Most of the time, this shift of focus happened without participants explicitly recognising this.

For several participants from the provider group, the main reason for their objections against attempts by insurers to enhance quality of care is that they perceive this – almost by definition – as an inappropriate role for insurers. In their view, quality of care is something that concerns medical professionals and insurers have no part in it:

"The question is whether the health insurer should interfere with creating outcome indicators. That is something that medical professionals should do" – Participant 7 (provider focus group)

Additionally, several participants of the provider group expressed fear that insurers will inappropriately use quality information as a contracting instrument. For these participants, this has nothing to do with improving quality of care:

"Being judged on indicators that say little about good care, but more about whether you have met certain values. That is what is happening" – Participant 6 (provider focus group)

Participants from the group with other stakeholders also raised arguments against quality interference by insurers as such, although based on a different notion. In their perception, the market is not yet ready for insurers to steer on quality because important preconditions need to be fulfilled before insurers can effectively fulfil this role. The most important condition mentioned is transparency of quality. They argued that only when there is consensus on and access to reliable quality information, insurers can effectively steer on quality of care.

6. RESULTS OF THE INVENTORY OF INSURER COOPERATION

In addition to our investigation of the perceptions of various stakeholders, we also examined whether and how insurers actually cooperate in enhancing quality of care. Based upon the discussions in the focus groups, a scan and analysis of available procurement policy documents, and a subsequent check and feedback by participants from the focus groups, we identified 14 initiatives in which health insurers currently (intend to) cooperate to enhance quality of care. Figure 2 provides an overview of these initiatives plotted

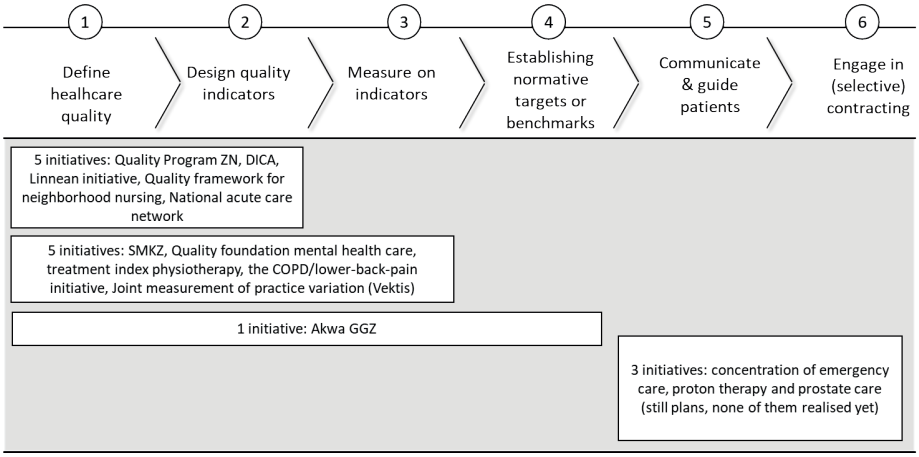

Figure 2. Number and examples of initiatives in which insurers cooperate to enhance quality of care plotted on the continuum of joint activities

on the continuum of (joint) activities to enhance quality of care that we discussed in section 2. Appendix 5.2 provides a more detailed overview of all identified initiatives. Please note that these initiatives are sometimes developed in close collaboration with the healthcare providers.

Most initiatives are part of the first stages in the continuum, either focusing on developing quality indicators (five initiatives) or on developing and measuring quality indicators (also five initiatives). We found only four initiatives that aim to go further (stage 4-6), by jointly establishing normative targets, guiding patients and/or engaging in selective contracting. From these initiatives, only one is actually realized. This initiative still largely focuses on the first three stages but also includes stage 4 since it establishes benchmarks.

The other three initiatives involve the most extensive forms of cooperation and all aim at a concentration of expensive and complex treatments. None of these three initiatives have been implemented yet and all have been subject to uncertainty about legal acceptability. In the first case - concerning emergency care - the competition authority unilaterally decided to publish a negative evaluation of the proposed insurer cooperation. The main argument was that insurers could not substantiate the claimed benefits of the concentration with adequate quality data and missed support of the medical scientific associations (Autoriteit Consument & Markt (ACM) 2014). In the case of proton therapy, the insurers requested an informal judgement of their intention to jointly contract only one provider instead of separately negotiating terms with the four providers that intended to invest in proton therapy. Their most important argument was more cost- than

quality driven and stated that separate negotiations would result in excess capacity of this expensive treatment in the Dutch market. The competition authority could not find confirmation for this argument, concluded that the disadvantages outweighed the advantages and decided against it (Autoriteit Consument & Markt (ACM) 2015c). In the case of the proposed insurer cooperation on concentrating prostate cancer treatments, the competition authority judged that it was not able to evaluate the proposal because the plan for cooperation was in a too early stage of development (Skipr 2017). The request for an informal judgement was made by only one insurer and the authority found too little support for the plan amongst other insurers and also observed that there was insufficient information available to weigh the advantages against the disadvantages.

Hence, from the perspective of quality enhancement, there are so far no examples of the most extensive forms of cooperation that received a positive evaluation of the competition authority based upon the criteria discussed in section 2.

7. DISCUSSION

The current Dutch healthcare system provides an interesting setting to evaluate the model of managed competition, given that in the Netherlands most preconditions for this model seem to be fulfilled (Van de Ven et al. 2013b). In this system, competition should incentivize insurers to contract high quality of care at the lowest price possible. To date, however, competition among insurers is primarily focused on price, while insurers' efforts to enhance quality of care have been limited. The implications of several studies suggest that for several reasons cooperation among insurers could be an effective way to increase the role of quality of care in the contracting process between insurers and providers (OECD/European Observatory on Health Systems and Policies 2017, Maarse et al. 2016, Ruwaard et al. 2014, Nederlandse Zorgautoriteit (NZa) 2014, Stolper et al. 2017, Van Kleef et al. 2014, KPMG 2014). An unanswered question, however, is what this cooperation should entail and whether this would be consistent or in conflict with the model of managed competition. In our study, we sought to find out how the various stakeholders in the system perceive the need for cooperation among insurers on quality of care and whether and how insurers currently cooperate.

7.1 Key lessons

We found that all stakeholders see advantages of cooperation amongst insurers on quality of care. These advantages focus mainly on the first three stages (define, design and measure quality indicators) of the continuum of activities that insurers may employ to enhance quality of care (see figure 1). The main argument in favour of cooperation in

these domains is uniformity. All stakeholders acknowledge that quality improvement in healthcare is troubled by the variety of initiatives that different insurers developed to enhance quality of care. Stakeholders perceive less advantages with respect to the other domains in which insurers can cooperate (i.e. establishing benchmarks, communicate to patients, and engage in selective contracting). Only some insurers think that more extensive forms of cooperation are desirable to enhance quality of care.

None of the involved stakeholders were very outspoken on arguments against insurer cooperation. Some insurers mentioned that cooperation could diminish the possibilities to discern themselves amongst each other and others indicated that competition legislation could be a reason not to cooperate. The other stakeholders have the perception that the market is not ready for interference on quality by health insurers, thereby implicating that cooperation on quality is also not feasible at the moment.

In addition, we saw that providers are generally not supportive of the idea that insurers will steer on quality. They question whether insurers are rightly positioned to have a role in quality improvement and fear that insurers will misuse activities to enhance quality for financially driven contract negotiations.

In total, we found 11 initiatives in which insurers actually do cooperate. Almost all these initiatives focus on jointly developing and measuring quality indicators. Further forms of cooperation are either in an early stage of development or simply absent. Moreover, the few proposed initiatives concerning more extensive forms of insurer cooperation were negatively evaluated in a preliminary assessment by the competition authority. The absence of more extensive forms of cooperation is in line with the finding from the focus groups that stakeholders are mainly positive about the first three stages of cooperation and see no (active) role for insurers to interfere on quality as such.

7.2 Interpretation and implications

Our findings thus indicate that insurer cooperation focusing on the first three stages of the cooperation continuum is undisputed and largely accepted. We have seen that most of the cooperation that currently exists takes place in this domain. Moreover, all stakeholders bring in positive arguments for cooperation in this domain and the negative arguments that were mentioned are not applicable: there are no legal barriers for jointly developing quality indicators and it is not logical for insurers to seek distinction on the definition of quality or the indicators used. Hence, insurer cooperation in this domain appears to be a precondition for more effective competition on quality. The only real obstacle for successful cooperation in this domain is the low level of trust. Various

recent studies confirm our finding that among both providers and consumers trust in Dutch health insurers is rather low (Maarse and Jeurissen 2019, Bes et al. 2013).

Cooperation on stage 4, 5, and 6 of the continuum, in which quality standards are set and patients are steered towards preferred or selected providers, appears to be more controversial. We found that there is hardly any cooperation in this domain and those initiatives that we did find are in their infancy. Furthermore, we saw that these initiatives were critically evaluated by the competition authority, which supports the argument by the stakeholders that more extensive forms of cooperation may encounter legal barriers. This does not rule out the possibility, however, that the benefits of more extensive insurer cooperation outweigh the disadvantage of a reduction of competition. But the burden of proof is on the insurers. However, the problem is that this proof is hard to deliver without adequate quality information. Therefore, the question to what extent insurer cooperation could be an effective substitute for competition cannot be answered yet.

Hence, the prospects of any initiative on cooperation amongst insurers beyond the first three stages of the continuum will be indeterminate without meaningful, reliable and accessible quality information. This means that simple forms of cooperation to achieve this kind of quality information are not only beneficial for enhancing quality of care, but also necessary to achieve the right balance between competition and more extensive forms of insurer cooperation on quality of care. As long as providers object against any interference by insurers to improve quality of care, however, even insurer cooperation on developing and measuring uniform quality indicators is bound to fail.

For policymakers, this implies that improving transparency of quality should have a high priority. During the past decade, however, efforts to increase transparency of quality show that the development and implementation of uniform quality standards and indicators proves to be a difficult and prolonged process. The development of a common set of quality indicators is not a typically Dutch challenge but a more broad phenomenon and it can be seen as an important caveat for competition on quality of care (Barros et al. 2016). However, without strong institutional support, insurers will clearly have a difficult time gaining relevant and reliable quality information from providers, who are in many cases the source of essential data as well as reluctant to share this with the insurers who they view as their opponents. Hence, policymakers should do everything within their power to ensure that all stakeholders cooperate in developing a uniform set of meaningful and reliable quality indicators. Only if that point is reached, we may be able to assess whether intensified cooperation amongst insurers is a precondition or substitute for competition.

Chapter 6

Conclusion and discussion

INTRODUCTION

The central research questions of this dissertation are: i) does competition between Dutch health insurers work as originally intended? and, if not or not completely, ii) what can be done to improve the role of insurers in the healthcare system? The four preceding chapters all contribute to the answer by providing different insights into the dynamics that drive the behaviour of the competing Dutch health insurers. Based upon the empirical findings presented before, and summarised in the next section below, the short answer to the first question is that in the current (financial) setting insurers are primarily and successfully incentivised to contain healthcare spending growth but are insufficiently incentivised to include quality in their purchasing decisions. The research and accompanying discussions presented in the preceding chapters also provide a partial answer to the second question. But to fully answer that question, a broader theoretical perspective is needed. That perspective will be provided in the second and third section of this final chapter. There, three different mechanisms that can coordinate the allocation of healthcare resources are discussed and compared. Based upon this, the fourth and last section of this chapter reflects on the implications for the Dutch healthcare system and the role of health insurers within it, including recommendations for future research and health policy.

1. EMPIRICAL FINDINGS

The four separate studies included in this dissertation all view the role of the Dutch health insurer from a different perspective. The study in the second chapter takes the consumer's perspective. The central question in this study is whether consumers perceive and trust the health insurer as a prudent purchaser of care. The implications of a negative answer would be a cause for concern. If consumers would not perceive and trust the health insurer as a prudent buyer of care, they would not make a choice for an insurer based upon the performance of the insurer in that capacity. In that case, consumers would focus entirely on the price of an insurance policy and there would be no market driven incentive for the insurer to buy healthcare according to the preferences of its enrolees, other than the incentive to reduce cost in order to offer a competitive premium. The study used a mixed method approach to answer this question and concluded that consumers do perceive health insurers as prudent buyers of care. But it also concluded that consumers trust in health insurers' purchasing role is currently fragile and that consumers have insufficient information to cast a good judgment about the purchasing role. This hinders consumers to base their choice for a health insurer on anything other than price, limiting the incentive of health insurers to act as a prudent buyer of care.

The study presented in the third chapter takes up the internal perspective of health insurers and asks whether insurers perceive an incentive to steer on quality of care. If insurers perceive no incentive to steer on quality, there would be a risk that insurers would not include quality in their contracts with healthcare providers. Providers, in turn, could be tempted to skimp on quality in favour of their financial results. The study employed a qualitative approach (i.e., focus groups and interviews) to answer this question and found that insurers are caught in a struggle between positive and negative incentives to steer on quality, with negative incentives slightly dominating. The perception of a 'social mission' is the most important positive incentive that insurers experience; they feel the moral obligation to live up to the public goals of the healthcare system. Lack of transparency about quality of care is the most important negative incentive. Insurers feel that efforts to improve quality of healthcare are not rewarded by attracting consumers because the results are not transparent for consumers.

The study in the fourth chapter focussed on the actual behaviour of health insurers as visible in the market. The central question was whether insurers use target marketing to attract customer segments with a predictable profit. There could be two reasons why insurers would do so. The first is that insurers may tailor their purchasing activities to specific customer segments based upon their profile as users of healthcare. By doing so

insurers may attract and retain customers while potentially reducing costs by improving efficiency in the healthcare system. This would be in line with the original intentions of the system of managed competition. The second reason is that insurers may use target marketing to attract favourable risk groups from a mere financial perspective, looking at deficiencies in the risk equalisation system. We used mixed methods to find an answer, analysing qualitative data and a large sample of promotional materials. The conclusion was that insurers' marketing efforts are mainly motivated by the second reason; i.e., attracting financially favourable price-sensitive buyers. Targeting users of care and tailoring of purchasing activities to specific segments of care users, driven by the first reason, appears to be almost non-existent.

The last study, presented in the fifth chapter, took a system perspective by examining to what extent insurers can and do cooperate in enhancing quality of care in a managed competition setting like in the Netherlands. Specifically, the question was whether cooperation on quality enhancement should be seen as a precondition or substitute for competition. We developed a six-stage continuum to map the possible and actual forms of cooperation between insurers on enhancing quality of care, using qualitative methods and a document scan to acquire an overview of all existing cooperative initiatives. Within this continuum, we distinguished two types of cooperation, subsequently represented by the first three stages of the continuum (defining, designing, and measuring quality indicators) and the last three stages (setting benchmarks, steering patients, and selective contracting). The first type of cooperation can enhance competition between health insurers and should be seen as a precondition to competition. We concluded that this kind of cooperation does take place and is indeed not controversial from an antitrust perspective. The second kind of cooperation can be seen as a substitute for competition. Our findings showed that this kind of cooperation is almost absent and is also largely seen as controversial. The key problem is that it is difficult to assess whether the benefits of this kind of cooperation outweigh the cost associated with reduced competition. Hence, this type of cooperation is legally problematic.

In summary, in the current setting consumers find it difficult to judge the performance of health insurers as prudent buyers of care and have limited and fragile trust in the purchasing role of the health insurer. In line with this finding and most likely caused by it, health insurers feel that they are not incentivized to steer on quality of care because it will not result in attracting more consumers. In practice, insurers face an incentive to target financially favourable groups instead of users of care and act upon it. And, in addition, insurers do not cooperate on enhancing quality of care beyond the first pre-competitive steps of quality enhancement because it is difficult to comply with antitrust legislation. These findings lead to the conclusion that insurers are primarily and

successfully incentivised to contain healthcare spending growth but are insufficiently incentivised to include quality in their purchasing decisions.

As discussed in the introduction of this dissertation, an important caveat about this conclusion is that the risk equalisation system has been substantially improved in 2024. By imposing constraints on the coefficients of the risk adjustment system, undercompensation of care users and overcompensation of healthy people has significantly been reduced. This could alter the conclusions since the financial incentive to focus on healthy consumers may well have been taken away. At the same time, consumer switching behaviour will not directly change because of this intervention, implying that the incentives health insurers receive from the health insurance market – where a low premium is most important – will remain the same.

2. THEORETICAL REFLECTION ON THE SUITABILITY OF MANAGED COMPETITION

The first chapter of this dissertation outlined the concept of managed competition as the theoretical basis for the empirical research presented in chapters two to five. The previous section of this chapter established that managed competition has not yet fully achieved its intended objectives. Based on the empirical findings, we can draw various conclusions about what can be done to improve managed competition. However, it can be questioned whether the model of managed competition itself is best suited for enhancing the role of health insurers, particularly in view of new challenges facing the Dutch and other healthcare systems. To address these challenges, other coordination mechanisms than managed competition may be better suited, which could have profound implications for the role of health insurers. Hence, for a more comprehensive answer to the second research question, a theoretical reflection on what coordination mechanism might be best suited for addressing the challenges ahead is required. Based on that reflection, we can fully assess what needs to be done to improve the role of health insurers. These steps will be taken in the following three subsections.

2.1 The challenges ahead

For a comprehensive answer to the second research question, the empirical findings should be understood in the broader context of the challenges confronting the Dutch healthcare system. As discussed in chapter 1, various developments collectively constitute a significant challenge to the healthcare system's capacity to ensure equitable access to and maintain adequate quality of healthcare. The most important development is the rapid demographic change caused by an ageing population. This trend does

not only result in an increased number of individuals in need of healthcare but also leads to a decline in the available workforce to deliver such care. Hence, the challenge is to deliver more care with a proportionally smaller number of people without raising the healthcare budget more than is socially and politically acceptable. The prevailing consensus is that this requires a fundamental transformation of the healthcare sector. This transformation encompasses amongst other things i) a rapid digitalisation of healthcare provision, ii) more focus on delivering appropriate care and avoiding unnecessary treatments, and iii) a restructuring of the physical infrastructure to centralise specialised healthcare and decentralise basic healthcare services[2] (CPB 2020, VWS 2020b, WRR 2021, VWS 2023b, SiRM 2023).

The question is whether our current healthcare system can accommodate the required transformation. Is the existing system, based upon the principles of managed competition which gives private insurers as competing third-party purchasers a central role, suited to coordinate the healthcare domain in a way that the proposed transformation intends?[3]

The tendency in the Dutch public health policy debate is to suggest that the transformation requires less competition and more cooperation. Both the former Dutch Minister of Health and his predecessor, for example, asserted that the challenges ahead require less competition in the healthcare system (VWS 2023d, Trouw 2021). Furthermore, in a combined interview in a leading Dutch newspaper, the CEO's of three prominent health insurers all agreed that the healthcare system needs revision with a smaller role for competition (FD 2023). These statements are just a few illustrations of increasing public pressure over the past decade to reconsider the role of competition in the healthcare system (Van der Schors and Varkevisser 2023). This can be understood against the backdrop of a broader societal discourse in which the role of the market in general is questioned and the dominance of neo-liberal thinking in the 1980s and 1990s is criticised (Davies and Gane 2021). As said, the alternative is sought in more cooperation, often on a regional level. Both the ministers and the three CEOs, for instance, suggest that regional cooperation is the solution for the challenges ahead. Moreover, in a recent extensive agreement (*Integraal Zorgakkoord*; abbreviated IZA*)* between the Ministry of Health, Welfare and

2 Centralization in healthcare concentrates specialized, low-volume care at fewer locations to improve expertise and outcomes, while decentralization distributes high-volume and routine care to accessible, cost-effective locations and expands home-based care by empowering patients and their support networks.

3 A related question is whether the transformation in itself is organised optimally. This touches on theories of transformation and 'transformation failure' (Bolhuis 2024). Given the long-term horizon often needed for healthcare transformation, this dissertation focusses on coordination mechanisms required for the envisioned future and the gradual change necessary to get there. The possibility of radical, short-term change and its temporary implications are left out of scope.

Sport (VWS) and the representative organizations of almost all relevant stakeholders in the healthcare sector, regional cooperation between the various stakeholders is considered to be a crucial enabler for the required transformation (VWS 2023b). Furthermore, in a recent advisory report, the Council of Public Health & Society - a constitutionally established advisory body to the government and Parliament - also argues that less competition and more cooperation is the way forward for the Dutch healthcare sector (RVS 2023). Advocates of this perspective argue that prioritizing cooperation over competition will allow the participants in the system to transcend interests of the individual organisations in favour of the greater good. They contend that the current system, in which competition plays a pivotal role, fosters a focus on self-interest and thereby hinders the fundamental transformation that might come at the expense of some organisations but will improve the overall system performance from the societal perspective.

2.2 Three coordination mechanisms

Given the empirical findings as summarized in section 1 of this chapter and the challenges ahead discussed in the previous section, it does seem justified to ask if the healthcare system should be changed and what the implications are for the role of health insurers. It is, however, highly questionable whether the current tendency to create a contraposition between cooperation and competition leads to a solution. Even though the relation between cooperation and competition might sometimes be tense, cooperation is not necessarily a substitute for competition but can also be a complementary way to coordinate a healthcare system. Like all coordination mechanisms, cooperation comes with certain advantages, such as the ability to facilitate a joint vision and a focus on the common good, but also entails various disadvantages, like a reduction of incentives for efficiency and innovation. To create a constructive and less binary discourse, it would help to (i) weigh the advantages and disadvantages of the possible coordination mechanisms and, on a case-by-case basis, (ii) analyse which is the preferred mechanism following the characteristics of a specific type of healthcare.

To do so, it is useful to compare the strengths and weaknesses of three common coordination mechanisms distinguished in the literature (Thompson 1991): markets, hierarchies and networks (see Figure 1 and Table 1). These three coordination mechanisms can be understood as distinct but overlapping and often complementary ways to coordinate social and economic domains - a comprehensive set of rules, customs and ideas that form an instrument to achieve an optimal allocation of resources and an efficient coordination of activities. Of course, the mechanisms should be understood as ideal-typical models, providing a framework for understanding and debate. Reality is

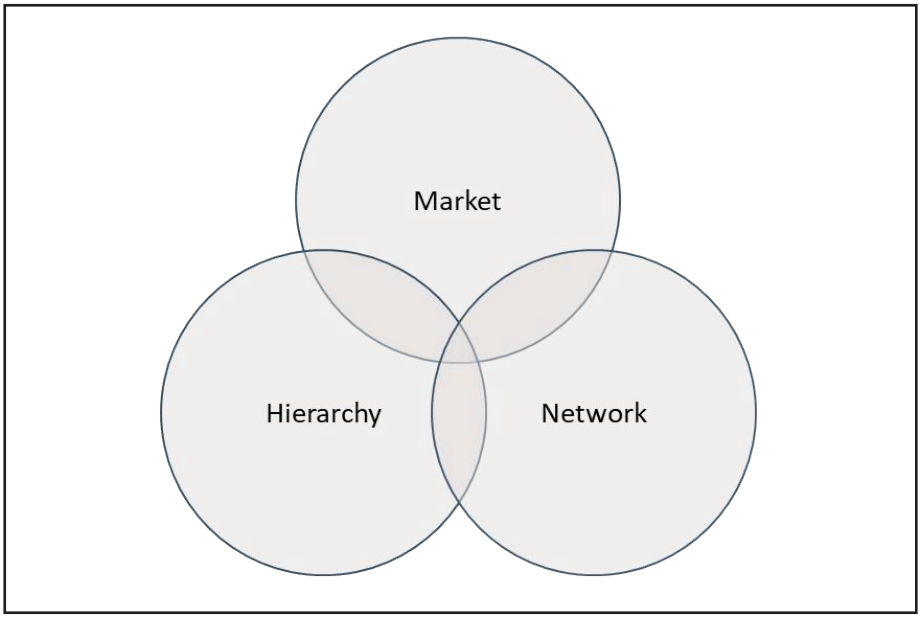

Figure 1. Three coordination mechanisms

always more complex and nuanced, harbouring variances and patterns that will not be fully encapsulated by a theoretical framework[4].

The first mechanism, the market, is a spontaneous social order (preferably within the boundaries of a carefully constructed market design) caused by voluntary individual transactions on a decentral level, rather than a created order enacted by central human coordination. Through the complex set of all independent and individual transactions, guided by the price mechanism, the economic activities of the society are coordinated. Under the (hypothetical) assumption of perfect competition[5], the market attains a Pareto equilibrium. That is, an outcome in which the market participants cannot make themselves better off without making someone else worse off, which is defined as an optimal (Pareto-efficient) allocation of resources[6]. Markets do not lead to this optimal outcome when market characteristics – such as the presence of information asymmetry,

4 For instance, the model of managed competition entails substantial government regulation, intervention, and supervision, meaning that it does not fit neatly in the ideal-typical market mechanism.

5 Being many buyers and sellers, identical products, perfect information, and free entry and exit.

6 Pareto efficiency solely addresses the efficiency of resource allocation without considering fairness or moral concerns. As Amartya Sen argued; an economy can be Pareto-optimal, yet still perfectly disgusting by any ethical standards (Sen 1970).

Table 1 – Three coordination mechanisms

	Market	Hierarchy	Network
Core element	Price	Authority	Trust
Level of optimalisation	Decentral	Central	Mid-level
Strenghts	Spontaneous optimalisation	Decision making	Mutual coordination
Risks	Market failure	Bureaucracy, information overload at the top	Slow or sub-optimal decision making

unbalanced market power, and externalities[7] – cause market failure. In theory, markets can effectively manage complexity, provided that market failures are (largely) non-existent or are adequately mitigated by the government and/or its regulatory agencies (Levacic 1991).

The second mechanism in this framework is a hierarchy. A hierarchy is a created social order which features a central authority and a clear chain of command. In the context of healthcare systems, the central authority is usually the national, regional or local government. A hierarchy optimises the system from a central perspective. Hierarchies ideally excel in fast decision making since there is a principal authority that can make a quick judgement and has sufficient mandate to make the call. However, hierarchies risk bureaucracy, inefficiency and a lack of flexibility as a result of formal procedures, information and motivation problems, communication barriers and duplication (Mitchell 1991).

The third mechanism is the use of networks. Networks are created social orders produced by collaborative relationships between autonomous organisations[8]. It is based upon mutual dependencies and informal relationships. In contrast to hierarchies and markets, networks coordinate in a less formal, more organic, and associative way. A network flourishes when orientation and purpose of the participating organisations are aligned. In that setting, parties forgo the right to pursue their own interest at the expense of others in favour of their shared long-term interest. Trust is a crucial feature of networks, facilitating collective commitment and reducing transaction costs that are prevalent in markets and hierarchies. However, networks risk slow decision-making because of ongoing deliberations and consensus-building. They also risk suboptimal decision-making given the likelihood of a consensus seeking culture within networks (Powell 1991).

7 Note that no other market of substantial importance violates the preconditions for perfect competition so radically as the market for healthcare (Dranove and Satterthwaite 2000).

8 In the context of this dissertation, networks and cooperation are closely related concepts. A network refers to a set of actors linked by a specific type of relation while cooperation refers to the actual act of working together.

2.3 Applicability of the coordination mechanisms

The applicability of the three mechanisms discussed above for coordinating the allocation of resources depend on the circumstances within the domain on which the mechanisms are applied. As summarised in Table 2, there are four criteria that can help to determine the applicability of the mechanisms: complexity of allocation, goal congruence, asset specificity and performance ambiguity (Thompson 1991)[9].

Table 2 – Criteria for assessing the applicability of the three coordination mechanisms

	Market	Hierarchy	Network
Complexity of allocation	Indifferent, able to handle complexity	Should be low	Preferably not high
Goal congruence	Indifferent, able to handle incongruence	Indifferent, able to handle incongruence	Should be high
Asset specificity	Should not be high	Indifferent, able to handle high asset specificity	Preferably low
Performance ambiguity	Should be low	Preferably low	Indifferent, able to handle ambiguity

The first criterion, complexity, asks whether the allocation in the relevant domain is complex or simple. When complexity is high, a hierarchy will be less appropriate as a coordination mechanism given the risk of information overload and possible information asymmetries. In the context of healthcare, it is important to note that this criterion refers to the complexity of the allocation process – i.e. for instance due to a high number of providers, heterogeneous products, and supply chain complexities and interdependencies – and not to the complexity of the treatment that is provided in the market. To give an example, there are highly specialised medical treatments – like certain complex heart surgeries, complex organ transplants and specific forms of radiotherapy and nuclear medicine – that are only performed at very few specialised centres. Hence, while the treatment itself is very complex, the allocation and coordination within this market are relatively straightforward (at least in theory; i.e., apart from emotional and political aspects that might complicate allocation decisions)[10]. Conversely, relatively simple treatments, like physiotherapy and dermatological procedures, are provided in complex markets characterized by numerous small suppliers, rapid technological developments[11] and increasing product differentiation, all of which complicate the allocation process.

9 These are in the context of this dissertation the most important criteria. There are other criteria that can be an argument to reject the market as coordination mechanism, like the collective or merit nature of a good, the presence of externalities and other market failures.

10 Note that spillover effects of allocation decisions, resulting of historically grown dependencies within a hospital, can significantly increase the complexity beyond what would be encountered in a hypothetical 'clean slate' scenario.

11 Such as diagnostics and/or therapy using innovative online apps like Physitrack and Skinvision.

The second criterion, goal congruence, asks whether the interests of actors within the domain in question are aligned, often reflected by a shared vision and a common purpose. Goal congruence is of pivotal importance when networks are employed. Without a high level of goal congruence, networks will not be able to function effectively since the conflicting interests of participants within the network will make it difficult to create common ground and come to a joint conclusion.

The third criterion, asset specificity, concerns the degree to which the assets that are used in the domain are of a unique nature. Asset specificity can take various forms, it can refer to specific technology that is needed, human competences that are required or a specific location that is essential. When asset specificity is high, a market will most likely be inefficient due to an increased risk of information asymmetry and a high probability of a monopoly.

The fourth criterion, performance ambiguity, asks to what extent the quantity and quality of outputs are measurable and observable – i.e., whether a buyer can assess whether the supplier is performing well and delivers quality. The market mechanism is only suitable if performance ambiguity is low. In the context of the healthcare sector, it is important to note that the question of performance ambiguity has an indirect nature as healthcare markets are characterized by the presence of third-party purchasers that buy healthcare on behalf of their enrolees. Given this context, the applicability of the market mechanism does not depend on the question whether consumers can directly assess the performance of healthcare providers. Instead, performance ambiguity looks at the performance of the health insurers and asks whether consumers can assess whether health insurers are buying high quality healthcare against the lowest price possible and, as a prerequisite, whether insurers are able to assess and monitor whether providers are delivering good quality care at a reasonable price.

Based on the characteristics, strengths and weaknesses of the coordination mechanisms (as discussed in section 2.2) and the criteria for applicability, there appears a natural order for choosing amongst these mechanisms. The market is the only mechanism that creates a spontaneous social order, regardless of the complexity of the allocation decisions that need to be made and the level of goal congruence. It can therefore be considered the preferred coordination mechanism that - if the circumstances are right - results in the most efficient societal outcome[12]. However, this requires a low level of asset specificity, a low level of performance ambiguity, and adequate mitigation of

12 As previously noted, the most efficient societal outcome is not necessarily the most just or fair. Therefore, following from societal preferences, there may be moral grounds to regulate the market.

(other) market failures. If this is not the case and the market proves to be inadequate as a coordination mechanism, it can be supplemented or substituted by hierarchies or networks. Hierarchies may provide an efficient alternative, as they provide quick and clear decision making, can deal with high asset specificity and are not dependent on goal congruency. But hierarchies can only excel in situations with low complexity. Networks are better equipped to deal with high complexity and are able to handle performance ambiguity. But networks can also be burdensome, time intensive and require a high level of goal congruence.

To be sure, the described criteria for assessing the applicability of the three coordination mechanisms simplify the complexity of reality in which the choice for a (combination of) mechanism(s) is highly dependent on the context. Therefore, the criteria only offer an indication of which coordination mechanism might be most adequate in any given context, rather than a clearcut tool to assess which coordination mechanism is optimal *per se*.

3. DISCUSSION

It could be tempting to discuss which of the coordination mechanisms should be used to coordinate the allocation of all resources in the Dutch healthcare system. But a generic choice to make one of the three coordination mechanisms dominant for the whole system does not seem to be the right way forward because here one-size-does-*not*-fit-all. In what follows, I will first discuss why this is the case and then focus on the alternative; i.e., finding the right balance between the coordination mechanisms in specific healthcare sectors. Based upon this analysis, we can establish what the implications are for the future role of the health insurer.

3.1 No one-size-fits-all solution

Although the public and political debate sometimes seems to suggest otherwise, a choice for cooperation (networks) as single foundation of the Dutch healthcare system is practically impossible. It would require that all coordination and allocation decisions are taken by collaborating, interdependent but autonomous parties that (i) together have a strong common purpose which is perfectly aligned with the public interest, and (ii) are always able to overcome all differences and conflicting private interests. In other words, it would presuppose full goal congruence in all parts of the healthcare system. It seems safe to assume that this will never happen and thus some form of hierarchy or market will always be necessary.

A choice for either a hierarchy or the market as an overall coordination mechanism effectively comes down to the choice between a single-payer or a multi-payer system[13]. However, the literature (discussed below) on the choice between a single- or multi-payer system is ambiguous and does not favour one of the alternatives univocally. The advantages and disadvantages of a multi-payer system, under the conditions of managed competition, have extensively been discussed in this dissertation. A significant drawback of the alternative, a single-payer system, is that the payer may exploit its monopsony power. General economic theory on private monopsonies contends that this will lead to welfare loss (Blair and Harrison 2010). The private, commercial monopsonist will typically boost profits by cutting costs, potentially leading to reduced quality, supply shortages and waiting lists. A possible solution is to create a public, non-profit monopsony, in which the government or a semi-governmental body is given the task of purchasing healthcare. The advantage is that a public monopsonist will not be driven by profit maximalisation and can be given the task to safeguard ample access, high quality and equity. However, the incentive to steer on efficiency and innovation is relatively weak for a public monopsonist. While there might be an intrinsic motivation to serve the public interests, provider resistance to efficiency-improving changes can lead them to prefer the status quo, choosing to live a quiet life (Enthoven 1978, Hicks 1935). The Dutch experience with the long-term care single-payer system (*Wet Langdurige Zorg*; abbreviated Wlz) seem to confirm these expectations, supporting the notion that the incentive to steer on efficiency in a single-payer system is relatively weak (VWS 2020a).

Comparisons with other countries that have a single-payer system for curative care (as covered by the HIA), such as the United Kingdom, Canada and Denmark, confirm the described uncertainty since these systems do not necessarily obtain better results. The Dutch healthcare system scores consistently high in rankings and on a variety of indicators on access and quality of care, and there is no justification to assert that a single payer system would yield better outcomes (Emanuel 2020, OECD 2023a). Even a high performing single payer system as Denmark, often cited as an example in the Dutch discourse about the healthcare system given its robust regional layer, does not produce better outcomes while in some domains even requiring more personnel to provide the same amount of care (Gupta 2023).

Altogether, the literature on single-payer and multi-payer healthcare systems identifies pros and cons in both options. It tentatively concludes that single-payers favour equity,

13 Note that in a single-payer system there can still be competition among providers. In addition, in a multiple-payer system competition for customers could be excluded, for instance if payers have a (regulatory) designated group of enrolees (e.g., in case of regional insurers with separated statutory working areas or employment-based insurance funds).

risk pooling and negotiation power, whereas multi-payer systems – if all necessary preconditions are fulfilled - provide stronger incentives for efficiency and innovation and more options to accommodate patients' preferences while being less vulnerable to political interference (Petrou et al. 2018, Enthoven 1988). It seems therefore safe to conclude that completely abolishing the current multi-payer system in the Netherlands in favour of a single payer-system is premature and unwise. Let alone the transaction costs associated with such a fundamental health system reform. There are clear indications that the current system has a positive effect on cost containment while maintaining good access to care (OECD 2023b) and there is no reason to assume that a single payer-system will lead to better outcomes.

3.2 Finding the right balance

Hence, the right way forward should be found in balancing the combination of market, hierarchy, and network elements within the current healthcare system. This balance will not be found on the aggregate health system level because there are large differences between the various domains (e.g., long-term care, curative care, and social care) and the various sectors within these domains (e.g., hospital care, primary care, and pharmaceuticals within the curative care domain). These differences impact the applicability of the different coordination mechanisms and the role of health insurers in the various domains and sectors of the health system. This was already clear at the introduction of managed competition in the curative healthcare domain in 2006. Several studies concluded that the idea of managed, or regulated, competition would not offer a one-size-fits-all solution. For instance, for some sectors within this domain the risk of market failure is very high due to a limited number of potential competitors or extreme information asymmetry, which means that competition should not be allowed or only under strict regulatory conditions (Varkevisser et al. 2004, Varkevisser et al. 2003a, b). For that reason, in some sectors or for some services competition has been largely excluded. For instance, the provision of ambulance services is far more regulated than other parts of the healthcare market as there is no free access for providers, no contracting between insurers and providers and no patient choice. In addition, for the most complex hospital services, comprising about 18 percent of hospitals' revenues (Zorginstituut 2024), prices are regulated by the Dutch Healthcare Authority (NZa). Still, the largest part of the curative medical care domain is coordinated through managed competition and allows for contract freedom between providers and insurers, free access for providers[14] and patient choice.

14 That is, within regulatory constraints on access and performance of providers, which are specified in the Act on Admission of Healthcare providers (*Wet Toelating Zorgaanbieders*).

Therefore, to improve the coordination of care and resources in the domain of curative health services, the solution should be sought in refining the balance between the three coordination mechanisms for each of the different sectors within this domain separately[15]. To do so, we made an indicative assessment of the applicability of the coordination mechanisms per sector or type of health service. Table 3 gives the overview of the applicability of the mechanisms per sector. Table 4, in turn, provides an overview of the most logical combination of coordination mechanisms per sector based upon the insights of Table 3. Both overviews are merely for illustrative purposes and should be validated before they are usable for policymakers. In this discussion, they serve to suggest an approach on how a more refined balance between the coordination mechanisms can be found. Scores on the applicability criteria (table 3) are based on expert judgement of five senior professionals (two officials from a health insurer, three academics and one policymaker) and the author. Scores on the coordination mechanisms (Table 4) have been derived from this expert judgement, using the logic as described in section 2.3 and Table 2 (see Appendix 6.1 for more explanation).

The scores in these tables should be interpreted as indication on what coordination mechanism or combination of mechanism could be preferred in a certain sector or for a certain type of health service. When a coordination mechanism receives a 'medium' or 'high' score, this suggests that the mechanism should play a significant role in that sector. Conversely, when the score is 'low', it is questionable whether the mechanism is the appropriate way to coordinate the allocation of resources. A higher score does not necessarily make the mechanism the sole option, but it could justify assigning it an important role in the overall mix of mechanisms.

The implications of the scores for the role of health insurers will extensively be discussed in section 4 of this chapter. For now, it is important to note that a low or medium score on 'Market' does not automatically eliminate the purchasing role for health insurers. It may, however, offer an argument to restrict their freedom and autonomy. In the most extreme situations, their role might be confined to the pure operational tasks of collecting premiums and distributing budget based on established agreements or guidelines.

The classification presented in Tables 3 and 4 is an expanded version of a commonly used framework (Nederlandse Zorgautoriteit (NZa) 2023c). Note that the sectors physiotherapy and dental care are only partially covered in the basic insurance policy (the

15 The coordination of allocation of services in other domains, such as long-term care and social care, falls outside the scope of this dissertation. Clearly, improving the coordination within these other domains as well as across the three domains is an important subject for further research.

Table 3 – Scores on applicability criteria per sector/type of service (indicative)

	Complexity of allocation	Goal congruence	Asset specificity	Performance ambiguity
Emergency hospital care	Medium	Medium	High	Low
Basic hospital care	High	Medium	Medium	Medium
Complex hospital care	Low	Medium	High	Medium
Ambulance services	Low	High	High	Low
Emergency mental care	Low	High	High	Medium
Basic mental care	High	Low	Low	High
Complex mental care	Medium	Medium	High	High
General practitioners	High	High	Low	High
Obstetrics	High	Medium	Low	High
Community nursing	High	Low	Low	Medium
Physiotherapy	High	Medium	Low	High
Regular pharmacy	High	Medium	Low	Low
Expensive medicine	Low	Low	High	High
Dental care	High	Medium	Medium	Medium

Table 4 – Scores on applicability of coordination mechanisms per sector/type of service (indicative)

	Market	Hierarchy	Network
Emergency hospital care	Low	Medium	Medium
Basic hospital care	Medium	Low	Medium
Complex hospital care	Low	High	Medium
Ambulance services	Medium	High	High
Emergency mental care	Low	High	High
Basic mental care	High	Low	Low
Complex mental care	Low	Low	Medium
General practitioners	Medium	Low	High
Obstetrics	High	Low	Medium
Community nursing	High	Low	Low
Physiotherapy	High	Low	Low
Regular pharmacy	High	Medium	Medium
Expensive medicine	Low	High	Low
Dental care	Medium	Low	Medium

HIA); i.e., physiotherapy just for chronic conditions and dental care only for children under 18 and in case of special medical conditions.

From the preliminary and indicative overviews presented in Tables 3 and 4, the following can be concluded. First, the applicability of the coordination mechanisms indeed varies largely per sector or type of service. To some extent, this variation is already reflected in how the HIA is currently organised. Physiotherapy and regular pharmacy show a high fit with the market-mechanism and currently function fully as a market based upon the principles of managed competition (although some preconditions still need to be fulfilled). Emergency mental care has little fit with the market and is largely excluded from this coordination mechanism. And basic hospital care scores medium for market and network which suggests a combination of these mechanisms, which in many instances already is the case. There is, however, also room for improvement. Complex mental care, for example, is currently for a large part organised conform the logic of managed competition but seems to have a small fit with the market mechanism[16]. It is more suitable for a network solution, implying that health insurers should work together with professional associations for coordination and allocation of resources in this sector.

Second, the overviews suggest that market-based coordination may be appropriate for many parts of the healthcare system, even though our empirical findings showed that at this moment the market only partially works as intended. In these cases, therefore, the solution is to enhance the system in such a way that managed competition will function more effectively rather than fully replace competition by coordination via networks.

Third, in many sectors networks can be of substantial added value. This is a challenging conclusion, even though it aligns with the discussed tendency in the public debate and the latest Dutch health policy interventions. Because even though there are already numerous networks initiatives in the healthcare system, the application of this coordination mechanism at a system level and the interaction with other coordination mechanisms are less thought-through than the more familiar concepts of supply and price regulation and managed competition. These last two concepts constitute the foundation of the current system, and there is a well-developed understanding of how to maintain or improve their balance (Trottmann et al. 2023). By contrast, up till now cooperation is organized rather ad hoc instead of being a systematically applied way of coordinating the provision of health services. So far, a clear governance structure, decision rules, guidelines and – most importantly within the context of this dissertation – clarity regarding the implications for the role of health insurers are all lacking (van der Woerd et al. 2024).

16 As was already evident prior to the introduction of the HIA (Schut et al. 2005)

4. IMPLICATIONS AND RECOMMENDATIONS

The findings presented in this dissertation demonstrated that the Dutch model of managed competition does not yet work as intended, incentivising health insurers to steer primarily on cost containment and less on quality. As discussed, these conclusions should be understood in the broader context of the challenges ahead and the transformation that is required to address these challenges. The question is whether the current healthcare system is able to coordinate the healthcare domain in a way that aligns with the intentions of the proposed transformation. The theoretical reflections showed that replacing competition by cooperation or by a single-payer system is not the panacea, as is often incorrectly suggested in the public and political debate. The best way forward seems to be finding the optimal balance between the three possible coordination mechanisms per sector or type of health service.

For those parts of the healthcare system where the (regulated) market is likely to be the most promising coordination mechanism, improvements are needed to make sure that insurers are also incentivized to steer on quality and access when negotiating contracts with healthcare providers. This will be discussed in the following section (4.1). The subsequent sections will discuss the implications of the broader theoretical reflections in general (4.2) and specifically for networks (4.3).

4.1 Improving managed competition

The empirical findings showed that within the current Dutch healthcare system the model of managed competition does not yet work fully as intended. When contracting providers, health insurers are primarily incentivised to steer on costs containment and much less on quality of care. The primary reason is that some of the necessary preconditions for managed competition, see Van de Ven et al. (2013a), are still not fulfilled. This can be improved by implementing a series of policy measures, all of which have been discussed in one or more of the previous chapters and are summarised here.

In essence, the most crucial step to be taken is to enhance publicly available information on how insurers execute their purchasing role. At the beginning of the annual open enrolment period, it should be transparent for consumers what healthcare services health insurers purchase on an individual and competitive basis, which providers they contracted for this type of healthcare, and what the consequences are of the agreements made between the insurer and these providers[17]. Moreover, consumers should be

17 As also recognised in the new coalition plans of the four parties forming the upcoming government in the Netherlands (Kabinetsformatie 2024)

able to easily compare price and quality of, and access to, healthcare across the various health plans offered by insurers.

To get there, information on the quality of healthcare needs to be improved. Currently, consumers find it difficult to assess the quality of healthcare, hindering their ability to evaluate the value of healthcare purchased by insurers. As discussed in previous chapters, the progress on improving transparency is encouraging but from a consumer perspective by no means sufficient. The number of initiatives to improve transparency does not seem to be the bottleneck, as the set of quality indicators available grows steadily. The real challenge is synthesizing all the available information into a concise, accessible, and comprehensible set of quality markers for consumers. That this is necessary to let managed competition work as intended has been clear from the onset of the healthcare system in 2006. However, until now 'the market' has not been able to solve this matter autonomously. Hence, a government-enforced effort - possibly with the help of private third-party certifiers - seems to be the most promising way forward.

A similar line of reasoning holds for transparency on access to healthcare. Compared to other healthcare systems, the Dutch system performs relatively well on access to healthcare (Commonwealth 2021, OECD 2023a). However, as outlined earlier, due to workforce shortages and an ageing population access will increasingly become a pressing issue for many health services. Incentivising insurers to focus on access might be an effective way to alleviate this problem. If consumers can evaluate how well health insurers fulfil their duty of care, they can use this information when choosing an insurer. Health insurers offering a selection of providers with long waiting lists will then be less attractive than other insurers ensuring timely access. Similarly, health insurers offering effective waiting list mediation services are likely to be more appealing than health insurers underinvesting in this service (because they will not be able to help consumers finding the quickest way to a provider).

These ambitions are a huge step away from the current practice in which consumer health insurance choice is predominantly determined by the price of a health plan. It is important to note that comparison websites play a crucial role in getting there. The majority of Dutch switchers use these comparison sites to determine which health insurer is the best choice for them (Autoriteit Consument & Markt (ACM) 2021). If comparison websites provide the right information in a balanced and accessible way, they may substantially help to realize the underlying idea of managed competition that critically choosing consumers incentivise health insurers to buy the best quality of care against the lowest price possible. A combination of regulation and support – in which comparison websites are both enforced and facilitated to collect and present the right

information on quality and access in a balanced way - could be a pivotal enabler of that perspective.

As a bedrock beneath these efforts to create transparency, the functioning of the health system will improve if consumers have more trust in health insurers. As reported in chapter 2, trust is currently fragile and most consumers think that health insurers are commercial organisations, driven by profit maximalisation rather than promoting the affordability, accessibility, and quality of healthcare. In these circumstances, even if full transparency would be achieved consumers would still hesitate to act upon the information provided since they mistrust the intentions behind the performance of insurers. Only if consumers trust that the health insurer intends to act as a sincere and prudent buyer of care on their behalf, they will be inclined to act upon information that is given to evaluate the performance of the insurer. Improving trust will be difficult as, to a certain extent, the current lack of trust can be considered as institutional (Maarse and Jeurissen 2019). But political support in combination with abundant publicity for the idea behind the system and the non-profit nature of almost all insurers could help to advance the situation.

Finally, despite the recent improvements of the risk equalisation model further improvements are very important. As we have seen, the imperfections in the risk equalisation system directly influence the behaviour of health insurers. Up till this moment, there are still no health insurers focusing their marketing and purchasing efforts on specific groups of patients; especially not those with chronic diseases. And even if that behaviour becomes visible in the market, it remains important to continuously refine and adjust the system to avoid that it pays off for health insurers to invest primarily in target marketing based upon financial data analytics instead of investing in purchasing and patient guidance capabilities.

4.2 Recalibrating the system

Besides optimising managed competition, the healthcare system could benefit from creating a (more) balanced combination of the three possible coordination mechanisms. Clarity on which combination of coordination mechanisms per sector or type of service is a crucial step for getting there. As previously mentioned, the discussion in this dissertation on the applicability of the three coordination mechanisms per sector or type of service within the curative care domain (section 3 of this chapter) has an explorative character and needs to be validated before it can be used for policy making. To bring this approach further, it is recommended to focus future research on developing a solid analytical framework that helps to establish the right ‘applicability score’ per coordination mechanism for the various sectors or service types. This framework needs

to be supplemented with an analysis of other considerations that need to be taken into account. Including, for instance, the fact that some of the sectors are intertwined. As an illustration: emergency care, regular and complex hospital care cannot be optimised independently because of the joint inputs (i.e., human resources and infrastructure). This restricts the room to make autonomous decisions per sector and could lead to spill-over effects of one sector to another (Van der Geest 2003). The implication is that the coordination mechanisms applied have to be sufficiently aligned and cannot be derived directly from the 'applicability scores'. Additionally, there could be normative trade-offs that need to be taken into account – e.g., between efficiency and equity or between price and quality – that prevent a straightforward application of the applicability scores but require careful balancing between the various insights that together establish which combination of coordination mechanisms is most appropriate. The next step is to apply these combined insights consistently to the healthcare system. For some sectors, like ambulance care or physiotherapy, the consequences will probably be limited because historical choices are closely aligned with the conclusions of the proposed analysis. For other sectors, like complex mental care, the consequences could be larger because the current setting differs substantially from the theoretically most suitable one.

Much of the proposed logic is already implicitly taken into account in the system. There are, for example, various networks that deal with complex issues that cannot be solved by either the market or the government (VWS 2023c). And the government does already take matters into its own hands when markets and networks do not provide a solution, as for example in the case of proton therapy and children's heart surgery (Volkskrant 2023, VWS 2016)[18]. Hence, the value of further analysis of the applicability scores and other considerations is not that it will lead to an entirely new healthcare system. Rather, it will give clarity on what mechanisms are used to coordinate the healthcare system and take away the misleading notion that it is only or primarily the market that coordinates the healthcare system. This clarity will help the various stakeholders within the system to take up their role more effectively. Regulators, for instance, will be able to refine their regulation per sector. Comparison websites will know on which types of healthcare health insurers really differentiate. And it would be helpful for health insurers, who are given clarity on when cooperation is not only allowed but also when it is required to advance the delivery of healthcare. As found in chapter 5, health insurers are up till now hesitant to engage in cooperation beyond a certain point because it is difficult to establish that the benefits outweigh the consequences of reduced competition. As soon

18 The last example (children's heart surgery) also illustrates that the government's role and the legitimacy of its decisions are not without controversy. These decisions often meet resistance among healthcare providers, provoking legal challenges and highlighting the need for a better understanding of the interaction between hierarchy (government), networks, and market.

as it becomes clear that cooperation rather than competition is expected to coordinate a certain sector or type of service, this problem will most likely be reduced significantly.

4.3 A larger role for networks and its consequences for the role of insurers

Section 3.2 argued there is reason to consider a larger role for networks within the Dutch healthcare system. This aligns with the more intuitive insight in the public debate that the transformation of the Dutch healthcare sector which is needed to meet the challenges of an ageing population and increasing workforce shortages, requires more cooperation from all stakeholders in the field. Networks, however, do not automatically flourish on their own. That is, for the effective functioning of networks certain preconditions must be met. Many of these preconditions have been thoroughly discussed elsewhere, such as careful selection of stakeholders, active participation of all participants, compliance with agreements and appropriate handling of breaches (Ostrom 1990). The most relevant challenge in the context of this dissertation is how to increase the role of networks without eroding the fundamentals of the existing healthcare system based upon the principles of managed competition. However, increasing the role of networks while at the same time preserving the benefits of managed competition is easier said than done. This especially true when it comes to insurer competition.

The ideas with regard to this challenge that currently figure in the public debate and the most recently suggested policy interventions often revolve around a 'lead insurer' that in some way leads or represents other insurers (VWS 2023b). The idea of a leading or representing insurer is not new. In the healthcare system that preceded the introduction of the HIA in 2006, inpatient care was purchased 'in representation' – i.e., contracts were negotiated by the leading regional health insurer and copied by the others – and

Table 5 – Different forms of joint purchasing that currently happens within the HIA*

	Policy of following	Purchasing with equal aims	Purchasing in representation	Joint purchasing
Explanation	Insurers make an individual choice to follow the purchasing policy of another insurer	Insurers agree to align their purchasing aims in their individual contracts	One or two insurers purchase on behalf of the other insurers	A joint purchasing organisation purchases on behalf of all insurers
Examples	Integrated care dementia, unplanned night care, coordination first-line stay	Guideline evening, day & weekend services, digitalisation, 'more time for the patient'	Regional ambulance care, acute mental care, part of general practitioner care, pharmaceutical emergency care	Some expensive medicine, expensive medical aids

* With permission partly based upon an internal analysis of 'Zorgverzekeraars Nederland' (ZN).

in the subsequent years this was only gradually phased out. Also in the current system, there are several health services and products that are purchased in some form of alignment. Table 5 gives an overview of the constellations in which this occurs and provides examples of the current Dutch practice.

This idea of a lead insurer at the regional (or sometimes even national) level seems attractive and logical when considering a larger role for cooperation for some sectors or service types within the curative healthcare domain (as covered by the HIA). It would make sure that whenever cooperation is required, there is a leading health insurer that together with the involved providers and other stakeholders forms a network in which all necessary plans are drafted, and decisions are made. These plans and decisions subsequently form the purchasing framework for other insurers, which in the most extreme variant could reduce their role to a that of an 'executing agency'. However, the idea also comes with some risks. The pivotal point is that cooperation and representation can, and most probably will, have several (opposite) effects on insurer competition and the resulting incentives for efficiency and innovation.

First, it could decrease the incentive for individual health insurers to purchase the best healthcare against the lowest price possible. When the most important purchasing decisions are made 'in representation', the purchasing role may ultimately have only a marginal effect on the competitive position of individual health insurers. In that case, there is no reason why health insurers would not choose to live the earlier mentioned 'quiet life'. Both the lead insurer and the other insurers may lack incentives to tackle challenging issues and to invest in innovative healthcare improvements, since there are no competitive advantages and disadvantages involved. Consequently, when facing choices, they will be inclined to opt for the path of least resistance (and thus enjoy a 'quiet life'), favouring uncontroversial but less effective solutions over controversial but more effective solutions (Hicks 1935, Ikeda et al. 2018).

Second, there can be distorting effects on the level playing field amongst health insurers. The lead insurer could, for instance, create competitive advantages that are difficult to obtain for other insurers. To give an example, lead insurers are likely to be better positioned to craft joint care propositions with providers since they may have better relations with these providers than their competitors. In addition, the lead insurer could leverage specific knowledge gained in the collaborative process in one sector to individual negotiations that are held in other sectors. Conversely, taking up the lead role could also bring disadvantages. For instance, it might provoke 'free rider' behaviour in the market. Large insurers, for example, are likely to be assigned the lead role in many regions. If this requires them to expand their workforce (e.g. for negotiating

and monitoring provider contracts), they will face higher administrative costs than small insurers. Hence, small insurers could seize the opportunity to position themselves as cheap alternatives for the more expensive large insurers. In addition, large insurers could, as lead insurer, also feel the moral obligation or public pressure to fully accept the consequences of jointly crafted plans in individual contracting. This is particularly true when they have been deeply involved in forging a shared, inspiring (regional) vision – a blueprint that demands considerable investment but offers the prospect of more efficient healthcare provision. It would be inconsistent and unreasonable to act as an enthusiastic co-author of the plan yet to be unwilling to accept its financial implications in provider contracts. Small insurers, however, could act as free-riders and strategically stay on the sidelines, sticking to simple and sharply negotiated price/volume-based agreements while benefiting from the fundamental transformation initiated and financed by others.

These drawbacks of more cooperation in a competitive setting are not insurmountable. However, tackling these problems first requires more clarity on the role that networks are to play within the healthcare system. It needs to be clear which sectors or service types will be (primarily) coordinated through networks. For these sectors, it should be specified which are coordinated on which level (e.g., local, regional or national). For the regional networks, it is important to demarcate the logical geography, which will possibly differ across sectors. The next step is to establish the necessary institutional requirements and provide clear guidelines on how these networks will operate. Who participates? What is the governance and decision-making structure? What regulators will supervise the functioning of the networks? And what are the roles and responsibilities of the actors within the network? In other words, just as the market is regulated according to the principles of 'managed competition', networks also need to be managed according to what could be called the (to be established) principles of 'managed cooperation'. These steps are crucial not only for the network itself, but also to clarify the role of the health insurer as purchaser. It is the context in which an answer can be given to two pivotal questions. First, which of the insurers participate? Second, what is their role within the network? Ideally, competition plays a logical role in distributing these roles, for example by assigning the roles based on the insurers' average (regional) market shares of the past four years and other performance indicators like patient- and/or provider satisfaction with the insurer. Depending on the nature of the sectors[19] that the network deals with and the considerations given in the preceding paragraph, a lead insurer can be given a broader or more limited mandate. In this process, it is crucial to

19 As described in Section 3.2. To give an example: a sector where a network functions as a secondary coordination mechanism alongside the market will require a more delineated mandate for the lead insurer compared to a sector where a network is the sole coordination mechanism.

balance the advantages and disadvantages of being a (regional) lead insurer so that the distortion of level playing field between insurers will be minimalised, while at the same time the position of lead insurer remains attractive enough to compete for. How this can be done is an important issue for further research.

Finally, careful and considerable attention should be paid to the natural pitfalls of coordination through networks (see section 2.2). Networks run the risk of slow and/or suboptimal decision-making. Hence, it is essential to specify what happens when the deliberations stall and the participants are unable to reach an agreement. There are basically two options: either the lead insurer or the government makes the call. An argument can be made for both choices but since the lead insurer has already been part of the collaborative effort, there will be cases in which it is necessary that the government takes up this role. To ensure a sustainable solution in such a situation, appropriate rules and procedures as well as a regulatory entity to enforce these rules and procedures should be established.

In short, while the concept of cooperation through networks is attractive and promising, it needs careful consideration before it can be applied in a balanced and sophisticated way within the Dutch healthcare system. Just like competition needs to be 'managed', 'cooperation' also needs to be managed to ensure that all preconditions for success are met. Only under the right circumstances 'managed cooperation' can help to improve the sustainability of the healthcare system and a new balance between market, hierarchy and cooperation through networks can be found.

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SUMMARY

Most countries face similar serious challenges in their healthcare systems, mainly caused by changing demographics and the resulting increase in demand for healthcare. In the context of these challenges, an optimal allocation of resources within the healthcare system is crucial. To achieve this, several countries have incorporated market-based elements in their healthcare systems. In an effort to do this in a comprehensive and equitable way, some of these countries introduced the model of 'managed competition', in which competing third party purchasers buy healthcare on behalf of their enrolees within a strict regulatory framework to guarantee universal access to affordable care. This dissertation studies the experiences with the managed competition model in the context of the Dutch healthcare system. The central research questions for all chapters can be formulated as follows: does competition between Dutch health insurers work as originally intended and, if not or not completely, what can be done to improve the role of insurers in the healthcare system?

This central research question is answered by conducting four separate, but closely related studies. The first study, presented in chapter 2, takes the consumer's perspective. This study examines whether consumers perceive and trust the health insurer as a prudent purchaser of care. It used a mixed method approach by employing focus groups and a survey. The conclusion is that consumers do perceive health insurers as prudent buyers of care yet have fragile trust in insurers' ability to fulfil this role. The study also concluded that (i) consumers have insufficient information to cast a judgement about insurers as purchasers of care, and therefore (ii) cannot base their choice for a health insurer on anything else than the price (the premium) of a health plan.

Chapter 3 takes up the perspective of health insurers and asks whether they experience an incentive to steer on quality of care when purchasing care on behalf of their enrolees. The study employed a qualitative approach, using interviews and focus groups, and found that insurers are caught in a struggle between positive and negative incentives to steer on quality. Overall, the negative incentives – e.g., a lack of transparency, reputational risks and consumer indifference – seem to slightly dominate. The perception of having a non-commercial 'social mission' is the most important positive incentive that insurers experience. That is, they feel the moral obligation to live up to the public goals of the healthcare system.

Chapter 4 focusses on the actual behaviour of health insurers. Again, a mixed methods approach is employed – including a literature review, content analysis of systematically gathered promotional material, and interviews – to examine whether insurers use target

marketing for attracting specific customer segments that are profitable for insurers. The conclusion is that insurers' marketing efforts are mainly targeted at financially favourable price-sensitive buyers. Targeting users of care and tailoring of purchasing activities to specific segments of care users appears to be almost non-existent.

The study presented in chapter 5 examines to what extent insurers can and do cooperate in enhancing quality of care in a managed competition setting. Based on qualitative research methods – comprising focus groups, a document scan, and interviews – it is concluded that cooperation as a precondition to competition (i.e., defining, designing, and measuring quality indicators) is uncontroversial and takes place in practice. Cooperation as a substitute for competition (i.e., jointly setting benchmarks, steering patients, and selective contracting) – is largely controversial and almost absent. The key problem is that assessing whether the benefits of this kind of cooperation outweigh the cost associated with reduced competition is difficult. However, such an assessment is required by competition law for being allowed to engage in this type of cooperation.

In chapter 6, the overall research question is answered based on the empirical findings obtained in the preceding chapters. It is concluded that insurers are primarily and successfully incentivised to contain healthcare spending growth but are insufficiently incentivised to include quality in their purchasing decisions. Considering this conclusion, and given the challenges facing the health care system, it seems justified to ask if the model of managed competition – including health insurers' central role as competing prudent purchasers of care on behalf of their customers – is the best option. Therefore, the potential role of three common coordination mechanisms that are distinguished in the literature - markets, hierarchies and networks – is discussed. It is argued that the suitability of these mechanisms varies across healthcare sectors that each have their own distinctive features. The chapter ends by discussing the implications for improving and (re)designing the Dutch healthcare system and the role of health insurers. It is argued that the system can be improved by enhancing publicly available information on how insurers execute their purchasing role. Moreover, the role health insurers have to play in the various healthcare sectors could be specified by establishing a clear framework to determine the best coordination mechanism for each sector. For some sectors this may result in a shift in emphasis from managed competition to managed cooperation.

NEDERLANDSTALIGE SAMENVATTING

Veel landen worden in toenemende mate geconfronteerd met aanzienlijke uitdagingen in de zorg. Deze uitdagingen worden onder andere veroorzaakt door een veranderende demografie en de daardoor toenemende vraag naar zorg. Gezien deze uitdagingen is een optimale verdeling van de middelen binnen het zorgsysteem cruciaal. Om dit te bereiken hebben verschillende landen al in de jaren negentig elementen van marktwerking in hun zorgsysteem opgenomen. Sommige van deze landen hebben gekozen voor een model dat bekend staat als gereguleerde concurrentie (managed competition). In deze opzet kopen concurrerende zorgverzekeraars namens hun verzekerden zorg in. Aan het einde van ieder jaar kunnen verzekerden 'stemmen met de voeten'. Dat wil zeggen, ze mogen kiezen voor de verzekeraar die dit in hun ogen het beste doet. Dit gebeurt binnen een strikt kader van wet- en regelgeving dat gelijke toegang en gelijke behandeling waarborgt. Het idee is dat de prikkels in dit systeem leiden tot de meest efficiënte allocatie van alle middelen.

Dit proefschrift onderzoekt de ervaringen met gereguleerde concurrentie in de Nederlandse context. De centrale onderzoeksvragen luiden als volgt. Functioneert de concurrentie tussen Nederlandse zorgverzekeraars zoals oorspronkelijk bedoeld? En als dat niet (volledig) het geval is, wat kan er dan worden gedaan om het zorgsysteem te verbeteren? Deze centrale vragen worden beantwoord in vier afzonderlijke maar nauw verwante studies, gevolgd door een afsluitende algemene beschouwing op basis van deze onderzoeken.

De eerste studie, te vinden in hoofdstuk 2, bestudeert het perspectief van de consument. In deze studie onderzochten we of consumenten de zorgverzekeraar zien als een goede inkoper van zorg en of ze vertrouwen hebben in deze rol van de zorgverzekeraar. Dat is essentieel om het systeem te laten werken zoals oorspronkelijk bedoeld. We maakten gebruik van focusgroepen en een enquête, en concludeerden dat consumenten zorgverzekeraars weliswaar als zorginkoper zien, maar dat zij weinig vertrouwen hebben in het vermogen van zorgverzekeraars om deze rol goed te vervullen. Daarnaast bleek dat consumenten onvoldoende informatie hebben om een goed oordeel te vormen over verzekeraars als zorginkopers. Het gevolg is dat hun keuze voor een zorgverzekeraar voornamelijk gebaseerd is op de prijs (premie) van een zorgverzekering.

Hoofdstuk 3 onderzoekt het perspectief van zorgverzekeraars zelf en bekijkt of ze een prikkel ervaren om bij de inkoop van zorg te sturen op kwaliteit van zorg. Het onderzoek, dat gebruikmaakt van interviews en focusgroepen, toont aan dat verzekeraars gevangen zitten tussen positieve en negatieve prikkels. De negatieve prikkels, zoals een

gebrek aan transparantie, reputatierisico's en onverschilligheid bij consumenten, lijken het zwaarst te wegen. De perceptie van een niet-commerciële, 'sociale missie' vormt de belangrijkste positieve prikkel voor verzekeraars om te sturen op kwaliteit van zorg. Meer concreet: ze voelen een morele verplichting om de publieke doelen van het zorgsysteem na te streven. De vraag is echter of deze prikkel op lange termijn houdbaar is.

Hoofdstuk 4 richt zich op het daadwerkelijke gedrag van zorgverzekeraars. In dit hoofdstuk gebruikten we een gemengde onderzoeksaanpak - bestaande uit een literatuuronderzoek, analyse van verzameld promotiemateriaal en interviews - om te onderzoeken hoe verzekeraars hun marketinginstrumenten gebruiken. De conclusie is dat de marketinginspanningen van verzekeraars vooral gericht zijn op financieel gunstige, prijsgevoelige afnemers. Doelgroep-marketing gericht op zorggebruikers en het aanbieden van zorginhoudelijke proposities voor specifieke doelgroepen binnen dit segment blijken vrijwel niet voor te komen.

De studie in hoofdstuk 5 onderzoekt in hoeverre verzekeraars kunnen en willen samenwerken om de kwaliteit van zorg te verbeteren. Op basis van kwalitatieve onderzoeksmethoden – waaronder focusgroepen, een documentenanalyse en interviews – concluderen we dat samenwerking als voorwaarde voor concurrentie (d.w.z. het definiëren, ontwerpen en meten van kwaliteitsindicatoren) onomstreden is en daadwerkelijk plaatsvindt. Samenwerking als alternatief voor concurrentie (d.w.z. gezamenlijk vaststellen van benchmarks, sturen van patiënten en selectief contracteren) is echter grotendeels controversieel en bijna afwezig. Het belangrijkste probleem is dat het moeilijk is om te beoordelen of de voordelen van deze samenwerking opwegen tegen de kosten van verminderde concurrentie. Een dergelijke beoordeling is echter nodig om dit soort samenwerking op grond van de mededingingsregels toe te kunnen staan.

In het laatste hoofdstuk worden, op basis van de empirische resultaten uit de voorgaande hoofdstukken, de onderzoeksvragen beantwoord. Samenvattend laten de onderzoeken zien dat het Nederlandse zorgsysteem deels functioneert zoals oorspronkelijk bedoeld, maar deels ook niet. Verzekeraars worden primair en succesvol gestimuleerd om de groei van zorgkosten te beheersen. Ze worden echter onvoldoende geprikkeld om de kwaliteit van zorg mee te nemen in hun inkoopbeslissingen terwijl het systeem samenwerking op dit gebied wel in de weg staat. Deze conclusie roept de vraag op of het huidige systeem geschikt is voor de uitdagingen waar de zorg voor staat. In dit hoofdstuk wordt daarom ook besproken welke alternatieven er zijn. Dit gebeurt door drie gangbare coördinatiemechanismen - markten, hiërarchieën en netwerken - zowel in algemene zin als vanuit het perspectief van de gezondheidszorg te evalueren. Hieruit blijkt dat er geen 'one size fits all' oplossing is voor de hele zorg, maar dat de toepasbaarheid van coördinatieme-

chanismen verschilt per zorgsector. Het hoofdstuk eindigt met de implicaties van de onderzoeksresultaten voor het Nederlandse zorgstelsel. Dit proefschrift laat allereerst zien dat het huidige systeem beter kan gaan werken door de openbaar beschikbare informatie over hoe verzekeraars hun inkooprol vervullen te verbeteren. Daarnaast laat het proefschrift zien hoe voor het toekomstige systeem per zorgsector, op basis van criteria zoals marktcomplexiteit, kan worden vastgesteld welk coördinatiemechanisme het best passend is. Voor sommige sectoren kan dit een verschuiving betekenen van gereguleerde marktwerking naar gereguleerde samenwerking of naar meer directe overheidssturing. Afhankelijk hiervan kan de rol van de zorgverzekeraar in die sector worden herzien. In een aantal sectoren – zoals bijvoorbeeld dure geneesmiddelen, waar overheidssturing logisch is – komt de analyse naar verwachting goed overeen met de dagelijkse praktijk. In andere sectoren – zoals bijvoorbeeld complexe GGZ – kan deze analyse leiden tot de conclusie dat minder concurrentie en een kleinere inkooprol voor zorgverzekeraars wenselijk is.

Appendices

2

Appendices Chapter 2

APPENDIX 2.1 – 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 healthcare 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 2.2 – 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?**
    - o a.s.r.
    - o Aeviate (Eucare)
    - o Anderzorg
    - o Besured
    - o Bewuzt
    - o CZ
    - o CZdirect
    - o De Friesland Zorgverzekeraar
    - o Ditzo
    - o DSW
    - o FBTO
    - o Hema
    - o Interpolis
    - o inTwente
    - o IZA
    - o IZZ
    - o Jaaah
    - o Just
    - o Menzis
    - o Nationale-Nederlanden
    - o OHRA

- o ONVZ
- o PMA
- o PNOzorg
- o Promovendum
- o Pro Life
- o Salland
- o Stad Holland
- o UMC
- o United Consumers VGZ
- o Univé
- o VGZ
- o VinkVink
- o VvAA
- o ZEKUR
- o ZieZo
- o Zilveren Kruis
- o Zorg en Zekerheid
- o Zorgdirect
- o I don't know

2. What type of policy do you have with your current health insurer?

- o Restitution policy
- o In-kind policy
- o Combination policy
- o I don't know

3. Are you participating in a group contract (for example through your employer, sports club or trade union)?

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

4. Do you have a supplementary health insurance in addition to your basic insurance?

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

5. Have you opted for a voluntary deductible?

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

6. **How satisfied are you with your current health insurer?**
   - o Very satisfied
   - o Satisfied
   - o Neutral
   - o Dissatisfied
   - o Very dissatisfied
7. **Have you ever had a problem with your health insurer?**
   - o No, never
   - o Yes, about the service provision
   - o Yes, about the reimbursement of care
   - o 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 policy-holders (i.e. make agreements with healthcare providers about the care to be provided)?**
   - o I'm aware of that.
   - o I'm somewhat aware of that.
   - o 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?

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

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

- o Yes (go to question 5a)
- o No (go to question 4 and then to 5b)

- o I don't know (go to question 6)

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

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

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

- o Because of my experiences with health insurers
- o Because of the objective that I think health insurers have
- o Because of the tasks that health insurers have
- o Because of the interests of health insurers
- o Because of the expertise of health insurers on healthcare procurement
- o Because of the transparency of health insurers about the agreements they make with healthcare providers
- o 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?

- o Because of my experiences with health insurers
- o Because of the objective that I think health insurers have
- o Because of the tasks that health insurers have
- o Because of the conflicting interests of health insurers
- o Due to the lack of expertise of health insurers on healthcare procurement
- o Due to the lack of transparency of health insurers about the agreements they make with healthcare providers
- o 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?

- o A lot
- o Many
- o Reasonable
- o Few
- o No

- o 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?**
   - o Man
   - o Woman
   - o Otherwise
2. **What is your year of birth?**

[insert drop-down list]

3. **What is your highest completed education?**
   - o Low
   - o Intermediate
   - o High
4. **How would you assess your physical health in general?**
   - o Excellent
   - o Very good
   - o Good
   - o Fair
   - o Poor
5. **How would you assess your mental health overall?**
   - o Excellent
   - o Very good
   - o Good
   - o Fair
   - o Poor
6. **How much care do you use?**
   - o None
   - o Very little
   - o Little
   - o Much
   - o Very much

Closing

Thank you for completing this questionnaire.

APPENDIX 2.3 – DESCRIPTIVE STATISTICS

Table III.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%	
	Very good	197	28%	85%
	Excellent	125	18%	
Physical health	Poor	16	2%	19%
	Fair	119	17%	
	Good	361	51%	
	Very good	149	21%	81%[1]
	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.

APPENDIX 2.4 - RESULTS FACTOR ANALYSIS FOR THE CONSTRUCT VARIABLES PERCEPTION OF APPROPRIATENESS AND IN TRUST IN PERFORMANCE OF TWELVE PURCHASING TASKS

Purchasing tasks		Factor loadings for Perception of appropriateness	Factor loadings for Trust in performance
1	Purchase care for a low price	0.465	0.525
2	Purchase care of good quality	0.680	0.694
3	Set criteria for quality of care	0.749	0.727
4	Inform policyholders about price and quality	0.666	0.722
5	Determine care needs of policyholder population	0.534	0.765
6	Determine from which providers services are reimbursed	0.419	0.736
7	Ensuring that care is available on time	0.724	0.769
8	Ensure that care is available in the area	0.671	0.749
9	Taking into account policyholder preferences	0.578	0.795
10	Stimulating prevention in healthcare	0.542	0.626
11	Taking into account research and developments	0.679	0.762
12	Playing a role in the concentration of highly specialized care	0.398	0.669
Cronbach's alpha		**0.86**	**0.97**

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Chapter 3 Appendices

APPENDIX 3.1 – TOPIC GUIDE FOR INTERVIEWS

Opening

1) Some remarks on objective study
2) Personal introduction
3) Explanation of the proceedings of the focus group
4) Opening questions:
    a. Can you give a short statement on the importance of insurers steering on quality within the Dutch healthcare system?
    b. What tools/means does the system provide to the insurer to steer on quality? To what extend is this sufficient?

Key questions

1) With regard to health insurers:
    a. What are the most important incentives in the system?
    b. What are the incentives to steer on quality?
    c. Are there any incentives to not steer on quality?
    d. Which incentives are the strongest?
    e. Are there – apart from the discussed incentives - any other perceived opportunities and/or barriers to steer on quality?
2) With regard to the healthcare system; what do you see regarding:
    a. Purchasing behaviour: do insurers actually steer on quality?
    b. Care market: do patient flows/volumes to providers alter as a result of insurers steering on quality?
    c. Insurance market: are commercial results of the insurer influenced if he steers (or doesn't steer) on quality?

Closing

1) Any final remarks?
2) Explanation of next steps and follow up

APPENDIX 3.2 – TOPIC GUIDE FOCUS GROUPS

Opening

1) Some remarks on objective study
2) Introduction of participants
3) Explanation of the proceedings of the focus group
4) Opening question: can you give a short statement on the relation between quality and price in the Dutch healthcare system?

Key questions

1) Incentives on system level (macro)
   a. What are the most important incentives in the system?
   b. What are the incentives to steer on quality?
   c. Are there incentives to refrain from steering on quality?
   d. Which incentives are the strongest, which prevail?
2) Incentives on organisational level (micro)
   a. How are system incentives translated organisational level?
   b. Is this translation ideological or prompted by practical considerations?
   c. Are there other incentives on organisational level that play a role?
3) Effects in daily practice
   a. How do the incentives influence daily practice?
   b. Are there practical considerations to steer on quality or refrain from doing so?
   c. Are health insurers adequately equipped to steer on quality?
   d. What is the effect of steering on quality? Are you rewarded?

Closing

1) Are there any final remarks?
2) Some remarks on next steps and follow up

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Chapter 4 Appendices

APPENDIX 4.1 – TOPIC GUIDE

Opening

1) Objective of the study and personal introduction
2) Opening question: can you give a short statement on the advantages and disadvantages of target marketing by health insurers within a system of managed competition?

Key questions

3) Incentives and instruments
   a. Which financial and non-financial incentives are there for a health insurer to target specific groups of consumers?
   b. Which marketing instruments does an insurer in theory have to attract or disinterest specific groups of consumers?
   c. To what extent are online and offline marketing campaigns an instrument to attract or disinterest specific groups of consumers?
4) Market observations
   a. Do you observe that Dutch health insurers use target marketing as an instrument to attract or disinterest specific groups of consumers?
   b. If yes, what role play online and offline marketing campaigns in this behaviour?
   c. Is there a difference between the switching season and the remainder of the year when it comes to target marketing?
5) Own behaviour
   a. What is your vision c.q. the vision of your organisation when it comes to target marketing?
   b. Is there for your organisation a difference between switching season and the remainder of the year with regard to target marketing?
   c. Is there anything that we should take into consideration when we analyse the promotional material of your organisation that we collected?
   d. Are there any promotional items of your organisation that we missed and that we should include in our dataset? If so, could you provide these?

Closing

6) Any final remarks?
7) Explanation of next steps and follow up

APPENDIX 4.2 – PUBLICATIONS ABOUT OVER- AND UNDERCOMPENSATED SUBGROUPS BY THE DUTCH RISK EQUALISATION SYSTEM (CATALOGUED IN 2019)

Nr	Author	Title
1	Van Kleef et al (2019)	Selection Incentives for Health Insurers in the Presence of Sophisticated Risk Adjustment
2	Van Kleef et al (2019)	Strategies to Counteract Risk Selection in Social Health Insurance Markets
3	Van Kleef et al (2019)	Compenseer zorgverzekeraars beter voor verlies op chronisch zieken
4	Van Kleef et al (2018)	Gebruik van diagnose-informatie uit huisartsenregistraties in de risicoverevening via constrained regression
5	Van Kleef et al (2017)	Risicoverevening 2016 Uitkomsten op subgroepen uit de Gezondheidsmonitor 2012
6	Croes ea (2018)	Evidence of selection in a mandatory health insurance market with risk adjustment
7	NZa (2016)	Rapport risicoselectie en risicosolidariteit zorgverzekeringsmarkt (kwalitatief onderzoek)
8	NZa (2016)	Kwantitatief onderzoek naar risicoselectie en risicosolidariteit op de zorgverzekeringsmarkt
9	NZa (2016)	Marktscan Zorgverzekeringsmarkt
10	NZa (2014)	Verdiepend onderzoek Naleving acceptatieplicht door zorgverzekeraars
11	Van Vliet et al (2017)	Onderzoek “gezonde verzekerden”: verbetering van de compensatie voor chronisch zieken in het somatisch vereveningsmodel
12	Douven et al (2008)	Doelmatige zorg versus risicoselectie
13	NZa (2016)	Risicoselectie en risicosolidariteit zorgverzekeringsmarkt
14	KPMG (2020)	Onderzoek restprobleem risicoverevening
15	CPB (2016)	Keuzegedrag verzekerden en risicosolidariteit bij vrijwillig eigen risico
16	Vektis (2017)	Herclassificatie chronisch zieken
17	Houtepen (2017)	Onderzoek (jonge) kinderen en bevallingen
18	vd Ven (2019)	Verminder de verliezen op gemeentepolissen (blog)
19	Kleef et al (2014)	Evaluatie Zorgstelsel en risicoverevening
20	KPMG	Restrisico’s in de verevening

APPENDIX 4.3 – FINANCIALLY ATTRACTIVE OR UNATTRACTIVE SUB-GROUPS FOR INSURERS AT THE PREVAILING DUTCH RISK EQUALISATION SYSTEM

Nr	Sub group	Source
1	Healthy (or good self-reported health)	Van Kleef et al (2019). Van Vliet (2017). NZa (2016), Kleef et al (2014), Douven, Mannaerts (2008), KPMG (2020)
2	Unhealthy (or bad self reported health)	Van Kleef et al (2019)
3	High number of self-reported conditions	Van Kleef et al (2019)
4	Low number of self-reported conditions	Van Kleef et al (2019)
5	High risk of anxiety disorder or depression	Van Kleef et al (2019)
6	Low risk of anxiety disorder or depression	Van Kleef et al (2019)
7	Sufficient physical activity	Van Kleef et al (2019)
8	Insufficient physical activity	Van Kleef et al (2019)
9	Chronic ill	Van Kleef et al (2018). Vektis (2017), KPMG (2020)
10	Enrolees with high deductible	Croes ea (2018), NZa (2016), KMPG (2020)
11	Pregnants	NZa (2016), Houtepen (2017), KMPG (2020)
12	Switchers	NZa (2016)
13	Low income group contracts	Vd Ven (2019), KPMG (2020)
14	Budget-policy holders	Douven, Mannaerts (2008), KPMG (2020)
15	Intensive users of mental care	KMPG (2020)
16	Orphan medicine users	KMPG (2020)
17	Newborn (0-1 years)	Houtepen (2017), KPMG (2020)
18	Season labourers	KPMG (2020)
19	Long lasting home care users	KPMG (2020)
20	Deeased during the year	KPMG (2020)
21	Foreign care users	KPMG (2020)
22	Insured without a known/administered care history (e.g. immigrants)	KPMG (2020)
23	Free choice seekers	KMPG (2020)
24	Different (non-Dutch) ethnic background	KPMG (2020)
25	Incorrectly classified in higher risk category	KPMG (2020)
26	Just above the threshold of a higher risk adjustment category	KPMG (2020)
27	Limited health capabilities (enrolees that find it difficult to understand and apply information about health)	KPMG (2020)
28	Former sickness fund enrollees	KPMG (2020)
29	Defaulters	KPMG (2020)
30	Homeless	KPMG (2020)

APPENDIX 4.4 - QUALIFICATION PER SEGMENT

Nr	Sub group	Type	Financial impact*	Group size**	Targetable?
1	Healthy (or good self-reported health)	F	Low	Large	Yes
2	Unhealthy (or bad self-reported health)	NF	High	Large	Yes
3	High number of self-reported conditions	NF	Low	Large	Yes
4	Low number of self-reported conditions	F	Low	Large	Yes
5	High risk of anxiety disorder or depression	NF	Low	Large	Yes
6	Low risk of anxiety disorder or depression	F	Low	Large	Yes
7	Sufficient physical activity	F	Low	Large	Yes
8	Insufficient physical activity	NF	Low	Large	Yes
9	Chronic ill	NF	High	Large	Yes
10	Enrolees with high deductible	F	Low	Large	Yes
11	Pregnants	NF	High	Large	Yes
12	Switchers	F	Unknown	Large	No
13	Low income group contracts	NF	Unknown	Large	Yes
14	Budget-policy holders	F	Low	Large	Yes
15	Intensive users of mental care	NF	High	Small	No
16	Orphan medicine users	NF	High	Small	No
17	Newborn (0-1 years)	F/NF	High	Large	No
18	Season labourers	F	Unknown	Large	Yes
19	Long lasting home care users	NF	High	Small	No
20	Deceased during the year	NF	High	Large	No
21	Foreign care users	NF	Unknown	Large	Yes
22	Insured without known/administered care history (e.g. immigrants)	NF	Unknown	Large	No
23	Free choice seekers	NF	Unknown	Large	Yes
24	Non-Dutch ethnic background	NF	Unknown	Large	Yes
25	Incorrectly classified in higher risk category	F	Unknown	Unknown	No
26	Just above the threshold of a higher risk adjustment category	F	Unknown	Unknown	No
27	Limited health capabilities (enrolees that find it difficult to understand and apply information about health)	NF	Unknown	Large	Yes
28	Former sickness fund enrollees	NF	Low	Large	No
29	Defaulters	NF	Unknown	Large	No
30	Homeless	NF	Unknown	Large	No

* High is > €500; Low is <€500 under/overcompensation per person per year

** Large is >10K persons; Small is <10K persons

APPENDIX 4.5 – SUBGROUPS THAT ARE NOT SUITABLE FOR TARGET MARKETING BY HEALTH INSURERS

Nr	Sub group	Reason non targetability
12	Switchers	Switchers encompass all possible subgroups for target marketing and is therefore not a target group in itself
15	Intensive users of mental care	Marketing campaign is practically not conceivable
16	Orphan medicine users	Marketing campaign is practically not conceivable
17	Newborn (0-1 years)	Target group does not make its own choice for health insurance
19	Long lasting home care users	Marketing campaign is practically not conceivable
20	Deceased during the year	Moment of passing away is unknown
22	Insured without known/administered care history (e.g. immigrants)	Target group is often not aware that they are a member of this group
25	Improper risk adjustment qualification	Target group is often not aware that they are a member of this group
26	Just above the threshold of a higher risk adjustment category	Target group is often not aware that they are a member of this group
28	Former sickness fund enrollees	Target group is often not aware that they are a member of this group
29	Defaulters	Marketing campaign is practically not conceivable
30	Homeless	Marketing campaign is practically not conceivable

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Chapter 5 Appendices

APPENDIX 5.1 – TOPIC GUIDE

Opening

1) Some remarks on objective study
2) Introduction of participants
3) Explanation of the proceedings of the focus group
4) Opening question: can you give a short statement on cooperation between insurers on quality of care?

Key questions

5) Current situation: how does cooperation amongst insurers on quality of care currently look like?
   a. How and where do insurers currently cooperate on quality of care?
   b. How does this cooperation look like – does it differ per segment?
   c. What are the motives for this cooperation – do they differ per segment?
6) Advantages and disadvantages: what are the consequences of cooperation amongst insurers on quality of care?
   a. What are the implications of cooperation amongst insurers on the healthcare system in general in specifically with regard to quality?
   b. What are the most important advantages of cooperation amongst insurers on quality of care?
   c. What are the most important disadvantages of cooperation amongst insurers on quality of care?
   d. Do the advantages of cooperation amongst insurers on quality of care outweigh the disadvantages (or the other way around)? Why?
7) Obstacles: what obstacles are there for insurers that intent to cooperate on quality of care?
   a. Where and why are these obstacles experienced?
   b. Should these obstacles be taken away?
8) Future: what will and/or should change when it comes to cooperation amongst insurers on quality of care?
   a. Is the current balance between cooperation amongst and competition between insurers on quality of care the right balance?
   b. Would more cooperation amongst insurers have a positive impact on quality of healthcare?

Closing

9) Are there any final remarks?
10) Some remarks on next steps and follow up

APPENDIX 5.2 – OVERVIEW OF IDENTIFIED INITIATIVES IN WHICH INSURERS CURRENTLY COOPERATE ON QUALITY OF CARE (CATALOGUED IN 2018)

Initiative	Number of insurers involved	Explanation	Phase
Quality Program	Dutch Association for Health Insurers (23)	The Quality Program focuses on the development of transparent quality indicators (the transparency calendar). Within this Program the Dutch Association for Health Insurers works together with other actors (healthcare providers and patients) within healthcare. One of the themes inside this program is the development of questionnaires (PREM) for patients to share their experience with treatments. The objective of the program is for insurers to collaborate on developing quality indicators	1-2
DICA	Dutch association for Health insurers	DICA offers insight into the quality of care with reliable comparisons and analyses. DICA facilitates 22 registrations for multiple disciplines and various disorders. In recent years, the Dutch association for Health Insurers funded the (further) development, maintenance and management of registrations. Hospitals therefore pay for no longer for registrations themselves. DICA is currently focusing on the registrations within the hospitals. DICA is also developing PROMs within the DICA registrations in collaboration with both insurers and patients	1-2
Linnean initiative	Dutch association for health insurers and individual health insurers	National initiative where insurers participate together with other actors to develop outcome indicators	1-2
Quality framework for neighborhood nursing	Dutch association for Health insurers	The Dutch association for Health insurers has participated in the Steering Group Quality Framework for neighborhood nursing. The quality framework aims to provide direction to the development of neighborhood nursing and provide insight on what good neighborhood nursing means	1-2
National acute care network	Dutch association for Health insurers	Together with 10 other actors the Dutch association for Health insurers developed a quality framework for the emergency care chain	1-2
Quality Assurance Monitoring Foundation (SKMZ)	5	This foundation aims to develop audit models within the paramedical sector. Also new audit and other models and instruments for the measurement of quality are developed and used for both physiotherapy and other types of care within the paramedical sector. Several health insurers are involved in this process	1-3
Quality foundation mental healthcare	4	The foundation identifies quality indicators within mental healthcare (basis GGZ) and measures, analyses and enriches data in order to provide insurers and providers with accurate quality data	1-3

Initiative	Number of insurers involved	Explanation	Phase
Physio-therapy treatment index	5	The treatment index compares the average number of sessions per client of a provider with the expected number of sessions per client based on the client mix. Insurers involved within the Quality Assurance Monitoring Foundation made agreements about further standardization of the treatment index	1-3
COPD and lower back pain	2	Two health insurers developed uniform, supported sets of outcome indicators to create transparency in the quality information of physiotherapy when it comes to COPD and lower back pain	1-3
Joint measure-ment of practice variation (Vektis)	Dutch association for Health insurers	Based on the national claims database from Vektis, the Dutch association for Health insurers studies practice variation between healthcare providers	1-3
Akwa GGZ	Dutch association for Health insurers	The Dutch association for Health insurers is part of the Akwa quality council GGZ. The quality institute originated from the GGZ Quality Foundation and the Foundation Benchmarck GGZ. This institute for quality is involved in the further development of Routine Outcome Monitoring (ROM). Akwa GGZ aims to the improve the quality of mental healthcare by developing quality standards, quality indicators and measuring instruments	1-4
Emergency care concentration	Dutch association for Health insurers	Health insurers made plans to jointly concentrate the emergency care to improve the efficiency. The ACM has not allowed this cooperation yet, because health insurers were not able to show that the benefits of the concentration outweigh the loss of providers	5-6
Proton therapy	8	Health insurers asked the ACM for permission to contract only one institution providing proton therapy. The ACM has not given permission because the most important argument pro (overcapacity) could not be confirmed which implied that there were no benefits that could outweigh the disadvantages	5-6
Prostate Cancer	Unknown	One health insurer asked the ACM if it was possible to provide prostate cancer care in cooperation with other insurers with the aim to concentrate the care in two or three institutions. The ACM judged that it was not able to evaluate the proposal because the plan for cooperation was in a too early stage of development	5-6

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Chapter 6 Appendix

APPENDIX 6.1 – SCORES AND EXPLANATION ON APPLICABILITY OF COORDINATION MECHANISMS PER SECTOR/TYPE OF SERVICE (INDICATIVE)

Scores on the applicability criteria (table 3, section 3.2) are based on expert judgement of five senior professionals (two officials from a health insurer, three academics and one policymaker) and the author. Scores on the coordination mechanisms (table 4, section 3.2) have been derived from this expert judgement, using the logic as described in section 2.3 and Table 2. This appendix explicates this logic. All scores are indicative and for illustrative purposes only; further research is needed to substantiate these scores. A simple mathematical model has been used to ensure consistent translation from the expert judgement regarding the sector-specific applicability criteria into the sector-specific applicability scores per coordination mechanism below.

	Applicability scores			
Sector	**Market**	**Hierarchy**	**Network**	**Explanation**
Emergency hospital care	Low	Medium	Medium	Market scores low because of high asset specificity. Some degree of complexity of allocation (due to potential spill over effects to production levels of other services within hospital) and moderate goal congruency results in medium scores for hierarchy and network.
Basic hospital care	Medium	Low	Medium	Medium score on market because of some degree of asset specificity and performance ambiguity. High complexity of allocation results in low score for hierarchy. Moderate goal congruence (between regular hospitals and independent treatment centres) in combination with high complexity of allocation but moderate asset specificity gives medium score for network.
Complex hospital care	Low	High	Medium	High asset specificity and some degree of performance ambiguity (varies per specialty) results in low score on market. Hierarchy scores high given low complexity of allocation. Network scores medium because of a moderate degree of goal congruency in combination with low complexity of allocation.
Ambulance services	Medium	High	High	Medium score on market because of some degree of asset specificity (mostly technology and embeddedness in network with dispatch centres). High scores on hierarchy and network because of low complexity of allocation and high goal congruence.

	Applicability scores			
Sector	**Market**	**Hierarchy**	**Network**	**Explanation**
Emergency mental care	Low	High	High	Low score on market because of high asset specificity (specific infrastructure, specialised equipment and network integration) and some performance ambiguity. High scores on hierarchy and network because of low complexity of allocation and high goal congruence.
Basic mental care	High	Low	Low	High score on market because of low asset specificity. Performance ambiguity is currently high but transparency should be feasible. Low scores on hierarchy and network because of high complexity of allocation and low goal congruence.
Complex mental care	Low	Low	Medium	Low score on market because of high asset specificity (primarily knowledge) in combination with high performance ambiguity. Low score on hierarchy given some degree of complexity of allocation in combination with high performance ambiguity. Medium score on network given moderate goal congruency in combination with high asset specificity and a some complexity of allocation.
General practitioners	Medium	Low	High	Medium score on market given high performance ambiguity. Low score on hierarchy given high complexity of allocation. High score on network given high goal congruency and low asset specificity (although the high level of complexity of allocation is not ideal for a network).
Obstetrics	High	Low	Medium	High score on market because of low asset specificity. Performance ambiguity is currently high but transparency should be feasible. Low score on hierarchy given high complexity of allocation. Medium score on network because of moderate goal congruency (due to high number of self-employed) in combination with high complexity of allocation but low asset specificity.
Community nursing	High	Low	Low	High score on market because of low asset specificity and a moderate level of performance ambiguity. Low score on hierarchy due to high complexity of allocation. Low score on network given the low level of goal congruency (due to complexity caused by entanglement with social care).
Physiotherapy	High	Low	Low	High score on market because of low asset specificity. Performance ambiguity is currently high but transparency should be feasible. Low score on hierarchy given high complexity of allocation. Low score on network given moderate goal congruency (especially in cross regional debates) in combination with high complexity of allocation.

	Applicability scores			
Sector	**Market**	**Hierarchy**	**Network**	**Explanation**
Regular pharmacy	High	Medium	Medium	Low level of asset specificity and low performance ambiguity (apart from providing consultation) gives a high score on market. Hierarchy is medium given the high level of complexity of allocation in combination with low level of performance ambiguity. Moderate level of goal congruency in combination with low asset specificity gives medium score on network.
Expensive medicine	Low	High	Low	High asset specificity and high performance ambiguity gives a low score on market. Low complexity of allocation gives a high score on hierarchy, although there is a high level of performance ambiguity. Score on network is low given the low level of goal congruency between providers (pharma industry) and purchasers.
Dental care	Medium	Low	Medium	Medium score on market given moderate level of asset specificity and performance ambiguity. Low score on hierarchy given high complexity of allocation. Medium score on network given moderate level of goal congruency in combination with high complexity of allocation and a moderate level of asset specificity (some specific technology).

ABOUT THE AUTHOR

Education

2014 – 2016	Master of Science, Health Economics London School of Economics
2005 – 2007	Master of Arts (cum laude), Philosophy University of Utrecht
2000 – 2004	Bachelor, Business Administration Hogeschool Holland

Publications

Stolper KCF, Yildirim I, Boonen LHHM, Schut FT, and Varkevisser M. 2023. "Do consumers perceive and trust health insurers within a system of managed competition as prudent buyers of care?" Accepted for publication in Health Economics, Policy and Law.

Yildirim I, Stolper KCF, Boonen LHHM, Schut FT, and Varkevisser M. 2023. "Vertrouwen in zorgverzekeraars vereist duidelijkheid over inkooprol." ESB 108 (4828): 584-586.

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Stolper KCF, Boonen LHHM, Schut FT, and Varkevisser M. "Cooperation amongst insurers on enhancing quality of care: precondition or substitute for competition?" Health Economics, Policy and Law 16 (3):273-289.

Stolper KCF, Boonen LHHM, Schut FT, and Varkevisser M. "Managed competition in the Netherlands: Do insurers have incentives to steer on quality?" Health Policy 123 (3):293-299.

Professional experience

2024 – now	Chief Executive Officer CbusineZ – healthcare innovation fund
2019 – 2024	Director Health Insurance CZ Health insurer
2015 – 2019	Senior Manager Corporate Segment CZ Health insurer
2013 – 2015	Manager Indirect Distribution CZ Health insurer
2008 – 2013	Managing Consultant IG&H Consultancy

Ancillary roles

2017 – now	Guest Researcher Erasmus School of Health Policy and Management
2007 – 2008	Teacher Philosophy & Ethics Groevenbeek