# *Healthcare contracting, barriers and success factors*

*Empirical research on healthcare contracting of general practitioners and physiotherapists by health insurers*


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**Faculty of Technical Natural Science**

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**D.J. Willink**

**1119540**

University of Twente

Health Sciences

*Health Service Management*

*Health Technology Assessment & Innovation*

**University of Twente**

First supervisor: Prof. Dr. J. Telgen

Second supervisor: Dr. W.T. Koelewijn

**VvAA**

First supervisor: N. van Rossum

Second supervisor: A. Schepen

*"A well-embedded professional procurement function is essential for a healthy healthcare sector"*

NEVI

20 September 2016

**Preface**

The aim of this master thesis is to describe barriers and success factors in healthcare contracting between healthcare professionals and health insurers. The study is carried out at VvAA heretofore named the “Vereniging voor Verzekering van Artsen Automobilisten” Utrecht. This thesis is written as part of my graduation for the Master Health Sciences at the University of Twente and commissioned by VvAA from March 2016 until October 2016. Together with my supervisors, Nicolle van Rossum and Arjen Schepen, we chose to investigate the current healthcare contracting and to identify the knowledge questions and problems, members of VvAA currently have about this subject. After qualitative and quantitative research I was able to answer the research question: “*What are critical success factors and barriers in healthcare contracting for General Practitioners and Physiotherapists in the Dutch healthcare sector?”*

During my research period both mentors always were willing to answer my questions and often gave direction to my research. My supervisors from the University of Twente Professor Jan Telgen and second supervisor Dr. Wout Koelewijn shared their knowledge and supported me throughout the writing process and Dr. Fredo Schotanus helped me in particular with the start of the thesis.

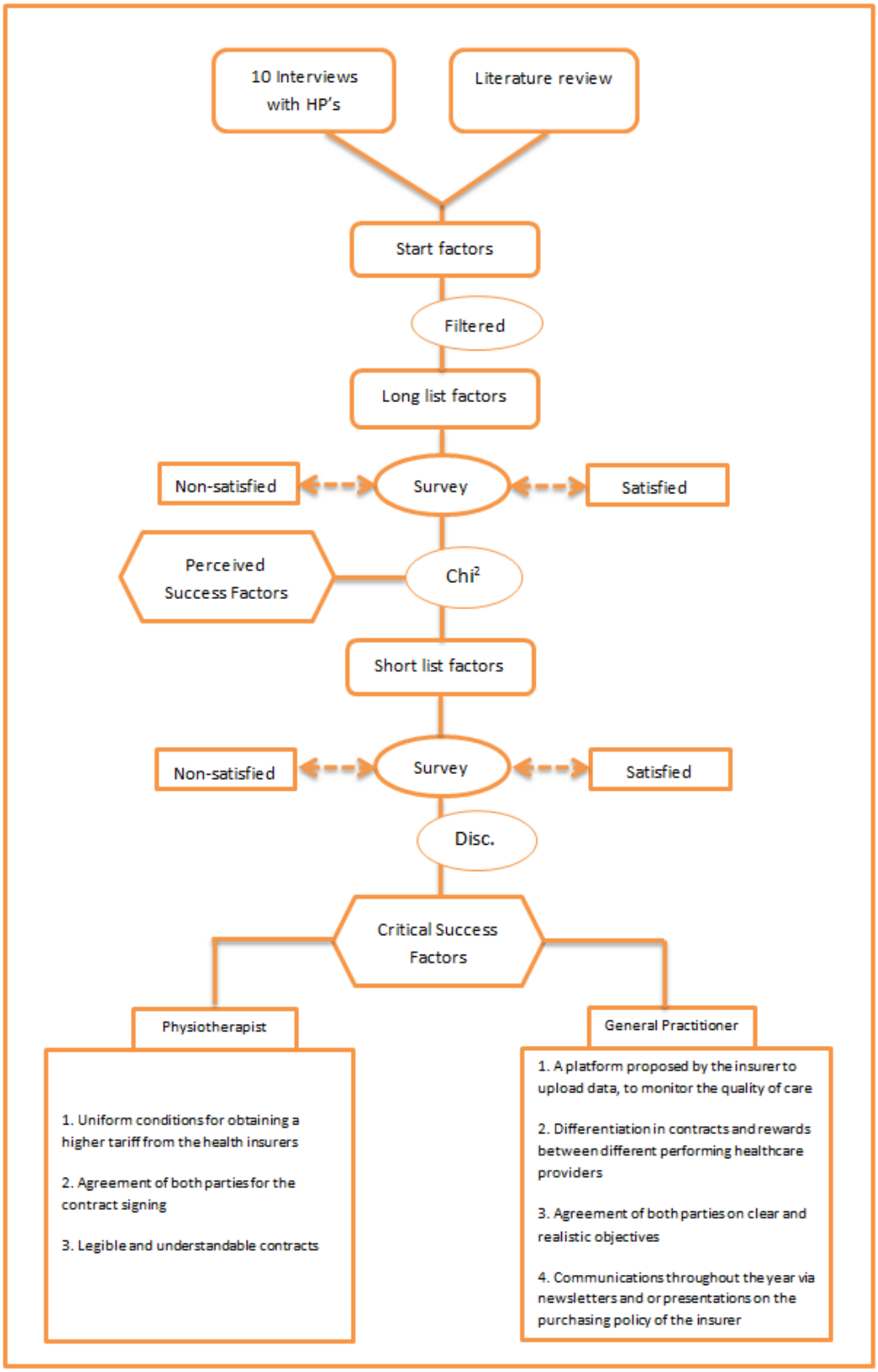
I would like to thank my supervisors for excellent guidance and support during this process. I like to thank all interviewees and survey respondents for their participation. Without cooperation of these healthcare professionals I wouldn’t been able to complete this study.

I also want to thank my colleagues at VvAA for the excellent collaboration. Many colleagues offered me multiple insights into the process concerning healthcare contracting and potential issues of healthcare professionals. Also I want to thank my friends and family, I got pleasant responses in regular conversations about my thesis, when I bogged down or needed moral support.

Douwe Willink
Utrecht, October 2016

## Management Summary

In the current healthcare system, healthcare contracting is generally regarded as a problematic issue by Physiotherapists and General Practitioners. This thesis aims to identify critical success factors and barriers in healthcare contracting for General Practitioners and Physiotherapists. First interviews and a literature research let to the identification of possible start factors, which were manually filtered and resulted in Long List Factors. Second a survey under healthcare professionals is conducted to confirm presence of these Long List Factors and their perceived importance. Short list factors and discriminating success factors are identified. For the physiotherapists, twelve short list factors were identified, with three discriminating critical success factors which together determine 70,5% of the cases to the correct group: “Uniform conditions for obtaining a higher tariff from the health insurers”, “Agreement of both parties for the contract signing” and “Legible and understandable contracts”. For the General Practitioners, thirteen short list factors were identified, with four discriminating critical success factors who together can divide 84,2% of the cases into the correct group: “A platform proposed by the insurer to upload data, to monitor the quality of care”, “Differentiation in contracts and rewards between different performing healthcare providers”, “Agreement of both parties on clear and realistic objectives”, “Communications throughout the year via newsletters and or presentations on the purchasing policy of the insurer”. More understanding of the contracts and the opportunity within the contracts seems a possible positive influence for outcomes. A mismatch regarding the critical success factors (what is important) and the perceived success factors (what seems important) is identified. Also in context of purchasing theories it is seen that a mismatch between health insurer and health professional is evident. Physiotherapeutic care is perceived as a leverage product and General Practitioners care as a strategic product by health insurers, whereas the health professionals themselves both see their products as core products. Also differences between health insurers are identified and differences based on health insurer size are identified. At small health insurers more prerequisites for successful healthcare contracting seem present. Furthermore it is found that there is a mismatch in the guidelines for good contracting provided by the Dutch Healthcare Authority (NZa) versus what seems really important for good contracting as evidenced.

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| | |
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| ACM | Authority Consumer and Market |
| CSF | Critical Success Factor |
| DWM | Dutch Windmill Model |
| GP | General Practitioner |
| HI | Health Insurer |
| HIA | Health Insurance Act |
| HP | Healthcare Professional |
| GCP | Good Contracting Practices |
| GPO | Group Purchasing Organization |
| LHV | Association of General Practitioners |
| LLF | Long List Factor |
| Mw | Competition Act |
| NZa | Dutch Healthcare Authority |
| PSF | Perceived Success Factor |
| SHI | Small Health Insurers |
| SLF | Short List Factor |
| SME | Small Medium Enterprises |
| SSM | Service Specification Model |
| TROG | Please, your signature in the right corner |
| VWS | Ministry of Health, Welfare and Sports |
| WLZ | Law Protracted Care |
| Wmg | Law Healthcare Market Organization |
| WMO | Law of Social Support and youth care |

**Glossary of terms**

**Acceptance Duty:** duty of the insurer to accept anyone regardless of age or health status of the statutory health insurance
**Appropriate care:** care that the user at the time of use is necessary, effective and efficient (referred to appropriate care, defined in the Health Insurance Decree is also responsible care)
**Assessment Framework:** Framework with criteria which quality standards and measuring instruments are tested before they are entered in the register (= Register of Care Institute)
**Basic package:** necessary medical care, which every Dutch person is legally insured
**Best practice:** a technique, working method or activity that has been proven more effective than any other technique, method, etc.
**Care:** curative care (Long taking care)
**Care Agreement:** the agreement between the care provider and the health care provider about the compensation to the healthcare provider deliverables or reward the results achieved by the care and conditions attached to such compensation
**Care Broker:** mediator between the healthcare provider or group of providers and health insurers
**Care:** care that lasts more than a year for people with disabilities, the chronically ill and the elderly, who need care in their daily lives (Long term care)
**Care Contract:** care agreement
**Care giver:** the natural person who actually delivers health care
**Care Plan:** documented plan on caring for a patient / client, comprising: set treatment goals, the involvement of the patient / client, duration, duties and scope of care, including aftercare
**Care Process:** script of receipt and processing of care issues, establish and implement the care plan and evaluation and closure of the care
**Care Standard:** description of the necessary components of multidisciplinary care for patients with certain chronic illness seen from the client
**Contracted care:** care (or part of a care package) which is recorded in a care agreement or contract between a concern health care provider or health care provider
**Control Plan:** plan on checking declarations of care that an illuminated part of a care contract or care Contract
**Cure, Curative care:** care aimed at healing and recovery (including curative

care is especially primary care + medical specialist care and hospital care) (curative care)

**Default:** directive module, standard or organization description, covering the entire care process or part of a specific process of care and that capture what is necessary to provide good care from the perspective of the client

**Detail Control:** Control which is used to personally identifiable information concerning a person's health (medical records)

**Diagnosis:** the treatment process after the diagnosis by the caregiver

**Directive:** paper (based on scientific research and professional experiences) with recommendations to support care users and health care professionals, aimed at improving the quality of care

**Dominant health insurer:** Health insurer which represents the greatest segment of patients

**Duty of care:** means that an insured person is always entitled to the necessary care or reimbursement of the costs of the necessary care. The duty of the insurer is legally established

**Efficient care:** the most appropriate care (treatment or care process) given the state of health of the patient / client / insured

**Effective care:** care, meets the state of science and practice

**E-health:** use of new information and communication technologies (particularly Internet technology) to support health and health care or improve

**Errors:** unintentional violation of rules as a result of ambiguity, error or inattention

**Far health insurer:** health insurance, following the contract signed by the GP (and organization)

**Following Policy:** The dominant Health Insurer agrees on a contract with a healthcare professional. The other Health Insurers follow this contract (present in GP's – market)

**Formal verification:** verification that the declaration complies with the applicable regulations, the care is provided to a person insured by the insurer, the claim falls within the basic insurance, the care is provided by an authorized healthcare provider or caregiver and / or care is declared against the correct rate

**Fraud:** intentionally and deliberately act in violation of the rules in order to own or others (financial) gain

**General Practitioner Contract:** agreement or care contract

**Healthcare Provider:** a person or institution that provides health care

**Healthcare purchasing:** The procurement of healthcare at the healthcare professional by the health insurer.

**Indicator:** measurable aspect, expressed as a number, percentage or ratio, which says something about the quality of care

**Measuring instrument:** means by which an indication can be obtained from the quality of care

**Multizorg** is an umbrella organization which purchases healthcare for Zorg en zekerheid, ONVZ, A.S.R. and the non-core region of ENO

**Non-contracted care:** care that is not automatically compensated on the basis of a concern agreement or care contract with the health insurer

**Over declaration:** declare more performance than

**Over treatment:** do more treatments than necessary

**Outcome Funding:** the funding of care, focusing on the promotion of good outcomes of medical treatments in terms of quality and cost

**Performance Description Decision:** Decision NZa which the billable services are described

**Performance:** the care of a healthcare provider, which he can claim compensation

**Physical control:** control where the insurer assesses the submitted declaration on legality (the declared performance is actually delivered) and effectiveness (the declared performance is the most appropriate service for the health of the patient / client / insured

**Preference health insurer:** health insurer (usually, but not necessary with the largest proportion of insured persons in the population), the GP (and organization) wishes to follow the contract concluded by other insurers (remote health insurers) (called preferred insurer is also leading health insurer)

**Primary care:** among primary care physicians fall; practice nurses; physician assistants, physical therapists / remedial therapists, pharmacists, midwives and maternity nurses, speech therapists, primary care, occupational therapists, dieticians, dentists, orthodontists, dental hygienists, dental technicians, optometrists, podiatrists, occupational physicians, skin therapists, workers in home care, elder care, GP and labs, social workers, ambulance

**Policy rule (NZA):** regulatory framework and standards

**Quality Standard:** collective name of guidelines, modules and standards relating to the entire care process or part of a specific care process, that stipulate what good care is

**Rates:** price for performance

**Sales Ceiling:** financial ceiling for the number of treatments that may be performed (the insurer)

**Shared savings:** the purposeful implementation of savings (Something different cuts) with a view to making new investments (E.g. in innovation, but also in research for yet another savings) or its own pocket

**Switching:** move to another insurer (always January 1 of each year)

**Technical control:** control by health care provider or the declaration meets all technical (digital) conditions

**Treatment plan:** the package of agreements, which together make patient / client and therapist about the choice of diagnosis and treatment.

# 1. Introduction

*With the launch of the new Health Insurance Act (HIA) in 2006 the healthcare market in the Netherlands changed, four roles are present; healthcare professionals (HP's), healthcare insurers (HI's), the government and patients.*

This thesis describes a study conducted in association with VvAA, a large Dutch organization for healthcare professionals (HP's), which was founded in 1924. VvAA operates within the Dutch healthcare sector and supports HP's on financial and non-financial issues. VvAA is a members association for medics', paramedics and medical students in the Netherlands and provides insurances and advices. In the current Dutch healthcare sector four major players are present. The care recipient (consumer/insured patient), the care provider (medical professional), the health insurer (HI) and the government. Pictured in the center of the health triangle. The government plays a directing role (see figure 1). In this study we focus on the healthcare purchasing market.

HP's get their activities reimbursed by HI's by having a contract with the HI, HI's will then reimburse made costs for healthcare activities from their insured. Annually healthcare contracting takes places, with the outcome of an "agreement" between HP and HI. This healthcare contract contains agreements between both parties, regarding e.g. quality, financing, and expediency of care.

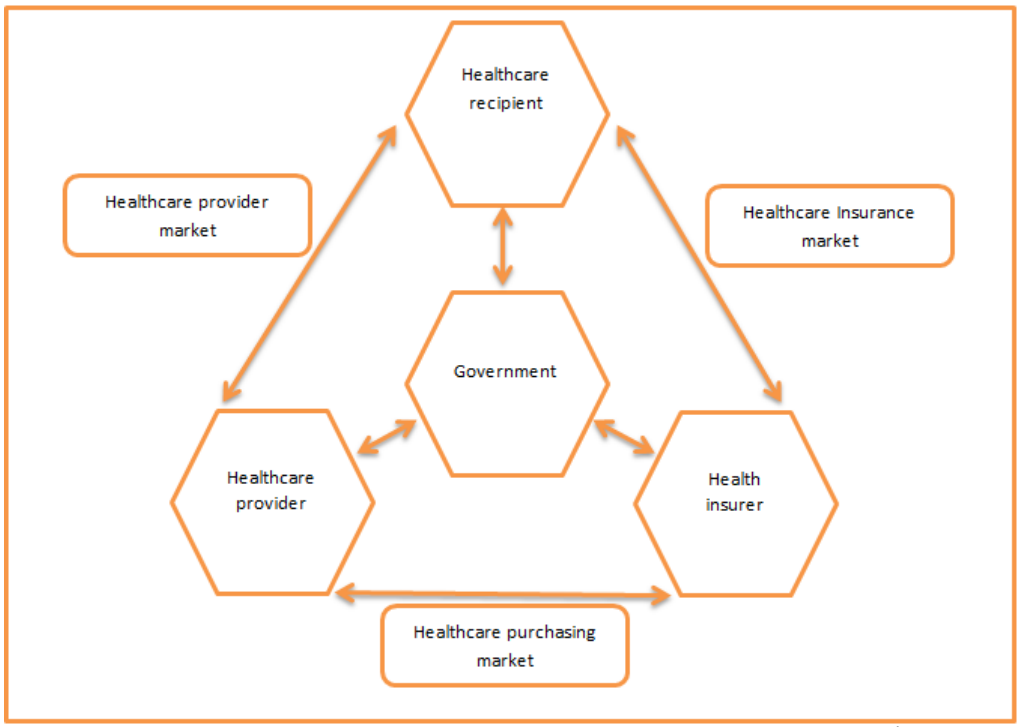


**Figure 1. Dutch healthcare triangle (based on governmental document 27 855)[1]**

*The new HIA introduced managed competition to the healthcare market. The goal of the HI is to remain competitive by pursuing low costs and high quality of care, which resulted in complaints by HP's regarding the increased power and steering conditions of HI's.*

Since 2006 the Dutch healthcare sector is, with the introduction of the new HIA, regulated in such way that a consumer is able to choose between competing HI's and HP's, and selects the for him or her most suitable (mandatory) basic health insurance. HI's contract HP's in order to purchase high quality and targeted healthcare[7]. With this new law managed competition in the healthcare market is introduced, which is supposed to curb costs, increase the efficiency in healthcare provision markets, insurance and maintain a high level of equity for the insured[21]. The three main factors in successful managed competition are: risk adjustment, consumer choice and tools to manage care[22]. In theory, fulfillment of these three factors for managed competition will lead to a more cost-efficient and consumer-oriented healthcare system[23].

HI's compete with each other to get the favor of the consumer and every consumer in the Netherlands is beholden to contract a "basis-verzekering" (basic insurance) and HI's are not allowed to refuse an application for this "basis-verzekering"[11]. To pursue low costs and high quality targets, HI's make use of healthcare contracts with demands for HP's[3]. These demands within the contract contain costs as well as quality requirements[3]. HI's and HP's differ in their opinion about the influence and power of HI's in the healthcare market. A recent research conducted by KPMG showed that more influence of the HI's could result in a more expedient healthcare system[12]. Whereas HP's launch actions themselves and complaints to the NZa "Nederlandse Zorg Autoriteit" (Dutch Health Authority) about the power of the HI's in contracting[3,39]. These complaints concern the healthcare contracting process as well as the content of the contracts[3]. In perception of HP's process and content are interrelated or woven into each other, which results in dissatisfaction of HP's because they feel not listened to and taken seriously by HI's if they want to discuss their complaints[3].

The monitoring of the healthcare market is conducted by the NZa, which publishes yearly monitors and reports. The NZa received most complaints about healthcare contracting by physiotherapists and speech therapists, some psychotherapists even mentioned to quit practicing and stop investments due to the healthcare contracting with HI's[3]. Furthermore the sector of dental care and pharmacy gave signals of dissatisfaction and a relatively large part of the complaints came from the mental healthcare[3]. Next to these, most complaints came from professions where HI's offer standard contracts and HP's felt that not enough

opportunities were offered to negotiate about the contract, such as physiotherapists and GP's[3].

*Two types of HP's who are in need of help regarding healthcare contracting are identified by VvAA; General Practitioners (GP's) and physiotherapists. Contracting differs between both groups, studying both groups will give a complete representation.*

Earlier research towards customer needs, conducted by VvAA identified that 49% (N=297) of HP's would like to get assistance in the healthcare contracting process[5]. Further analyses of data showed, after having two criteria introduced (N>30 & Applies to > 20%), that most interesting groups to focus on, are General Practitioners (GP's) and Physiotherapists (figure 2;)[5]. Within VvAA healthcare contracting applies to 28% of all GP's and of this group 45% wants help. Also, 54% of the physiotherapists stated that healthcare contracting applies to them, of which 35% want help with healthcare contracting. Most complaints about healthcare contracting come from the paramedic sector, although the GP's were the first to launch an initiative against the current form of healthcare contracting ("HetRoerMoetOm"). The contracting of both groups of HP's with the HI's differs, due to differences in archetype of HP in primary care. These differences can possibly be explained by using the Kraljic Product Portfolio[9], this will be elaborated on later (chapter 9.6). To obtain a complete representation of the healthcare purchasing market both groups are studied.

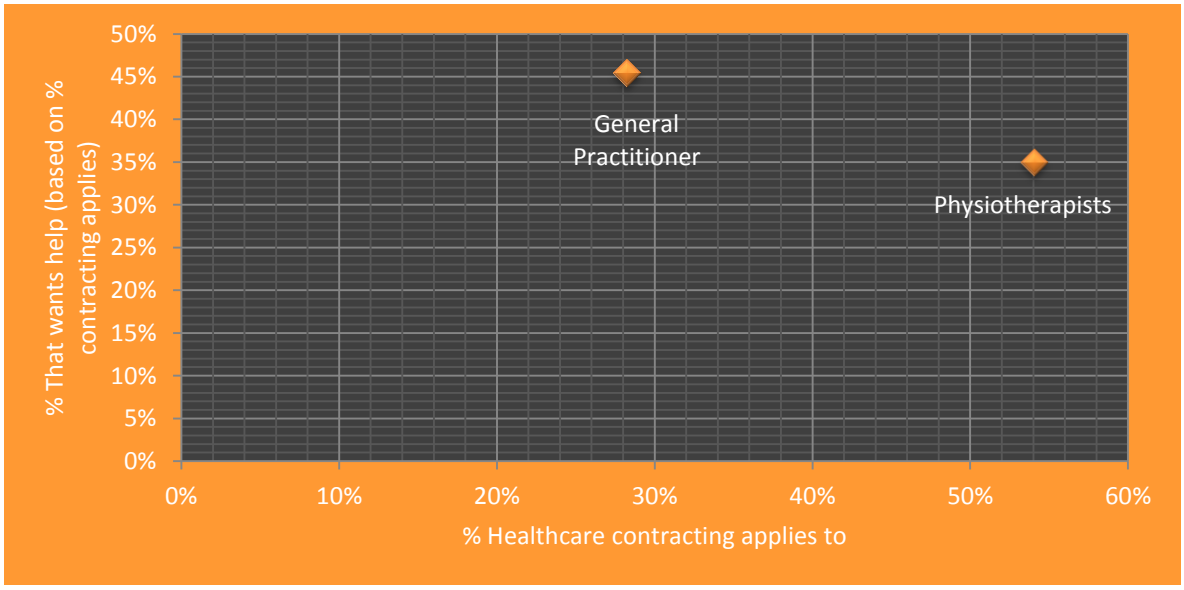


**Figure 2. Percentages healthcare contracting applies vs. Percentage help wanted. (Based on Totta, 2015)[5]**

Although it is clear that this group of HP's would like to have assistance, its not clear what kind of help these HP's would like to receive. Furthermore, possible differences in needs may exist between different HP's. At VvAA possibilities exist to contact HP's and to identify

needs and/or experienced barriers in healthcare contracting. However probably not all HP needs can be fulfilled, due to the fact that multiple laws and regulations are present and multiple factors play a role within the healthcare contracting market.

*Multiple complaints by HP's regarding healthcare contracting are identified by the NZa. In response reaction the NZa published the Good Contracting Practices (GPC's) and the regulation TH/NR-005, aimed at better healthcare contracting.*

Healthcare contracting is influenced by a lot of factors. Within the "Monitor Zorginkoop 2014", developed by the NZa, healthcare contracting was investigated. It identified several problems regarding healthcare contracting. One of the outcomes was that 39,3% of the primary HP's stated that their healthcare contracting was non negotiable, 15,2% stated it as "negotiable" and 45,5% as "verbal negotiable"[3]. An important finding of this survey was that 93,2% of the HP's who mentioned that healthcare contracting was not negotiable, were primary care HP's. A second identified problem was the administrative burden that HI's create with their contracting[3]. Next to this it was also mentioned that HI's organize the healthcare purchasing market per sector or region which can give coordinating problems for HP's[3]. Furthermore, possible non-contracting and the content of the contract conditions are seen as influencing factors[3]. One of the most important questions in this study concerns the HP's rate of the negotiation process. Answer possibilities were: "Satisfied" or "not satisfied" with the process and the outcomes: 11,6% was satisfied with the process as well as the outcome and 8.4% was satisfied with the process and dissatisfied with the outcome[3]. Furthermore, 61.1% was unsatisfied with the process and the outcome[3]. The last fraction was 18.9% that was unsatisfied with the process though satisfied with the outcomes of the healthcare negotiation and contracting process[3]. As a result of multiple complaints, the NZa published the Good Contracting Practices (GCP) (appendix II). Which are guidelines for good contracting. These GCP's can be divided into three themes, first care purchasing, second transparency and third timing[47]. These sixteen GCP's are factors which could stimulate better contracting between the HP's and HI's. The GCP's are compiled as a guideline for HI's and HP's to create good and transparent contracting. An example concerning the theme purchasing: "Clear communication during the process about what healthcare is contracted"[47]. Whereas in transparency an example is that "if parts of the contract change this change is communicated on time"[47]. Furthermore in the theme of timing an example is that the "time scheme is such that the HP has enough time to react on the contract proposition of the HI"[47]. In 2016, the NZa published the regulation TH/NR-005 "Transparantie zorginkoopproces Zvw" as a follow-up on the GCP's. As a result of the amount of complains about the contracting by HP's[90]. Ten rules within this regulation can now be enforceable regulated in the framework of the healthcare contracting.

# 2. Relevant parts of the Dutch healthcare system

Within this chapter relevant elements for this study of the Dutch healthcare system will be introduced. First a general description of the Dutch healthcare system, followed by an paragraph containing the Physiotherapeutic care system and in paragraph 2.3 the GP's care system.

## 2.1 The Dutch healthcare system

Since 2006, the Dutch minister of Health, Welfare and Sport (VWS), together with the Health Insurance companies (HI) have the task to improve the healthcare and to make it more affordable[2]. However, healthcare costs continued to increase, from 70.4 billion in 2006 to 95 billion in 2014[4]. This resulted in a cost control priority for HI's. With the new "Zorgverzekeringswet" (Health Insurance Act (HIA)) of 2006, partly because of the launch of the free market in the healthcare sector, the power of HI's grew. Healthcare providers (HP's) can get their healthcare services financed through reimbursements on several levels. One of them is contracting with HI's, which is about the direct and necessary healthcare costs. Within this way of contracting, HI's can choose which HP's to contract and which not to contract. This is called selective purchasing, based on different parameters, like quality and expediency of care, which will be elaborated on later[3]. This part is managed by the Health Insurance Act (HIA)[50]. A second way can be based on the "Wet Langdurige Zorg" (WLZ) (Law Protracted Care) in which agreements with the care agencies are made about care that is prolonged, for example by chronic ilness[49]. The third financing way of the healthcare system are municipalities who contracts HP's regarding "Wet Maatschappelijke Ondersteuning" (Wmo) (Law of Social Support and youth care)[48].

*Two government inspection authorities are present in the healthcare market. The ACM, which controls competition and purchasing power and the NZa, which publishes policy and regulations regarding the healthcare.*

The cooperation and control within the healthcare market is under jurisdiction of the 'Autoriteit Consument & Markt" (Authority Consumer and Market) (ACM). This authority controls if there is uneven competition or usage of purchasing power within the (healthcare) market[3]. ACM states that if the goal of a possible cooperation between HP's is to serve the patient and the insured, a cooperation initiative can be continued without further problems. However, alternatives for patients in their choice of HP should remain[6]. ACM rules are unclear, fragmented and divided in several law books, papers and documents, which all behold a small part of the rules. Next to the ACM the NZa keeps notion of the healthcare market, recently NZa announced that contracting is not mandatory[37,52]. The HI's have a

'Zorgplicht' (Duty of care) which means that HI's must purchase adequate levels of care for their insured pool. It is not stated what this law exactly means, and is a so called "open standard"[37].

*Focus of ACM is on safeguarding sufficient competition as outlined in the "Mededingswet" (Mw) and the "Wet Marktordening Gezondheidszorg" Wmg, Both laws facilitate the healthcare market in such way that interests of patients are guaranteed optimally. The Mw monitors all parties in the healthcare system.*

HI's put the HP's under pressure regarding price, quality, expediency and proper use of care[39]. One of the opportunities to save costs and to reduce prices for HP's is by putting purchasing activities in a partnership[13]. However, HP's do not purchase healthcare, HP's are contracting partner of HI's within the healthcare purchasing. For our study it is hypothesized that cooperation can be an opportunity towards better healthcare outcomes[14]. Furthermore, regarding partnerships in healthcare the ACM has some regulations as the market's watchdog. The rules of the ACM respect the "Mededingingswet" (Mw) (Competition Act) and the "Wet marktordening gezondheidszorg (Wmg) (Law Healthcare Market organization)[16]. Both these laws facilitate the market to operate in such way that interests of patients are best guaranteed[16]. One of the most important factors in the ACM guideline is presence or absence of direct competition between HP's. ACM bases the competition naming on products and geographical market of HP's[17]. There are several laws and rules which contain different parts of the market surveillance (Wmg-NZa) or competition regulation (Mw-ACM), which are presented in table 1. One exception where cooperation between competing HP's is allowed, is called the 'bagatelbepaling' (Bagatelle provision), which indicates that relatively small companies, with small turnovers, can cooperate without the risk of violating the rules of the prohibition of the cartels. The Bagatelle provision indicates that cooperation between no more than eight companies with a total turnover smaller than € 1,1 million will not be affected by the cartel prohibition[40, 41].

**Table 1. Laws and regulations Mw and Wmg**[40, 41]

| | |
|---|---|
| Art. 45 Wmg | Provides NZa to set rules on the conditions and manners of realization of contracts relating to care and tariffs if the clarity/competition in the healthcare market so requires. |
| Art. 6 (1) Mw. | Involves the prohibition on cartel behavior, to assess the impact of coordinated market behavior. |
| Art. 6(3) Mw. | Sets four conditions for an exception to the application of the ban in art. 6.1. A restrictive agreement must be objectively suitable to realize efficiency improvements (welfare benefits). Those efficiencies do not only benefit the companies involved, but also the users (user benefits). The arrangement may not be indispensable to the alleged to realize efficiency improvements (necessity).The appointment may not be about a substantial part of the total market (sufficient residual competition). |
| Art. 24 (1) Mw. | Includes the prohibition of abuse of economic power position (EMP) on the basis of which the consequences of unilateral market behavior are assessed. |
| Art. 41 (20) Mw. | Includes the prohibition of concentrations that significantly restrict effective competition. On the basis of Art.42 the impact assessment of mergers and acquisitions is conducted. |

Within the HIA, Article 13 clarifies that a HI has to pay compensation for healthcare used at a non-contracted HP, but can decide what level of refund he wants to pay[42,43]. Although, in 2014, the Supreme Court decided that the Hindrance Criterion (Hinderpaalcriterium) applies to article 13. This means that the level of refund cannot be so low that it withholds patients from getting the non-contracted healthcare, a refund level of 75% is more applicable than 50%, as described in the statement of the Supreme Court[44]. However, at this moment it is unclear what level of compensation for what kind of healthcare can be offered. This means that in theory, the HP can assail every compensation lower than 100%, due to the Hindcrance criterion. The HI's also mentioned that this compensation of 75%-80% could reduce the selective purchasing space of the HI's, but also that this compensation level of the passing rate is feasible for HP's[3]. With this compensation rate it is possible that consequence will be that contracts are not signed. In 2014, the Ministry of VWS tried to change Article 13 of the HIA so that HI's would not be mandatory to refund non-contracted care. This proposal was rejected by the Senate. The main reason was the loss of the free choice of physician for the insured consumer.

The ministry of VWS filed an amendment (No. 34445) in April 2016 which will influence several healthcare laws; regarding tariffs, performance regulations and market surveillance[61]. In the coming years the current funding of the healthcare, which is activity based, will be replaced by an outcome based system[61,62]. One of the expectations is described in a draft law with adjustments to tariff, performance regulations and market within

healthcare. It is believed that the ministry will, as long as there is regulation; establish regulatory frameworks and NZa will be limited to the task of monitoring[58]. Based on the ministerial regulations, NZa will continue to determine the tariffs[61]. Another expectation is the burden of administration in the contracting process, that will decrease by increased consultation and better agreements[58]. In this context the negotiating position of the HP versus HI's over healthcare agreements will be more equal[58].

*There are nine HI's present in the Dutch healthcare market, of which four represent 90% of the market (oligopoly). One of the jobs of HI's is to control declarations made by HP's, this can be conducted with three control systems.*

In the Netherlands nine HI's play a role. Four major HI's, who together represent 90% of the market and five small HI's, who represent 10% of the market. This imbalance of HI's is a result of the old healthcare system with "Care offices"(Zorgkantoren). HI's were regionally bounded, with the new HIA in 2006, it was expected that the market of HI's would open up and a more balanced distribution would develop. With a yearly switching rate of about 6%, the imbalanced distribution of the HI's remains[84].

The HP's report their performed activities at the HI. Once declarations are submitted to the insurance company, the HI checks these declarations. The HI can do this in three ways; technical, formal and tangible control[60]. Technical control means that the declaration is checked for technical correctness for example whether the GP declares two braces, for both legs one (which is the maximum possible). Formal control checks whether the declaration meets the applicable regulations. Tangible control checks for legitimacy and effectiveness of the declarations which is executed by the HP. Tangible control might result in extra control, including the patient's personal data that can be accessed[58]. HI checks the submitted declarations because he is obliged to do so. In its turn NZa controls if the HI has checked whether declared care was appropriate, it followed law and regulations regarding indicating conditions, it was effective and medically necessary[58,60].

## 2.2 Physiotherapists

*Due to overcapacity in the physiotherapeutic care, increased competition, high demands by HI's and more pressure on tariffs, the physiotherapeutic market is currently highly competitive*.

There are over 17.800 physiotherapists in the Netherlands. This number has risen in recent years, in 2005 there were 4000 less (13.800)[80]. Physiotherapeutic care is not insured in the basic-care insurance, it has to be purchased as additional insurance by consumers, or if not insured at all, payed by its consumers[81]. The total costs of Physiotherapeutic care are 448

million (1.2% of the total healthcare costs). With 4700 physiotherapeutic practices in the Netherlands, the supply overrates the demand of physiotherapeutic care[80]. Although rising levels of elderly and people with a chronic illness, predict a higher demand, strict policy and selective purchasing of HI's result in a total decrease in the demand for physiotherapeutic healthcare[80]. Also the numbers of treatments by the physiotherapists are shrinking. In 2005 an average of 17 treatments were used by consumers, in 2015 this was only 9.8 treatments[80]. Physiotherapists work with a fixed tariff pro session. Due to more pressure on tariffs and quality measures, such as treatments-averages by the HI, physiotherapeutic care has become a highly competitive market[80]. HI's further stimulate this competition by making small number of specific-agreements with a selection of top-performing physiotherapists and making only base agreements, or no agreement at all, with lower performing physiotherapists. Physiotherapeutic care seems less urgent than for example GP healthcare and has a less coordinating role in the healthcare system. HI's present more quality issues to physiotherapists and these quality requirements lead to higher administrative costs and differences in perceived bargaining position with the HI[80,81]. Some physiotherapeutic treatments are limited evidence-based, which makes HI's to be more strict in trying to safeguard the quality of care. As a reaction on the increased competition multiple physiotherapists started to obtain a specialism function[80].

## 2.3 General Practitioners

*GP's and HI's seem to have some balance of power. Although negotiations seem to take place about segment II and III only. Only in GP's HI have a following policy (dominant HI is followed by other HI's).*

On the first of January 2015, there were 11.568 GP's working in 5.045 GP practices in the Netherlands[77,79]. Since the change of the HIA in 2006, the market of the GP's changed. The GP has a gate-keeper and coordinator function in the HIA and is one of the most important links in the current healthcare system of the Netherlands[77]. Although spending on GP's care was over 2,68 billion euro's in 2013, this is only 2.9% of the total health expenditures[77]. Since 2006, the GP market is a market in where GP's can make their own choices. Segment one (regular consultations) and segment two (chronic care) sums up together to ± 90% of the revenue[59]. The level of usage of segment three (innovations) depends on the GP's own choice. Due to the innovation, aging of the population, emancipation of the patient and taking over multiple tasks from the secondary care it is expected that demand for primary care will keep rising in the future[77,78]. Also more cooperation is found within this market; due to the fact that segment two stimulates cooperation. With the new HIA in 2006, competition between GP's is stimulated. As competition within this market will keep rising and multiple

GP practices are filled with patients, cooperation seems necessary in order to meet the demand for healthcare.

*The GP's financing model contains three segments: I. basic care, II. Interdisciplinary care and III. Innovation with partly negotiable reimbursement.*
With the new HIA, the financial model of the primary care for GP's changed[3,59]. In 2011 the negotiations about a new financing model were started. The three segment model was launched in 2015.

- Segment I: Basic GP care
- Segment II: Cooperation in GP healthcare (interdisciplinary)
- Segment III: Innovation and performance-related pay

Total GP care costs about 2.700 million euro, with about 75% in segment I (over 2050 million euro), about 450 million in segment II (15-20%) and 112 million in segment III (5-10%). In segment I and II tariffs and policy are stated by the NZa. Only in segment III HI's can make their own policy and tariffs. Being active in segment three is a GP's own choice and a possibility for the GP to gain more revenue and conduct extra work. Due to the complex matter of this segment and different filling of segment three per HI, much of this segment seems to remain unclear for the GP's. Custom agreements can be made for multidisciplinary care purposes in segment II or for innovations of business cases in segment three. There are also achievements, within the GP healthcare contract, outside the three segments; for example obstetric care. Within the contract, a large part of the turnover is generated by the enrollment rate via segment I, a compensation the GP gets for every patient registered in his practice. These can be charged at the HI, every quarter as long as the GP takes care that his patients are able to obtain care 24 hour a day and seven days per week[59]. Next to GP's who work solo, other cooperation forms of GP's exist, which can agree on a healthcare contract with the HI.

The introduction of this three segment system was made gradual[59,82]. The main part of income of GP's comes from the registration fee (in Segment I) which they receive for each patient enrolled within their practice. Since 2011, the ministry of VWS reserves a part of the registration fee of GP's for the third segment to stimulate innovation and good performing GP's[59]. When this new model was launched the "LHV" 'Landelijke Huisartsen Vereniging' (LHV) (National General Practitioners' Association) directly mentioned some critical comments about the new financing model and were negative regarding the variable

funding[82]. After intense debate, the ministry of VWS together with the Dutch HI's and LHV reached agreement; which resulted in the new three segment system which was further build and implemented. Segment two, the segment for multidisciplinary healthcare, has expanded several times in recent years with more chronic care programs[82]. Also segment three is expected to keep growing in the future. Stimulation of innovations and performance-related pay will probably let this third segment grow in the future. The LHV mentioned that, the indicators for segment three payments need to be validated and workable for GP's. Originally in 2014 and before, 60 million euro was reserved for "variabiliseringsgelden" (Variabilization funds) they were not depending on activities performed and GP always received them. However since 2015; these 60 million euro is transferred into segment three (the HI's mentioned that all yearly segment three money will be spent on the third segment and not be withheld from the GP's market). These 60 million are used to simulate quality, expediency and service of the GP's care[82]. In 2015, segment three contained a total of 112 million euro, which includes variabilization funds, and money for modernization, innovation and experiments[82]. Deregulation in primary care is continuing, so description of activities and fixing of tariffs will eventually be released[58]. The relative importance of segment one will decrease in the coming years, whereas the influence of segment two and three will continue to increase. Segments two and three seem to need attention and time of the GP so that turnover of his practice will remain at a constant level.

# 3. Contracting

This chapter contains three paragraphs, first paragraph describes the current system of healthcare contracting between HI and HP. Second paragraph contains contracting of physiotherapists and third paragraph contracting of GP's.

## 3.1 Contracting in general

*Focus of the HI's is to deliver the best quality of care for the lowest costs possible. Whereas HP's want to deliver the most optimal healthcare for their patients.*

Within the healthcare market, a triad of players form the key stakeholders in the purchasing process, HI's, HP's and the healthcare recipient (patient), with in the center the Government (figure 1). Regarding the healthcare purchasing of primary care, the HI is the purchaser of healthcare and the HP is the supplier of healthcare products.

The goals of both parties (HI and HP) regarding the outcomes of the contracting also differ. HI's want to buy enough healthcare for their insured and have a triple aim focus. The healthcare needs to:

1. Improve the patient experience of care (including quality and satisfaction)[88]
2. Improve the health of populations[88]
3. Reduce the per capita cost of healthcare[88]

HI's want HP's to be expedient, deliver the best quality of care, for the lowest costs possible. Whereas the HP's want to deliver the best healthcare possible for their patients. Which may result in a different purpose of healthcare contracting. Meanwhile, HP's seem to start understanding that healthcare is not an unlimited source of financial opportunities and financial arguments also play a role in healthcare contracting. Lack of negotiation and lack of input from the HP's is often put forward as a problem in current healthcare contracting[14]. In chapter 9.6 the purchasing of healthcare in the framework of the Kraljic product portfolio matrix in combination with the findings of the study, will be discussed. Contracting between the HI's and both professions seem to differ between both groups of HP's.

*Incentives to sign a contract with the HI are that contract should result in practical, quick and high quality of care with assurance of income. Also non-contracting has some benefits: Fewer obligations, no negotiation, less bureaucracy and a lower administrative burden; with the consequence of earning less income and lower reimbursements.*

There are several incentives for HP's to sign a contract with HI's. A HP should be interested to sign a contract that arranges the healthcare in a practical, quick and high quality way, which is guided by the HI's. Also assurance of income due to reimbursement of performed activities via the signed contract. This incentive to sign a contract will be less if an insured patient is able to go to non-contracted HP's. Not contracting with HI's can also have benefits due to the fact that HI's often have specific demands in their contracts. They can ask for certain efficiency (be reluctant in referrals), meeting protocols (quality), service (use of e-health) and obligatory collaboration with other HP's or supporting professions[3]. Often fewer obligations less bureaucracy and a lower administrative burden exist if there is no contract with HI's. Also there is no need to negotiate with the HI's, which automatically can reduce transaction costs. However income of HP's is expected to decrease without a healthcare contract due to the lower refund for performed activities[105]. As long as duty of care is met, HI's can choose to not contract a HP by using selective purchasing. If there is no contract between both parties, this can result in lower payout of performed activities often 75-80% in the form of refund declarations[38.]

Nowadays, HI's can increasingly purchase healthcare selectively and as a consequence, make a selection of HP's with whom they want to establish a contract[3].This high level of influence on several segments of contracting is one of the main concerns for HP's[3]. As a result of this concern, several HP's launched initiatives against the current contracting with HI's. One example is "HetRoerMoetOm" ("'A change is needed"), which already collected almost 8000 signatures of GP's who supported the initiative, on a total of about 11.000 GP's in the whole country (± 72%)[2]. This manifest resulted in an agreement between GP's, HI's and patients. The expected effect of the agreement is less bureaucracy, more equal contract negotiations between GP's and HI's and a better insight in quality of care[24]. Furthermore, other HP's also report difficulties with their healthcare contracting with HI's, due to "Teken Rechts Onder Graag" (Please, your signature in the right corner) (TROG) contracts[3]. These difficulties are often based on unequal perceived balances in the negotiations between HI's and HP's[3]. Unequal balance of HI's and HP's in the contracting is perceived as negative by many HP's, of different specialisms. Also, HI's sometimes doubt the presence of balanced power relations, especially if HP's are starting collectives[39]. In collectives laws and regulations play a major role[3,39]. Although most HP's have a healthcare contract, also a (small) group of HP's function without a healthcare contract[30-36.]

## 3.2 Physiotherapists

Since 2008 tariffs for physiotherapists are open, the aim was to let physiotherapists and HI together negotiate and bargain about prices of delivered products[81,83]. Nowadays, eight

years later, the physiotherapeutic market is changed and further developed. Tariffs are lowered for multiple years, administrative burden rises and physiotherapists raise the alarm. Physiotherapists sign contracts with each HI apart and do this annually, most of the physiotherapists have separate contracts with all nine HI's[83,87]. In contrast to the GP's, there is no follow policy for physiotherapeutic care for HI's. Due to the fact that there is a surplus of physiotherapists the power of the HI seems large. HI's can steer and choose which physiotherapists to contract and which not. Because of the surplus in number of physiotherapists, it is possible to set strong demands regarding quality and treatment averages as a HI[81,83]. The contracts with physiotherapists have different levels, based on the scores of the physiotherapists[83]. Physiotherapists are able to influence their contract mainly indirectly. If their scores on indicators and conditions are excellent, the contract improves in terms of tariff. A higher level of payments comes with a higher level of rules, treatment averages and quality indicators. HI's offer physiotherapists a questionnaire which they have to fill in online which automatically results in a "standard" blanket contract. Physiotherapists can decide to sign the offered contract or not. The contracts in the non-highest tariff are non-negotiable. Sometimes custom agreements for innovations are possible for excellent practices (top-practices), although this is very exceptional. The base contracts, and base-plus contracts are prepared in advance and physiotherapists can choose to sign or not sign it. Bargaining with the HI seems not possible[83].

## 3.3 General Practitioners

The healthcare regarding GP's in the Netherlands is financially arranged in the form of a activity-based contract[58]. Performances are actions and results, which a GP can charge. Performances are described by the NZa (Dutch Healthcare Authority) and are compensated in the form of 'paying for performance'[30]. Results are rewarded if they meet the terms agreed in advance, described in the agreed healthcare contract. The closing of a contract between the GP and the HI is not compulsory, but for claiming performances in Segment II and III a contract with the HI is required. Content and form of a healthcare contract between GP and HI are determined in "free negotiations"[58]. It includes performances and results of the GP and what tariffs and quality conditions these can be declared at, and reimbursed by the HI. Party to the negotiations are at one hand the GP, a GP's practice or its representative (care agent) or economic entity of which he or she is part and on the other hand the HI[58]. Most often GP's sign bi-annual contracts with HI's.

The HI-market is highly concentrated; the four biggest HI's together represent 90% of the market[77]. It is mentioned that despite the fact of the four biggest HI's being very influential, GP still have a possible strong position in the negotiations with the HI[78]. GP's have this

position because of the shortage in GP's, small geographically relevant market, long-term relationship with the patient (patients trust their GP more than their HI), lack of transparency of quality of care and the GP's gatekeeping and coordinating role[78]. Although a strong position for GP's in negotiation with HI's is mentioned, it is often unclear if a real negotiation is present. HI's often send standard healthcare contracts to GP's and only segment three appointments seem negotiable. Due to the following policy, the GP only has to sign one contract, with its preference HI. The following policy means: The preference HI, the HI which represents the biggest part of the population of the GP, often one HI, concludes a contract with the GP. The rest of the HI's follows this preference HI's contract; by following its policy.

GP's are able to directly influence the content of their contracts by checking on or off certain boxes of choices (modules). However, this does not apply to the entire GP contract but only to segment two and three. The negotiation between the GP's and the HI take place between January till mid-November, in which the HI are obliged to get the healthcare contracts for coming year signed[38].

In summary; different HP's have identified different problems regarding healthcare contracting. There is too much bureaucracy and a high administrative burden. Furthermore real "negotiations" between HI and HP are often absent. And HP's want a better insight in quality of care[24]. For the physiotherapists also a low level of tariff and strong demands regarding treatment averages are issues.

# 4. Research design

This chapter first details the problem studied in this research, followed by the relevance and objectives of the study. The main research question is defined along with the sub questions. This chapter ends with discussing the research method and the outline of this thesis.

## 4.1 Research problem

Earlier research shows that HP's would like to improve their healthcare contracting, but it is unknown what type of assistance they actually would like to get. VvAA is interested in the needs of their healthcare professionals (HP's) regarding the help they expect in healthcare contracting. Perhaps in the future a business or advisory model, based on the outcomes of this research, can be build which can assist healthcare professionals in contracting. The outcome of this research can be useful on different levels of healthcare contracting. First at macro perspective, focusing on political decisions and policy[51]. Next at meso perspective level, which mainly is at organizational level, for example hospitals or HI's, but also agencies who perform policies like the NZa[51]. Last perspective level of outcomes could be at micro perspective which contains the clinical level of healthcare[51].

## 4.2 Relevance of the study

This study is undertaken to contribute to the knowhow of healthcare contracting, which is a popular and meaningful subject in the current healthcare sector. Especially because the healthcare is a large and expensive, but also a young, managed market (launched in 2006). Furthermore, different professionals have indicated that current healthcare contracting is inadequate. Questions rise as: "'What would be a better alternative, how could this be modelled, and then used and what are the legal restrictions? What are the needs and barriers in the HP's perception of the contracting? What factors influence successful healthcare contracting and how important are these for HP's?

## 4.3 The objectives of the study

Aim of this study is to understand the needs and barriers of different HP's regarding contracting and, identifying possibilities for VvAA to fulfill them. With identifying possible success factors and barriers which influence the healthcare contracting, knowledge regarding this subject will increase and solutions may become visible. First, influencing start factors and barriers will be detected, analysis of these factors may result success factors and in advises or solutions which can be converted in a product, a business or advisory model, or any other instrument to help HP's with healthcare contracting. Also exogenous factors will be measured, such as gender, level of entrepreneurship and dominant/preference HI, which could possibly influence the measured the level of success. The approach of this study is one-sided only; the HP's perspective is studied. This has

multiple reasons: First this study is explorative, it aims to identify new relations and facts regarding healthcare contracting, not much research about this topic has been conducted yet. Second, the study is commission by VvAA, which represent their members, who are HP's, for VvAA their perspective is important. Third, complaints regarding problems with healthcare contracting are mainly coming from HP's.

The objective of the study is to identify success factors and barriers regarding the healthcare contracting in General Practitioner (GP's) and Physiotherapist practices. Identified barriers, critical success factors and suggestions for improvement will be described. Different influencing start factors will be identified via interviews and literature review than analyzed into Long List Factors (LLF) and then compared between two groups, based on successful and non-successful contracting. After identifying and ranking the success factors, advises or tangible solutions can be composed to improve the most important success factors. The objective of this study is to assist HP's in their healthcare contracting with the HI.

## 4.4 Research questions

Main question:

***What are critical success factors and barriers in healthcare contracting for General Practitioners and Physiotherapists in the Dutch healthcare sector?***

Sub-questions:

I. Which factors influence healthcare contracting?
II. What are critical success factors regarding healthcare contracting?
III. Which barriers do different healthcare professionals meet regarding healthcare contracting?
IV. What can VvAA mean for the different groups of healthcare professionals in the context of the healthcare contracting?

## 4.5 Outline of the study

Now the Dutch healthcare system and the issues about healthcare contracting have been introduced. In chapter five the methodology can be found, including the research design, procedures, sampling, statistical techniques and an explanation of success. In chapter six relevant literature is discussed, also interviews and identified LLF's can be found. In chapter seven results are mentioned, first descriptive statistics and possible bias followed by results of analyses which are divided per profession, each paragraph starting with the physiotherapists and followed by the GP's results. Also last paragraph of the results shows the secondary analyses which analyses differences between different HI's. Then in chapter

eight the conclusion followed by the discussion in chapter nine, first analyses and discussion of the results of the physiotherapists are discussed, followed by the analyses and discussion of the results of the GP's and the discussion of the secondary analyses. In the same chapter Nza policy is discussed, followed by a discussion regarding HI policy and healthcare purchasing with respect to theoretical purchasing models. Then in chapter ten; first theoretical recommendations including general recommendations, limitations of this study and suggestions for further research are mentioned. Second part of chapter ten contains recommendations for practice; first VvAA, followed by HP's, HI's and last NZa recommendations. The outline of the study is also mentioned in figure 3.

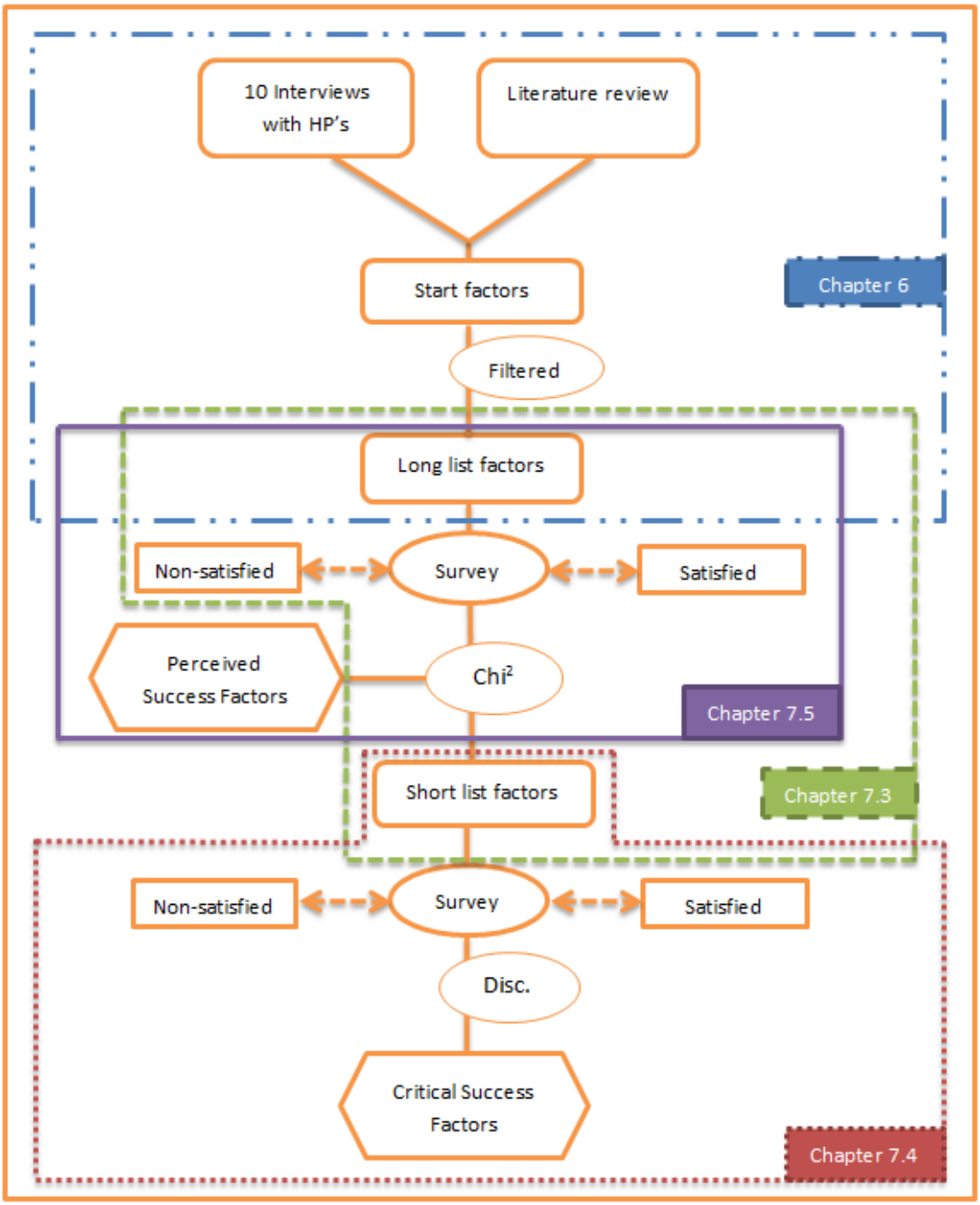


**Figure 3 Overview of thesis outline**

# 5. Methodology

This study includes a qualitative and quantitative part, in which GP's and physiotherapists participated. As part of the qualitative study a literature search/review and interviews identified start factors. As part of the qualitative study start factors were manually filtered which resulted in Long List Factors (LLF's). With a $Chi^2$ the LLF were leveled out towards the Short List Factors(SLF's) and the Perceived Success Factors (PSF's) were identified. Then SLF's were analysed with multiple Discriminant analyses to result in the Critical Success Factors (CSF's). First the research design and participants are mentioned, followed by the data collection and last in 5.3 the sampling techniques of the study.

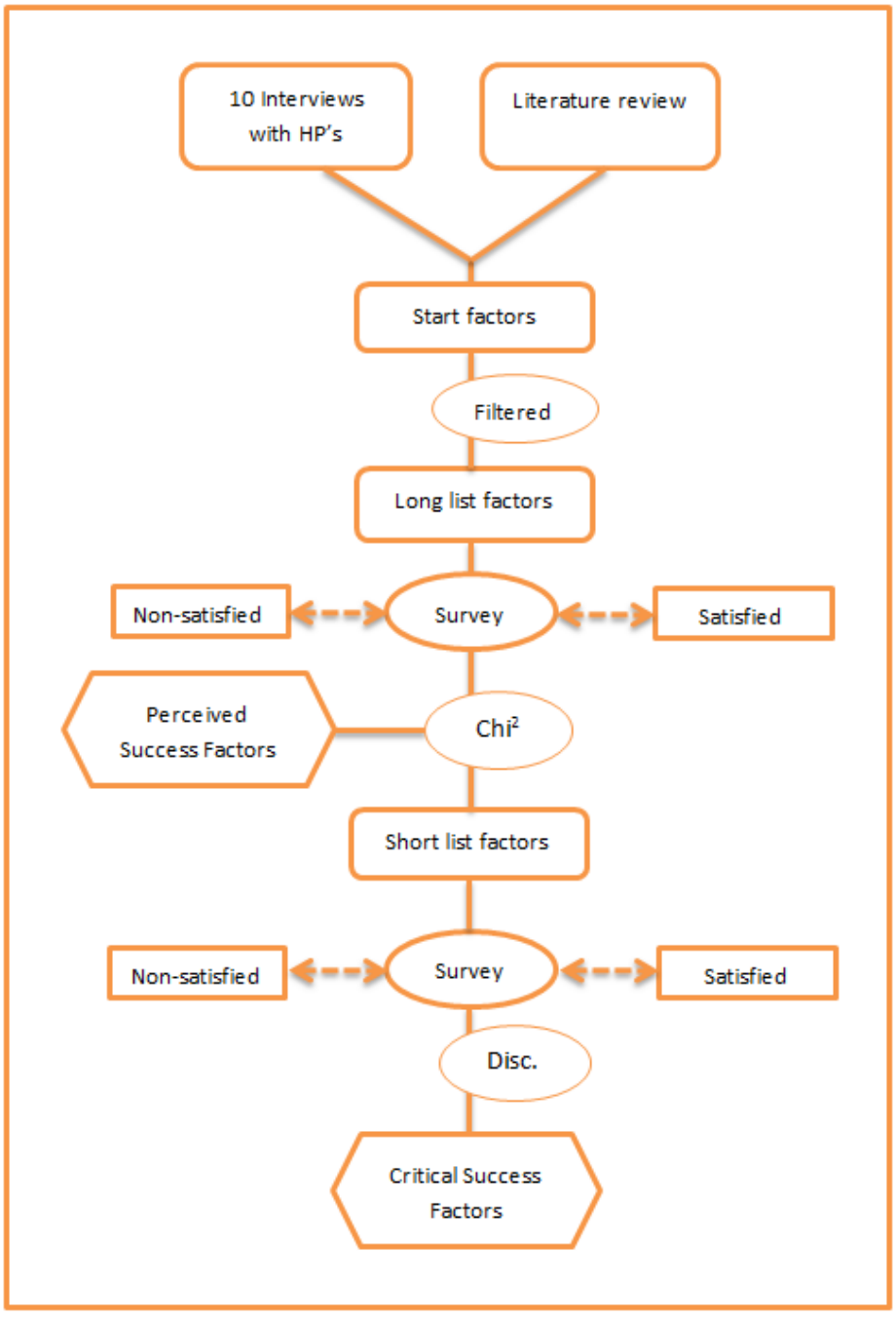


**Figure 4. Overview of study design**

## 5.1 Research design and participants

In this observational study two subsets of populations are included; physiotherapists and GP's. In order to identify influencing (start) factors we used two approaches; literature search and interviews. Based on these two we developed a questionnaire to identify success factors and barriers of specific relationships between HI's and HP[25].

A literature review precedes the interviews. Interviews reflect the perceived success factors and barriers by HP's. Via VvAA 10 HP's were contacted, five GP's and five physiotherapists. Outcome of the literature search and interviews is used to develop questionnaires. Only making use of interviews may give a distorted view of the healthcare contracting. Developing a questionnaire based on literature only to identify factors that influence healthcare contracting, could miss actual developments. Furthermore, interviews can provide insight in possible directions for solution or recommendations. The mixed method is chosen to identify success factors and barriers of healthcare contracting optimally.

First the explanatory qualitative design with semi-structured interviews is used. A topic list and questions has been developed in advance. The results of the interviews, described in 'outcomes of the interviews' (appendix III and IV), are used to identify factors that influence healthcare contracting.

Next, based on the interview outcomes combined with literature, an online survey is developed and, after a short pilot study, send via the "ledenpanel" (Members Panel) of VvAA, to HP's via email. The combination of qualitative and quantitative data collection can improve the validity and reliability of the study. Furthermore, a more detailed data collection will be obtained and more sub questions can be answered. Finally, results are described, the dependent variable is success(satisfaction) of healthcare contracting, whereas factors influencing the contracting are the independent variables.

## 5.2 Data collection

Data is collected from several information sources.

*Literature search:* First, so called "grey literature", from NZa, LHV, ACM, government documents, policy documents and guidelines from HP's, are used to identify bottlenecks and terms within the contracting. These bottlenecks and terms are used to further identify possible influencing (start) factors. Several scientific internet databases are used to further research start factors such as Scholar, PubMed, Web of Science and Scopus. Most frequent used terms are: Healthcare contracting, contracting, healthcare purchasing, healthcare procurement, healthcare insurers, negotiation, and healthcare negotiation, procurement and

purchasing and the identified “influencing factor”. Due to the exploratory identity of this study search terms of general procurement literature are used next to healthcare terminology. After not identifying new influencing(start) factors in the last 15-20 articles, search for literature was stopped. It’s possible not all influencing(start) factors are identified; moreover influencing (start) factors were completed with interviews.

Because of lack of literature regarding healthcare contracting also business literature is (partly) used. In businesses literature influencing factors were identified by using literature regarding small-medium-enterprise (SME) cooperation. The influencing (start) factors from literature; supplemented with the interviews gave about 50 start factors per profession. If start factors overlapped between both professions, were mentioned in interviews and literature, or mentioned in multiple interviews or multiple literature they were inserted in the Long List Factors (LLF’s). Some start factors only applied to one profession. The Long List Factors in the survey contained 40 physiotherapists factors, 31 GP’s factors, of which 27 were overlapping for both groups (table 3a-c).

*Interviews:* Interviews with five GP’s and five physiotherapists. The (anonymous) interviews were semi structured and have been recorded, transcribed and analyzed. With interviews the start factors were completed (Appendix IV).

*Survey:* After the interviews and literature research, Long List Factors of healthcare contracting are identified as described above. This information was used to develop the survey, which was sent to the HP’s. The survey included six questions regarding the success factors and barriers that may influence healthcare contracting, some demographic factors and questions regarding statements, furthermore also some questions were asked regarding the help the HP would like to receive in healthcare contracting, the questionnaire can be found in appendix V. The Long List Factors were measured by measuring presence and importance of the factor.

Next, the data is analyzed and divided in two groups, successful (satisfied) and not successful (not satisfied) contracting. This analysis was executed to collect promoting factors and barriers of successful healthcare contracting. The data is gathered anonymously and confidentially. The empirical basis in figure 5 refers to the number of independent HP’s for who healthcare contracting occurs. The number of people included in the survey depends on the members’ panel of VvAA, which exists of 628 physiotherapists and 455 independent GP’s(figure 5).

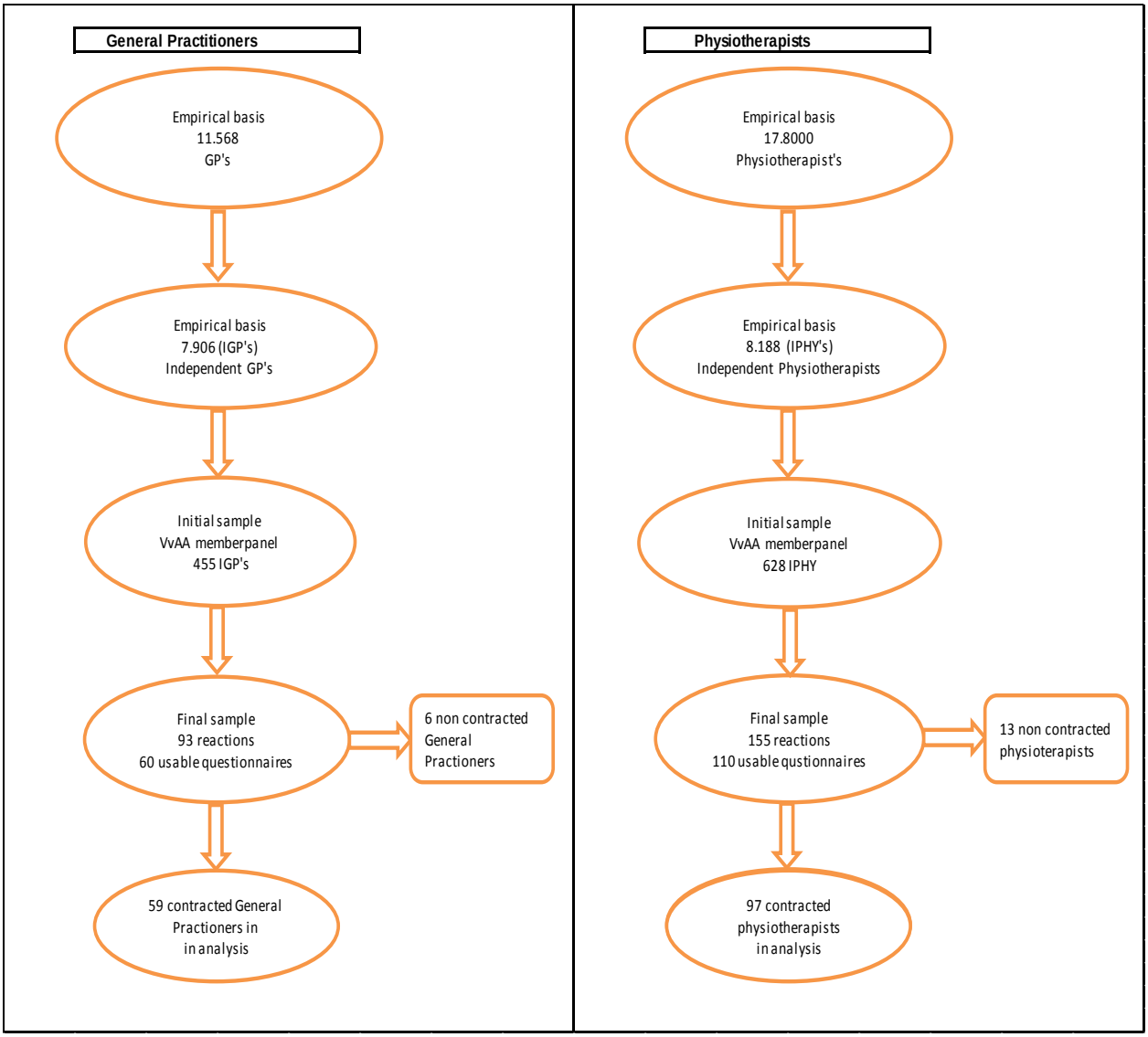


**Figure 5. Flowchart of respondents for both survey groups**

## 5.3 Sampling techniques

For the interviews, purposive sampling is used. HP's are approached via the network of VvAA (members of VvAA), and included in the study. No specific selections of HP's are made other than being a member of VvAA and a registered HP within the profession researched. The research tends towards purposive sampling.

Within the survey part of the research, (appendix V), which is sent to the HP's of the members panel, one version was developed for the GP's and one for physiotherapists. The HP's were asked whether they noticed Long List Factors (LLF) in relation to healthcare contracting and how they perceived the importance of different factors for the success of the healthcare contracting. Also the success of the healthcare contracting (dependent variable) was measured for every HP. This way it is possible to statistically analyze the influence of the LLF's on the perceived success of the HP in contracting. The perceived success is

measured via the HP; it is measured with asking out the level that the HP's achieved their objectives in their most recent healthcare contracting.

Within this research success is measured by the HP's themselves, taking into account the degree of success in achieving the HP's objectives. These objectives can differ, perhaps a good revenue is seen as success by one HP, whereas the other HP sees quick treatment of patients as success. This difference in success as a HP was also identified within the interviews. Success seems not strictly defined and the HP is not asked to rate his 'success' regarding his own healthcare contracting. As a consequence, it is chosen to indirectly measure the success of the HP in healthcare contracting[25,103,104]. The dichotomous outcome of success is asked in a construct of 'achieved goals' in a multiple choice question. The difference between "success" and "non- success" is determined by the HP's themselves. Answer A and B remain beneath or at the 50% of the achieved goals, whereas answer C and D show the achieved goal between 51% and 100%. If the HP answers A or B it is classified in the non-success group and if the HP answers C or D it is classified as successful(satisfied) healthcare contracting.

The statistical analyses (in SPSS) is conducted with a $Chi^2$-tests to identify which independent variables (LLF's) affect the successful or non-successful healthcare contracting. A condition for performing a $Chi^2$-test is that no more than 20% of the cells can have value less than five. If this condition is not met a Fishers-exact will be used to identify significance. Furthermore a discriminant analyzes is used to identify how much of the HP's can be predicted correctly in their status of success, based on one certain Short List Factor (SLF). With a discriminant analyses it is possible to calculate with which power a criterion can classify an observation into one of the both groups. This way it might be possible to analyze the estimation of the HP's in the success of their healthcare contracting. Furthermore a discriminant analyses step-by-step is conducted, this shows a lump sum of the most significant factors. The step-by-step shows the discriminating power of the most critical success factors (CSF's) whereas the regular discriminant analyses shows the discriminating power all the CSF's. If it is asked how important the HP considers the factor it is possible to compare these with the success factors and can be identified via a univariate or multivariate statistical analyses. Furthermore if the research group (via a high response rate) is large enough even differences between the different HP's (general practitioners and physiotherapists) and the factors that influence their contracting process could be identified with an ANOVA test. To identify similarities and differences between HI's a secondary analyses will be conducted. This secondary analyses with $Chi^2$-test and a discriminant analyses will show differences between HI's and between HI groups.

# 6. Literature and interviews

Literature search is used to identify influencing (start) factors of healthcare contracting. Organizations as NZa, LHV and (paramedic) profession organizations tried to identify influencing (start) factors in recent years, those will be further elaborated on in this chapter. Also the term “success” is further researched, including the terminology regarding Critical Success Factors (CSF’s) and Perceived Success Factors (PSF’s). Last, in 6.3 the identification of start factors is described; which are composed by combining literature and interviews.

## 6.1 Literature of start factors

Due to several complaints regarding healthcare contracting by healthcare professionals (HP’s), NZa started to evaluate the current primary healthcare contracting. The NZa published in 2010 good contracting practices (GCP’s) (Table 2). HI’s and HP’s were expected to use the GCP’s to optimize the process of contracting. The first GCP’s were based on earlier arranged meetings with representatives of HI’s and HP’s[47]. In 2013 the GCP’s were evaluated and some adaptations were made. In this evaluation many complaints regarding the purchasing of care were collected. Dissatisfaction at the side of the HP’s concerned, among other things, tariff levels, prerequisites of the contract and the lack of contracting possibilities[47].

The GCP’s are referred to as a guideline for a good contracting process. NZa puts forward that further interpretation of the GCP’s could be executed by the HI’s and HP’s. GCP’s are not complete and several other important factors might influence contracting, although these are not yet part of the GCP’s. Both parties (HI’s and HP’s) have their own responsibilities and are free to establish contracting together. The GCP’s are divided into three themes; 1. healthcare purchasing, 2. transparency and 3. the timing (table 2).

**Table 2. Good Contracting Practices of NZa[47].**

| Healthcare purchasing |
|---|
| 1. During the contracting process, communicate and explain explicitly which care is contracted. |
| 2. The insurer includes in his guideline or protocol in which case the insurer communicates and is accessible. |
| 3. During the period in which the contracts are established, the health insurer endeavors to be sufficiently available for questions and comments. |
| 4. Explore the possibilities to consult a care agency during the procurement process. |
| 5. The health insurer timely involves a (para) medic in the procurement process. |

| | |
|---|---|
| 6. | The health insurer timely publishes a framework for assessing applications for innovative projects and establishes an advisory committee to review these applications. |
| 7. | The insurer provides a good transfer of files to personnel changes among the purchasers. |
| 8. | The trade association and insurers have regular contact and will evaluate the (previous) contracting process that has taken place. |
| | **Transparency** |
| 9. | The insurer provides accessible information and, in consultation with the organizations makes use of (digital) newsletters and presentations about the procurement. |
| 10. | Create a platform - for example through the trade association - to discuss the use of available datasets to achieve transparency with regard to the quality of care. |
| 11. | The health insurer communicates on time about changes or deadline |
| 12. | Invite the insurer(s) to a meeting in which the provider of the insurer(s) gives information about the care, the policy and the contracting. |
| 13. | To increase the clarity of the contracts it is possible to work with trailers, in which is briefly stated which parts of the offered contract differ from previous years. |
| | **Timing** |
| 14. | The insurer agrees with the timetable of the procedure beforehand with (representatives of) the profession and releases the timeline prematurely. |
| 15. | The proposed timeline in the contracting process is displayed in such a way that health care providers have a reasonable time to examine the contract proposal. |
| 16. | The health insurer timely proposes information on what is new, fort he first time in coming contracting period. |

Next to NZa, the LHV measured dissatisfaction of the GP's regarding the healthcare contracting. The LHV conducted a survey and included 1750 GP's. Outcomes were alarming: Of the GP's who tried to get in contact with their HI regarding their contract, 74% mentioned that not any form of conversation with the HI was possible[106]. Furthermore, 92% of the GP's mentioned that they were not able to reject a contract with the HI[106]. The GP's concluded that not signing a contract would not change anything about the content of the contract; they felt powerless. Another finding was an uneven negotiation position between the HI and the HP[106]. HI presents a contract and HP's are only is able to customize small parts of the contract. Because of the large sample, differences between HI's came forward also. It was concluded that its easier for HP's to get in conversation with small HI's than with large HI's[106]. Only 17% of the HP's mentioned that they got enough time of the HI to evaluate and judge the offered contract. Finally, only 21% of the GP's was able to get into contact with their preference HI's easily[106].

After these results were published by the LHV, the NZa got in contact with the HI's to collect their opinion regarding some of the subjects. The NZa clustered the outcomes, based on five themes.

First theme that was investigated was “negotiation”. All HI’s mentioned not to negotiate with individual GP’s, although six of the nine HI’s had stated that it is possible for a GP to influence and even adapt the contract[65]. Although all HI’s mentioned that they accommodate the contract with the regional departments of the LHV (profession organization)[65].
Second, the GP’s mentioned that they got the feeling, by steering prerequisites, that HI’s steer HP’s activities with patients[65]. Four of the HI’s mentioned to have such steering conditions.
Third, GP’s mentioned they had to sign the contract while their contract was incomplete[65]. Four of the HI’s mentioned that all contracts were complete at signing, although some of the reimbursements were calculated at the end of the year[65].
Fourth, GP’s also mentioned to miss income of investments by changing policy of the HI’s while all HI’s mentioned that they have a clear policy which is consistent[65].
Last, all HI’s mentioned that they stimulate innovations in GP care and three of the HI’s stated that substitution is their main goal in innovation policy[65]. GP’s should hand in business plans, which the HI will evaluate and then, if approved, reimburse[65].
The NZa concluded that GP’s and HI’s differ in their experience of healthcare contracting. As a result of these outcomes the NZa started to arrange meetings with HI’s and HP’s which were led by the NZa, to make healthcare contracting subject of discussion.
*Five themes are identified which need further research and are relevant for this study: Level of negotiation between both parties, steering prerequisites of the HI’s, incomplete contracts at the moment of agreement, lost of income for HP’s by changing HI policy and stimulation of innovation by HI’s.*

On the 23rd of March 2015, the NZa arranged a meeting “In gesprek over contractering eerstelijn”. Multiple players within the healthcare market were present at this meeting: HP’s, HI’s, care Brokers, consumers organizations, representatives of the ministry of VWS and represents of ACM. The NZa started with four main themes which had come forward during this meeting i.e. four problems within healthcare contracting.
First concern a timely start of new policies or regulations and contracts which are revised after the first offer to the HP’s[107].
Second concerns equivalence; the number of contact moments between HI’s and HP’s are scarce and timely communication of changes is important[107]. However, most of the time HP’s still have the feeling they need to “sign at the bottom please” (TROG). Defense of the HI’s is that custom contracts for HP’s are difficult for them to realize due to the following policy. More early and regional consultation seems appropriate and more multiple year contracts should be agreed upon[107].

Third, the complexity of the healthcare contracting process is caused by the fact that every HI has its own policy[107]. Also mentioned are low tariffs, high administration requirements and turnover limits.
Fourth, the norms of the contracting process are put forward[107]. The HP's mentioned that they expect some regulating role of the NZa regarding the healthcare contracting; the HP's have no opportunities to act or intervene if healthcare contracting fails[107]. The NZa replied that different professions have different frameworks of contracting which is mainly aimed at norms and terms of contracting.
*Four themes which need further research and are relevant for this study are identified: Timeliness of new policies and regulations of HI's, contact moments between both parties, complexity of the process, low tariffs, high administration and turnover limits, last the norms of the contracting.*

The first meeting on the 23th of March 2015 was a general meeting regarding primary care, between all parties which have an interest in healthcare contracting. On the 12th of May the NZa arranged a similar meeting meant for the paramedic care.
Problems in the paramedic healthcare contracting are an excess of prerequisites within the contract, low levels of the tariffs and overregulation by the NZa[67]. Different criteria, to measure performance of the HP insinuated by the HI's lead to a high administrative burden[67]. The policy of the HI is fixed, communication with the HI as an individual HP is impossible and the profession organizations get the feeling they cannot influence one single aspect of the contract[67]. The profession organizations mentioned that consultation with the HI does not concern only talking but also acting based on the input of the professional organization[67]. Last problem of paramedics is that an unambiguously policy misses. Paramedics, which due to lack of a following policy, need to sign (sometimes up to nine) different HI contracts, which all differ[67].

As a result of all the complaints, multiple parties advocate a more enforceable regulation as an option to improve the contracting process. In response, the NZa published the *"Regulation TH/NR-005 transparency in the healthcare purchasing process",* which includes four rules which are required to follow, for the HI's and HP's in the contracting process[108].
First rule is the announcement of the healthcare purchasing process and procedures of purchasing which means that HI's have to publish their purchasing policy before the first of April of the contracting year [108].
Second is enough availability; the HI's and HP's both should be frequently available for questions and comments during the contracting process[108].

Third, the HI's should reserve enough time in their time scheme, which facilitates the HP to be able to make a reasonable judgement of the contract by the HP[108].
Last, changes about the contract need to be announced on time and by the same channel the original information was announced[108]. Changes after April 1st need to be motivated. This regulation started January 1st 2016 and applies to all contracts who start at or after January 1st 2017.

The Dutch healthcare market is unique. No international literature has been published regarding similar healthcare contracting in other countries. However, in businesses literature influencing factors of contracting were identified regarding small-medium-enterprise (SME) cooperation. In the perspective of SME's three main theories about existence boundaries and interfirm collaboration were identified: the transaction-cost theory[26], the resource-based view[27] and the knowledge-based theory[28]. All three theories were used to try to identify more business related influencing factors. Only factors which were applicable on healthcare contracting are used in current study[25]. Four SME-factors were identified as frequently used and applicable to the healthcare contracting:

- First, sharing the potential for joint value creation (shared savings)[25].
- Second, having an agreement on clear and realistic objectives[25].
- Third, a precise definition of rights and obligations of both parties[25].
- Fourth, the establishment of an information and coordination system[25].

Within SME's these four factors can positively influence contracting outcomes and the cooperation between two involved parties, i.e. HI's and HP's.

## 6.2 Definition of success

*Success depends on how success is defined and who is evaluating it. These aspects affect the final judgment of failure and success. Within this study success (satisfaction) is measured in an indirect way based on the level of achieved goals.*

The analyses are based on the dichotomous difference in success; success or non-success in healthcare contracting. Although the concept of success is quite vague, what is success, how can it be measured, and is such a measurement objective? According to the Dutch dictionary van Dale, success means: '*Good outcome or result or something that ends well*'[68]. The term success in business literature is interchangeable with the term 'performance' and both in general mean the achievement of something desired, attempted or planned[69]. There is variety in business measurement of performance; it can be identification of improvement opportunities and customer relations determination, to enhance understanding of the process and to assess the degree of success that is achieved[70]. Due to the fact that there

are different reasons for measuring performance, this gives also rise to a variety of measures in business performance, such as financial and non-financial measurements[71].
Due to different measurement systems and variety in performance measurement, success remains a difficult and elusive concept with different meanings. Success seems a social accomplishment which dependents on the perspective of the subject[72]. It can be concluded that success and failure are difficult to define and to measure since they mean different things to different people[73]. In certain systems the suggestion is made that success is achieved when the system is perceived to be successful by stakeholders[74]. The prospect theory explains that optimistic expectations regarding time, budget or quality can be seen as normal human psychological behavior if the conditions of the environment are uncertain[75]. Due to the human tendency to underestimate challenges and overestimate own capabilities, but also sponsoring of own projects, stakeholders could perceive success as non-success and vice versa[72,73]. It can be concluded that success depends on how it is defined and who is evaluating success and therefore affects the final judgement of failure and success[76].

Factors which may influence success can be critical success factors. Around 1980 the term Critical Success Factor (CSF) first appeared. Around that time people were interested in differences in success rates between organizations[109]. The components of this success were investigated. Freund (1988) described CSF's as: *"those things that must be done if a company is to be successful"*[110]. Three general rules apply to CSF's: They need to be controllable, measurable, and scarce in number. Whereas perceived success factors (PSF's) are factors which can be defined as "the perception of the degree of importance of the factor"[111]. In this study, the perception of the degree of importance of the factor regarding the outcome of the healthcare contracting (satisfied/success or non-satisfied/success) is used.

## 6.3 Identification of Long List Factors

*The start factors come from different sources; interviews, literature findings, and policy documents of the NZa and LHV. The start factors are manually filtered which result in the Long List Factors.*

As earlier mentioned in figure 3, success factors of this research are derived from different sources, primary literature findings and secondary the conducted interviews. An overview of the sources of the different Long List Factors are described in table 3a-3c and appendix IX. The conducted interviews and transcriptions of the GP's can be found in appendix IV. Next to the transcription analyses, which is the key component of the interview analyses word clouds are created per question. A word cloud visualizes a text in which the more frequently used words are effectively highlighted and showed with more prominence in the representation figure[64]. It also gives a fast and visual way to get basic understanding of the

data and it allows researchers to quickly visualize general patterns[64]. The word clouds of the different interviews and questions can be found in the appendixes III. Due to the fact that the analyses comprises two groups, GP's and physiotherapists, the factors that were derived from several other sources, are separated.

Literature search is displayed in chronological format. First the GCP's are mentioned followed by a summary of literature related to GP's is given. The goal of these GCP's is to assist the contracting process between the HI and the HP[47]. These GCP's are displayed in a special column in the sources table (Appendix IX, column three), because they are frequently used. The NZa in cooperation with the 'Landelijke Huisartsen Vereniging' (LHV) (National General Practitioners' Association) developed a questionnaire which was sent to all GP members of the LHV of which, 1752 responded[65]. Next to this paper,
Second, the factors for physiotherapists are summarized and GCP's for physiotherapists are also displayed in a separate column[47]. Next to that, the NZa has organized a meeting on the 12th of May 2015, named 'Discussing contracting in paramedical healthcare'. Several factors regarding the contracting where distillated from the report of this meeting, for example, unclear communication, declining ability to hold conversation, possible cooperation and lack of insight in quality of care[67]. Lack of trust between the both parties in contracting was also mentioned frequently, which can result in 'blaming and shaming' between the HP and the HI which is not very constructive [67].

Literature regarding contracting or cooperation in general, with no specific focus on the healthcare sector, was used as well. The article of Hoffmann & Schlosser (2001) shows success factors for good cooperation in SME's. Important factors are: the potential for shared savings, the core competencies, agreements on clear and realistic objectives and precise definitions or rights and obligations for both parties. Furthermore, Jean Perrot (2006)[66] describes several factors which can influence the contracting process, such as incompleteness of contracts or contracts who are too detailed, which could be a sign of distrust between the contracting parties, something which is also recognized in the NZa report[65,66].

Both tables in the Appendix IX are divided in three themes: communication, process and 'other'. The abbreviations in the table of Appendix IX refer to the origin where the success factor is identified: Literature (Lit.), Interviews (Int.) and Good Contracting Practices (GCP). This origin shows, why the factor is asked out, named in multiple origins could mean that it possible is a more important factor. All used factors have their origin in the literature (chapter

6), in the policy guidelines or regulations from NZa and or are mentioned in the interviews. The GCP's are literature, although used so frequently that they are mentioned separately.

The column named SSM in Appendix IX shows the indication of the success factor which relates to the SSM model[57]. The score of different labels shows different steps in the model. Whereas the success factor is ranked regarding the main presence of the success factor in the healthcare contracting. Regarding the SSM model; A is input, B is throughput, C is output and D is outcome, these can be found in the fourth column from the right[57].
Also by dividing Long List Factors (LLF) based on phase in SSM, it's possible to identify the perspective of a success factor in the framework of the integration of primary care model[91]. This can be on micro (MI), meso (ME) or macro(MA) level. In the most right column of Appendix IX, (header Pers.), the perspective of the success factor is displayed.

| **Communication** | **Phy** | **GP** |
|---|---|---|
| Communications throughout the year via newsletters and or presentations on the purchasing policy of the insurer. | X | X |
| Prompt availability of changes or new criteria used by contracting, even if things are no longer possible in the future. | X | X |
| Working with short documents that show how the contract that is offered is differs from the contract from the previous year. | X | X |
| A protocol on the accessibility of the health insurer, stating how it communicates and how the insurer is accessible. | X | X |
| Sufficient availability of the healthcare insurer for questions and comments about the contract. | X | X |
| Enough time to anticipate on the health insurer's proposed contract. | X | X |
| Sharing, discussing and understanding of the potential for joint value creation (shared savings). | X | X |
| Sharing, discussing of the core competencies (where both parties stand for) and its protection. | X | X |
| A precise definition of rights and obligations of both parties mentioned in the contract and /or negotiations. | X | X |
| Written record of agreements which explicitly stated what care is contracted. | X | X |
| Agreement of both parties on clear and realistic objectives. | X | X |
| Legible and understandable contracts | X | |
| Clear mirror information | X | |

**Table 3a. Long List Factors, category: Communication**

| Process | Phy | GP |
|---|---|---|
| Consultation prior to contracting with the legal representatives of the profession on the content of the contract. | X | X |
| Possibility of making changes to the contract by the representatives of the profession. | X | X |
| Prior consultation with the profession about the timetable and procedure of contracting. | X | X |
| A regional meeting in which health insurer provides the healthcare provider with information on contracting (purchasing, administration, supply). | X | X |
| Early publication of the timetable of contracting by the health insurer. | X | X |
| Timely involvement of the healthcare provider, by the health insurer, in the procurement process. | X | X |
| Negotiations on the content of the contract; personal, per physician or per cooperation (excluding health groups). | X | X |
| Evaluation of the contracting of the previous year between health insurer and healthcare provider. | X | X |
| Prompt availability of criteria used in the contract. | X | X |
| A reasonable time to examine the contract proposal. | X | X |
| Agreement of both parties (both general practitioner and health insurance) for the contract signing. | | X |
| Fast reimbursements from health insurers, so my practice has no financial risk by late payment of declarations. | | X |
| Involvement of the profession on the content of quality of care. | X | |

**Table 3b. Long List Factors, category: Process**

| Other | Phy | GP |
|---|---|---|
| The involvement of a care advisor (agent) in the process of contracting between the physician and health care insurer. | X | X |
| Differentiation in contracts and rewards between different performing healthcare providers. | X | X |
| A platform (e.g. Vecozo / Vektis) proposed by the insurer to upload data, to monitor the quality of care. | X | X |
| A platform (e.g. Vecozo / Vektis) proposed by the insurer to load data, to measure the status of agreed targets. | X | X |
| Sufficient clarity in the structure of the prescribed tariffs. | X | X |
| Clear communication of expectations for requests for healthcare innovations in segment 3. | | X |
| Clear demands on the business case for healthcare innovation so that compensation by the health insurer can be possible. | | X |
| Offer of a multi-year contract by the health insurer | X | X |
| Assessment of the quality of care from the health insurer. | X | |
| A clear definition of quality of care. | X | |
| Fair payment for executed transactions. | X | |
| Simplicity in the systems and access to the systems in which contracts with the health insurer are made. | X | |
| Evaluation of my performances as a physiotherapist based on my treatment average. | X | |
| Clear rules and / or agreements on the use of clinometric by the health insurer. | X | |
| Unambiguously in the contracting process of different health insurers. | X | |
| Unambiguous content of the contracts of the health insurers. | X | |
| Uniform conditions for obtaining a higher tariff from the health insurers. | X | |
| Unambiguous base agreements and rules that apply to all health insurers. | X | |

**Table 3c. Long List Factors, category: Other**

# 7. Results

This chapter first describes the descriptive statistics, then in 7.2 possible bias of the research. Then in chapter 7.3 identification of the Short List Factors (SLF's) per profession and in 7.4 identification of the Critical Success Factors (CSF's) per profession. In 7.5 Perceived Success Factors (PSF's). Last in 7.6 the secondary analyses is mentioned, which identified differences between HI's.

## 7.1 Descriptive statistics

*Small differences between the survey group and general population of HP's can be explained by the similarities between those who are involved in health care contracting (older age and males) and those who participated in this study. Furthermore the dispersion of dominant HI's in the survey is almost exactly identical with the general population.*

The physiotherapists needed on average 16 minutes and 19 seconds for filling in the survey. From them, 39% are women and 61% are men. The age of the respondents was on average 53,6 year (SD 8,6). Regarding the healthcare contracting, 77% contracted all HI's, 9% worked totally without a contract and 14% had contracts with a subset of all HI's. One of the questions was "Who is your most important HI"? 88% of the physiotherapists named one of the four big HI's as answer (figure 6).

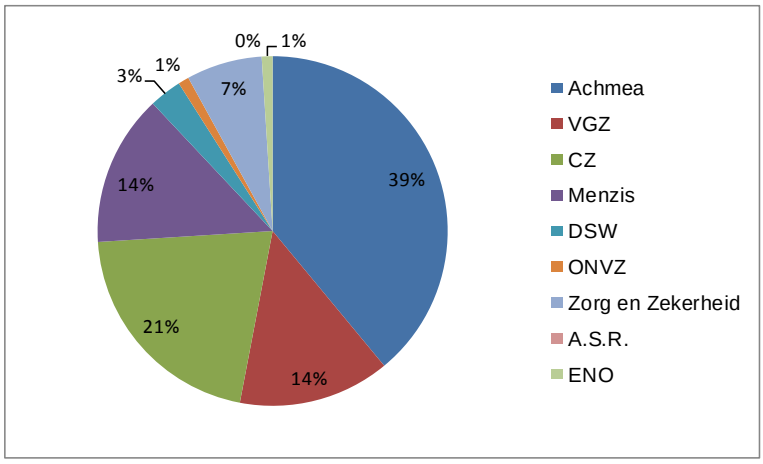


**Figure 6. Distribution of HI's in physiotherapist group of the survey**

The GP's needed an average of 11 minutes and 39 seconds for filling in the survey. From them, 36% are women and 64% are men. The age of the respondent was on average 51,5 (SD 9,5). Of all the respondents, 8% worked without a healthcare contract. Furthermore it is asked, what their preference HI is. Again the four big HI's came out as dominant HI's within the market, together being the preference HI for 89% of the respondents (figure 7). One respondent answered to have two preference HI's, being CZ and VGZ.

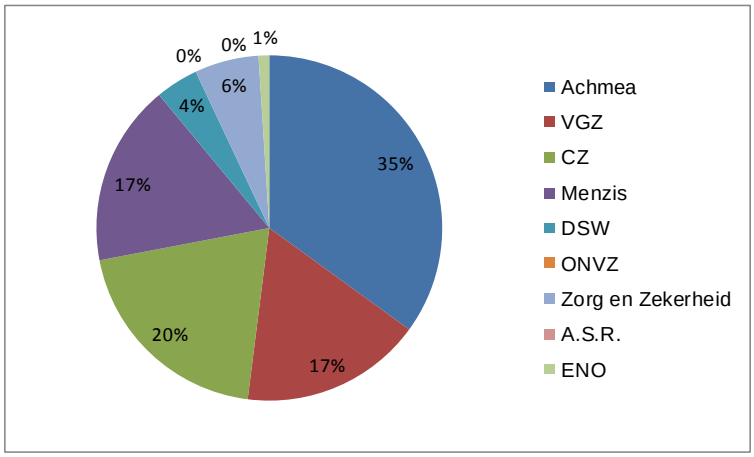


**Figure 7. Distribution of HI's in GP group of the survey**

In the Netherlands, there are 17.800 physiotherapists working, of which 46% is entrepreneur[80]. The majority of the physiotherapists are women (56%), versus 44% men[80]. The dividing of being entrepreneur or employer is aberrant; of the men physiotherapists 61,5% is entrepreneur and of the women only 33,4% is entrepreneur[87]. The average age of a physiotherapists is 42 years in the Netherlands[85]. The NZa estimates that between 2% and 10% of all physiotherapists doesn't have a contract with any HI[85]. Furthermore physiotherapists who do sign a contract (between 90-98%) almost all sign a contract with the dominant HI in the region and all other HI's, analyses based on regions seems less important due to the fact that all HI's are often contracted[85].

The second group, the GP's, consist of 11.568 in the Netherlands, working in 5.045 GP practices[77]. Of all the GP's, 70% has a private practice, or works in a partnership, the other 30% is employer[77]. Currently the GP's consists for 52% out of men and for 48% out of women. In the future this is expected to shift into a majority of women, due to the fact that more GP students are women and majority of the older GP's, who reach retirement age, are men[86]. The number of part-time working GP's is 64%[77]. From the GP's who have their own private practice or work in a partnership, 42% are women and 58% are men[86]. The average age of a GP in the Netherlands is 48 years[77].

The market of the HI's in the Netherlands is dominated by four major players, Zilveren Kruis Achmea (shortened to Achmea), Menzis, CZ, and VGZ[19,20]. Which all have more than two million insured persons, the five small HI's all have less than one million insured persons[84]. The four major players together represent about 90% of the healthcare market (figure 8)[84].

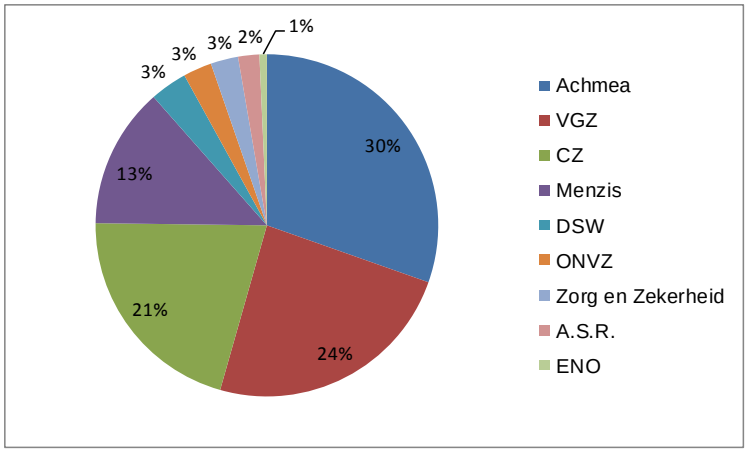


**Figure 8. Distribution of HI's in the general population**

Comparing the survey response groups with the general population some findings stand out. First of all age of the general population of both groups was lower than average age of both survey groups. This can be explained by the fact that starting your own practice as a HP will take investments in time and money. Directly after graduation a number of the students start to work as employer, before starting their own practice later during their career. HP's who have their own practice, will have to contract HI's whereas employed HP's don't. This could explain why the survey 'contracting-group' is on average older. Second, the gender distribution differs in both groups from the general population. In the general populations, the percentage women is larger than in the survey groups. This is because employees (who do not have to contract HI's) are more often women than man and entrepreneurs and private practice owners or members of a partnership are more often men. Regarding the healthcare contracting multiple similarities seem to be present between the survey groups and the general population. The majority of the physiotherapists had healthcare contracts with all HI's in both groups, and 9% (which is between 2-10% from the general population) of the physiotherapists do not have any healthcare contract. Furthermore the distribution of HI's the domination of the major four HI's in the general population corresponds in the survey groups. In the general population the major four HI's are responsible for 90% of the market, whereas by the physiotherapists and the GP's the major four HI's are responsible for respectfully 88% and 89%. Within and between the major four HI's, it is found that the fragment of Achmea is relatively larger within the survey versus the general population. This larger fragment of Achmea appears to be derived from CZ, which is relatively smaller within the survey versus the general population. It needs to be notified that the percentages on the distribution from the general population are about health consumers (insured people) and the percentages from the survey are about the most dominant HI for a HP. This difference in source could also influence the differences in percentages, although through regional domination of HI's a approximately equal distribution seems obvious.

## 7.2 Possible bias

The response rate is 20% (93) for the GP's and 25% (155) for the physiotherapists. In total, 13% and 18% of the questionnaires could be used, of the GP's and the physiotherapists respectively (figure 5). First the results of physiotherapists are analyzed, followed by the results of the GP's. The statistic accountability of the analyses can be found in appendix XII.

A non-response bias seems partly present, the HP's who answered the survey are relatively older and more often men than the total population of HP's. Although for the HI's distribution the survey shows a corresponding image regarding the total population. Also within the 'healthcare contracting' group it is possible that differences in the form of non-response bias occur. Other exogenous factors could influence outcomes. People who are more interested in this subject, could possibly react more on the survey. This will give slanting results versus the whole population of 'healthcare contractors'. Perhaps people who are more entrepreneurial will give different answers than people who aren't regarding the number of objectives they achieved. For the GP's the extent of use of segment three could perhaps show if more or less entrepreneurial behavior influences the outcomes. For the physiotherapists this relation could be viewed by using the information regarding their higher tariff contract. If a physiotherapists wants a higher tariff contract, some kind of entrepreneurial behavior seems necessary due to the conditions within this contract. In the context of the preference HI it could be distinguished if having a different preference or dominant HI will give different outcomes. Due to the fact that the major four HI's represent 88/89% of the survey respondents the five small HI's are added together under the title "SHI"(Small Health Insurers).

In the analysis further within this chapter, the success(satisfaction) is used as variable and its mentioned that different factors can influence this success. The level of success was measured in the form of goals achieved as explained in chapter 5.3. However this level of success can depend on other variables than the variables identified in table 3a-c. Possible differences in exogenous factors can influence the outcomes of the survey. The first finding is that gender does not significantly influence the outcomes of the study ($Chi^2$ test; $p = 0{,}807$ and $p = 0{,}222$). One of the other possibilities is that more entrepreneurial orientated HP's achieve a different level of success than the less entrepreneurial orientated HP's. Again a $Chi^2$-test was conducted to identify a possible (significant) relation between the level of entrepreneurial behavior and the level of success. For both groups, this relation was not significant ($p<0{,}05$), for the physiotherapists $p = 0{,}504$ and for the GP's $p = 0{,}197$. Also differences between dominant or preference HI are tested with a $Chi^2$-test; both non significant ($p = 0{,}718$ and $p = 0{,}098$).

## 7.3 Identifying Short List Factors

First the Long List Factors (LLF) are levelled out by using a Chi$^2$-test to identify the Short List Factors (SLF's) which significantly influence the success (satisfaction).

### 7.3.1. Physiotherapists

*Summarizing findings*

*It is found that for physiotherapists twelve short list factors (SLF's) have a significant effect on the success of healthcare contracting. With a high discriminant power for three critical success factors (CSF's): "Uniform conditions for obtaining a higher tariff", "Agreement of both parties for the contract signing" and "Legible and understandable contracts".*

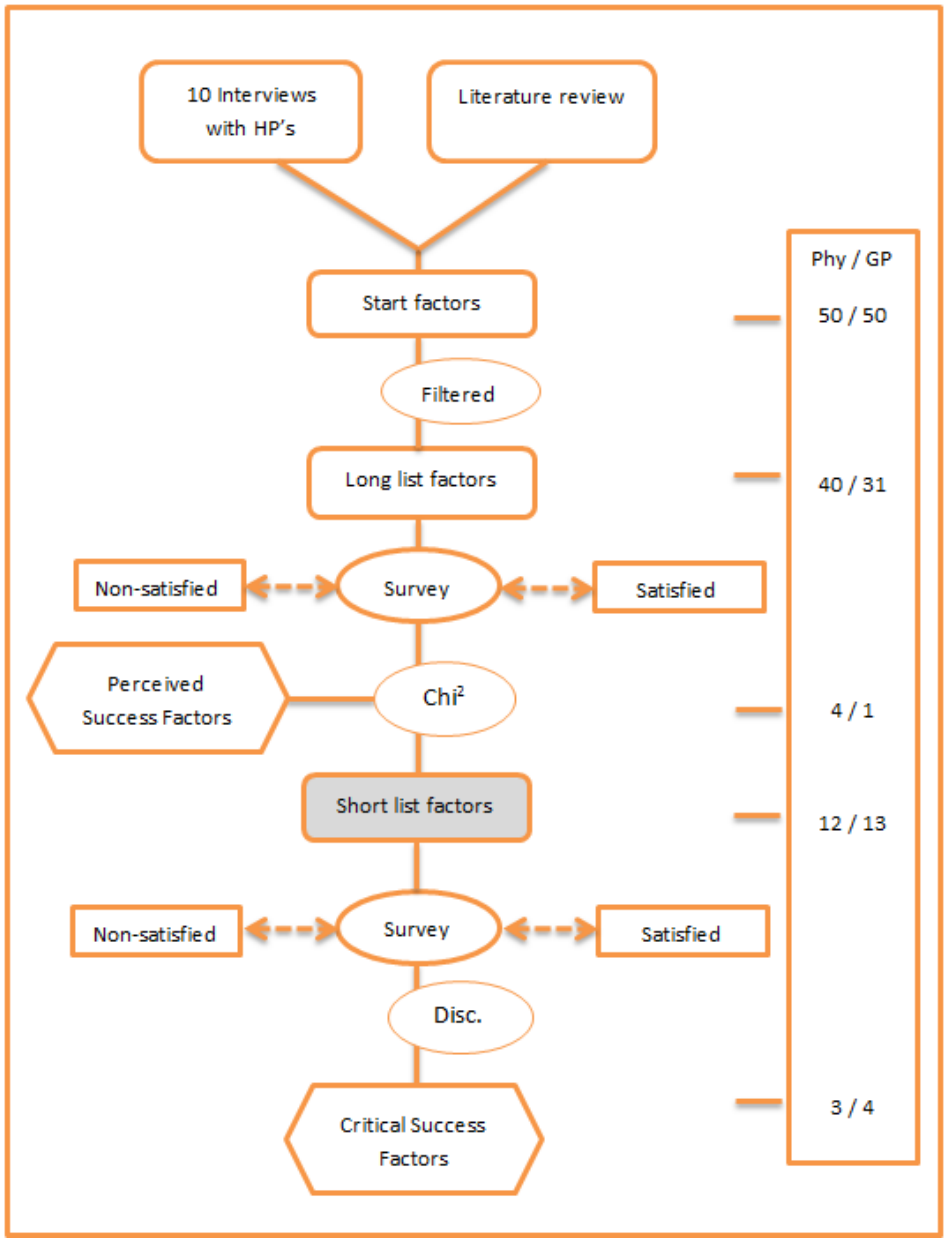


**Figure 9. Overview of study design identification of Short List Factors**

*Chi$^2$-test*

To identify the short list factors (SLF's) from the long list factors (LLF's) a Chi$^2$-test was used. As a result of the questionnaire outcomes it was possible to identify twelve short list factors (table 4). Significance was again set at p<0,05 and a higher ranking shows a higher influence on the success.

**Table 4. Short list factors for physiotherapists**

| Number | Variable | Absent Satisfied Physiotherapists | Absent Non-satisfied Physiotherapists | Significance (Chi-2) |
|---|---|---|---|---|
| 1 | Uniform conditions for obtaining a higher tariff from the health insurers. | 47% | 78% | **0,001** |
| 2 | Agreement of both parties (both physiotherapists and health insurer for the contract signing). | 70% | 91% | **0,002** |
| 3 | Legible and understandable contracts | 33% | 61% | **0,005** |
| 4 | A clear definition of quality of care. | 65% | 89% | **0,005** |
| 5 | A precise definition of rights and obligations of both parties mentioned in the contract and /or negotiations. | 21% | 48% | **0,007** |
| 6 | Agreement of both parties on clear and realistic objectives. | 70% | 91% | **0,008** |
| 7 | Written record of agreements which explicitly stated what care is contracted. | 5% | 24% | **0,010** |
| 8 | Involvement of the profession on the content of quality of care. | 67% | 87% | **0,020** |
| 9 | Unambiguous content of the contracts of the health insurers. | 60% | 81% | **0,022** |
| 10 | Assessment of the quality of care from the health insurer. | 26% | 48% | **0,023** |
| 11 | Unambiguously in the contracting process of different health insurers. | 51% | 72% | **0,033** |
| 12 | Prompt availability of changes or new criteria used by contracting, even if things are no longer possible in the future. | 28% | 48% | **0,042** |

### 7.3.2. GP's

*Summarizing findings*

*It is found that for GP's thirteen short list factors have a significant effect on the success of healthcare contracting. With a high discriminant power, four critical success factors: "A platform proposed by the HI to upload data to monitor the quality of care", "Differentiation in contracts and rewards between different performing HP's", "Agreements of both parties on clear and realistic objectives" and "Communications throughout the year via newsletters and presentations on the purchasing policy of the HI".*

*Chi$^2$-test*

As elaborated earlier, the chi-square test is used to identify short list factors of the contracting. Within the GP group it was possible to identify thirteen short list factors which significantly influenced the contracting (table 5). Significance was set at p <0,05. The higher

the number of the short list factors in table 5 the higher the influence. Especially short list factor number 1 till 8 seem to be especially important; the significance level is lower than p< 0,01.

**Table 5. Short List Factors for GP's**

| Number | Variable | Absent by Satisfied GP's | Absent by Non-satisfied GP's | Significance (Chi-2) |
|---|---|---|---|---|
| 1 | A platform (eg. Vecozo / Vektis) proposed by the insurer to upload data, to monitor the quality of care. | 25% | 73% | **0,000** |
| 2 | Agreement of both parties (both general practitioner and health insurer) for the contract signing. | 38% | 81% | **0,001** |
| 3 | Differentiation in contracts and rewards between different performing healthcare providers. | 38% | 81% | **0,001** |
| 4 | A platform (eg. Vecozo / Vektis) proposed by the insurer to load data, to measure the status of agreed targets. | 29% | 73% | **0,001** |
| 5 | Agreement of both parties on clear and realistic objectives. | 56% | 92% | **0,002** |
| 6 | Fast reimbursements from health insurers, so my practice has no financial risk by late payment of declarations. | 22% | 58% | **0,005** |
| 7 | Communications throughout the year via newsletters and or presentations on the purchasing policy of the insurer. | 19% | 52% | **0,007** |
| 8 | Sufficient availability of the healthcare insurer for questions and comments about the contract. | 44% | 78% | **0,008** |
| 9 | Sufficient clarity in the structure of the prescribed tariffs. | 53% | 85% | **0,011** |
| 10 | Prompt availability of changes or new criteria used by contracting, even if things are no longer possible in the future. | 38% | 70% | **0,012** |
| 11 | Written record of agreements which explicitly stated what care is contracted. | 9% | 35% | **0,018** |
| 12 | Sharing, discussing and understanding of the potential for joint value creation (shared savings). | 66% | 42% | **0,036** |
| 13 | Sharing, discussing of the core competencies (where both parties stand for) and its protection. | 66% | 88% | **0,043** |

## 7.4 Identifying Critical Success Factors

To identify the Critical Success Factors (CSF's) a discriminant analyses is conducted. The discriminant analyses has been conducted with the Short List Factors (SLF's).

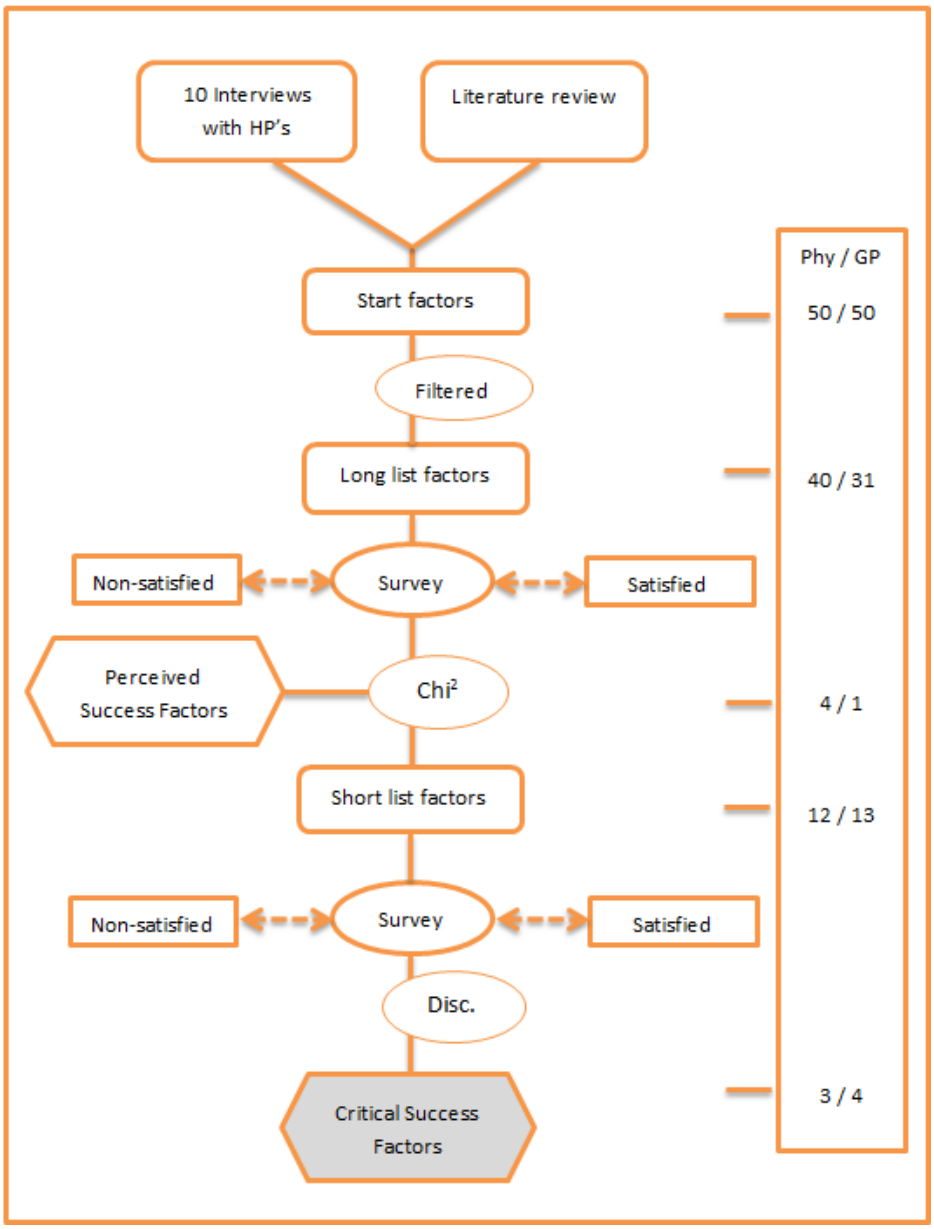


**Figure 10. Overview of study design, identification of Critical Success Factors**

### 7.4.1 Physiotherapists

The earlier identified twelve SLF's are then used in a discriminant analyses. The meaning of a discriminant analyses is; the percentage from the cases that can be divided in the correct group based on a criterion. With discriminant analyses a criterion may be calculated by which the observation can be classified in one of the populations, in this study, the satisfied

or non-satisfied group. With an accuracy level of 77,7%, the discriminant analyses has a significant results (P<0,01). This means that by using the twelve short list factors 77,7% of the physiotherapists can be divided in the correct group based on the scores regarding the presence of these CSF's.

Furthermore also the discriminant analyze step-by-step is conducted for the physiotherapists. A step-by-step discriminant analyses shows the most dividing short list factors. Three short list factors together can identify 70,5% of the cases correctly. Which means that the other nine short list factors can identify (77,7%-70,5%); 7,2%. The discriminant analyses step-by-step, follows the ranking of the short list factors in table 4. These most dividing short list factors are named Critical Success Factors (CSF's):

1. Uniform conditions for obtaining a higher tariff from the HI
2. Agreement of both parties (both physiotherapists and HI for the contract signing)
3. Legible and understandable contracts

### 7.4.2. GP's

The earlier identified thirteen SLF's are then used in a discriminant analyses. The first discriminant analysis shows, the level of cases that can be divided in the "correct group". For the GP's this level is 84,2%. The significance of 0 (P< 0,01) shows a high significance of the discriminant analyses. This means by using the thirteen short list factors 84,2% of the GP's can be divided in the correct group based on the scores regarding the presence of these short list factors.

Also a step wise discriminant analyses is conducted, which shows the discriminant power of a short list factor. Four SLF's together can divide 81.0% of the cases correctly. Where all thirteen SLF's can divide 84.2%, which means that the other nine SLF's only correctly divide another 3.2% of the cases. This analyses does not follow the significance level of the SLF's in table 5, the short list factors regarding the discriminant analysis step by step are ranked short list factor number 1, 3, 5 and 7. These four are the critical success factors (CSF's), which are:

1. A platform proposed by the HI to upload data to monitor the quality of care
2. Differentiation in contracts and rewards between different performing HP's
3. Agreements of both parties on clear and realistic objectives
4. Communications throughout the year via newsletters and presentations on the purchasing policy of the HI

## 7.5 Perceived Success Factors

To identify the Perceived Success Factors a Chi$^2$-test is conducted. This Chi$^2$-test has been conducted with the Long List Factors (LLF).

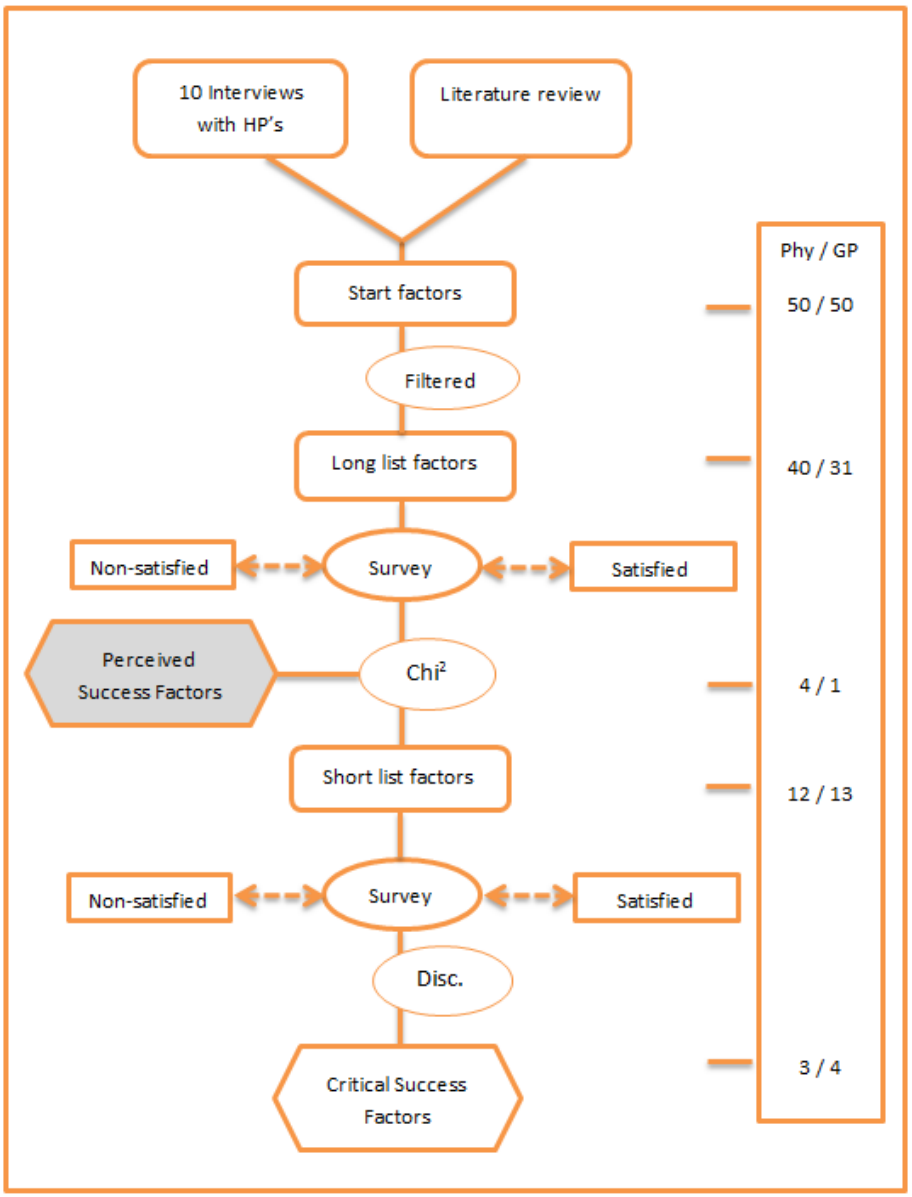


**Figure 11. Overview of study design, identification of Perceived Success Factors**

### 7.5.1 Physiotherapists

The importance of the long list factors (LLF's) was measured. Four LLF's are identified as having a significant influence on the success of healthcare contracting based on their perceived importance. The non-satisfied group rates these perceived success factors higher than the satisfied group, which could mean overrating of the importance of these LLF's regarding the outcome of the healthcare contracting. Table 6 shows the significantly different

PSF's between the satisfied and non-satisfied group, the four factors seem all overrated by the non-satisfied physiotherapists.

**Table 6. Significant differing Long Lis Factors of physiotherapists**

| Number | Variable | Very Important Satisfied | Very Important Non-satisfied | Significance (Chi-2) |
|---|---|---|---|---|
| 1 | Sharing, discussing of the core competencies (where both parties stand for) and its protection. | 12% | 44% | **0,005** |
| 2 | Written record of agreements which explicitly stated what care is contracted. | 10% | 38% | **0,012** |
| 3 | A regional meeting in which health insurer provides the healthcare provider with information on contracting (purchasing, adm., supply). | 20% | 44% | **0,015** |
| 4 | Unambiguous base agreements and rules that apply to all health insurers. | 63% | 77% | **0,038** |

Furthermore LLF's are analyzed and ranked in order of importance (ranking "Very Important"). Physiotherapists ranked almost all long list factors as very important. The five most importantly ranked long list factors are mentioned in table 7. Seen from the perspective of the physiotherapists, it is found that only one factor in table 7 ("Involvement of the profession on the content of quality of care") is a short list factor, which is found in rank 8 of table 4. Whereas the other four most important ranked long list factors are not short list factors. None of the CSF's was mentioned as in the top five of "very important", the (ranked) CSF's were ranked respectively as importance ranking number: 15, 9 and 6.

**Table 7. Top 5 most important Long List Factors of physiotherapists**

| Number | Variable | Very Important | Important | Total Importance |
|---|---|---|---|---|
| 1 | Involvement of the profession on the content of quality of care. | 84% | 16% | 100% |
| 2 | Fair payment for executed transactions. | 83% | 16% | 99% |
| 3 | Possibility of making changes to the contract by the representatives of the profession. | 71% | 28% | 99% |
| 4 | Unambiguous base agreements and rules that apply to all health insurers. | 71% | 26% | 97% |
| 5 | Consultation prior to contracting with the legal representatives of the profession on the content of the contract. | 64% | 34% | 98% |

### 7.5.2. GP's

Furthermore the importance of the LLF's was measured. One Perceived Success Factor (PSF) was rated statistic significant as important on the outcome of contracting ( ($p<0,05$) (table 8). The long list factor is: "Communications throughout the year through newsletters and or presentations on the purchasing policy of the insurer". Which is clearly rated more "Very important"(26,7%) in the satisfied group versus the non satisfied group (0%). It is seen that this long list factor is underrated by the non-satisfied group. There is a significant

relationship between the importance of this long list factor (also short list) and the outcome of the contracting.

**Table 8. Signifiant Importance Scale GP's**

| Number | Variable | Very Important Satisfied | Very Important Non-satisfied | Significance |
|---|---|---|---|---|
| 1 | Communications throughout the year via newsletters and or presentations on the purchasing policy of the insurer. | 26,7% | 0% | 0,016 |

Furthermore, other LLF's and their ranked importance are described in table 9. This table shows the five most important LLF's regarding the GP's. They are ranked regarding to their score "Very Important". Furthermore, comparison between table 5 and table 9, shows that PSF's score differently from short list factors with exception of number two "Agreement of both parties…". From the five most influencing short list factors (table 5) one can be found in table 9, as number 2, the other four most dividing short list factors are not mentioned in table 9. Whereas vice versa from the five most important long list factors (from table 9), regarding the CSF's two can be found in table 5, as number 2 and 6. Number 2 is also the only CSF which is named most important by the GP's the other CSF's aren't mentioned in the top 10 of importance ranking.

**Table 9. Top 5 most important Long List Factors of GP's**

| Number | Variable | Very Important | Important | Total Importance |
|---|---|---|---|---|
| 1 | Possibility of making changes to the contract by the representatives of the profession. | 63% | 33% | 96% |
| 2 | Agreement of both parties (both general practitioner and health insurance) for the contract signing. | 55% | 41% | 96% |
| 3 | Fast reimbursements from health insurers, so my practice has no financial risk by late payment of declarations. | 53% | 41% | 94% |
| 4 | Negotiations on the content of the contract; personal ,per physician or per cooperation (excluding health groups). | 46% | 44% | 90% |
| 5 | Timely involvement of the healthcare provider, by the health insurer, in the procurement process. | 45% | 47% | 92% |

## 7.6 Secondary results

It was also hypothesized that difference in dominant or preference HI could influence the level of success of the HP's. Again a $Chi^2$ test was conducted. For both groups the difference in dominant or preference HI, did not show a significant relationship with the outcome of the level of success achieved. For the physiotherapists $p = 0.098$ and for the GP's $p = 0.718$. A third hypotheses is that it's possible that there are differences between the different HI's in outcomes of Long List Factors. This presumption is because of the difference in sizes of HI's and the number of HP's it conducts healthcare contracting with.

Due to the fact that the five small HI's only represent a small market segment, within the analyses they are taken together under the name "Small Health Insurers" (SHI). In table 10 and table 11 the significant different factors for both groups are mentioned. Within the group of the physiotherapists, four LLF's were found as significantly different, with relation to the different HI's and for the GP's two factors were significantly different.

**Table 10. Influence of differences in dominant HI in outcomes of the factors for the physiotherapists.**

| | **Sharing, discussing and understanding of the potential for joint value creation (shared savings). (P = 0,035)** | **Clear mirror information. (P = 0,001)** |
|---|---|---|
| | Present | Present |
| VGZ | 0% | 53% |
| Menzis | 0% | 100% |
| Achmea | 8% | 36% |
| CZ | 24% | 67% |
| SHI | 0% | 73% |
| | **Offer of a multi-year contract by the health insurer. (P = 0,028)** | **Clear rules and/or agreements on the use of clinometric by the health insurer. ( P = 0,049)** |
| | Present | Present |
| VGZ | 20% | 20% |
| Menzis | 79% | 36% |
| Achmea | 53% | 53% |
| CZ | 48% | 43% |
| SHI | 36% | 9% |

**Table 11. Influence of differences in preference HI in outcomes of the factors for the GP's.**

| | **A regional meeting in which health insurer provides the healthcare provider with information on contracting. (P = 0,01)** | **A platform proposed by the insurer to upload data, to measure the status of agreed targets. (P = 0,05)** |
|---|---|---|
| | Present | Present |
| VGZ | 100% | 48% |
| Menzis | 100% | 86% |
| Achmea | 48% | 48% |
| CZ | 75% | 58% |
| SHI | 73% | 56% |

From the physiotherapists only the respondents from Achmea and CZ noticed "Sharing, discussing and understanding of the potential for joint value creation" as present, although, also their noticing score seems low. Furthermore all respondents with dominant HI Menzis, mentioned "Clear mirror information" and show that Menzis more often seems to "Offer a multi year contract". With regard to "the use of clinometric by the HI", it stands out that the SHI's do not mention these regularly. For the GP's it is found that all respondents from VGZ and Menzis mentioned "a regional meeting with the HI", as present whereas from Achmea less than half of the respondents mentioned this. Next "a platform to upload data in to measure the status of agreed targets", seems more often present by Menzis than by the other HI's. More differences between the different HI's are present, yet not significant.

**Table 12. Significant differences between types of HI, in outcomes of the factors for physiotherapists.**

| | **Legible and understandable contracts. (P = 0,039)** |
|---|---|
| | Present |
| Major four | 49% |
| Small five | 82% |
| | **Clear rules and/or agreements on the use of clinometric by the health insurer. (P = 0,035)** |
| | Present |
| Major four | 42% |
| Small five | 9% |
| | **Prompt availability of criteria used in the contract. (P = 0,030)** |
| | Present |
| Major four | 38% |
| Small five | 73% |

**Table 13. Significant differences between types of HI, in outcomes of the factors for GP's**

| | **Agreement of both parties (both general practitioner and health insurance) for the contract signing ( P = 0,037)** |
|---|---|
| | Present |
| Major four | 22% |
| Small five | 56% |

We also look at major four HI's together (Major four) and compare them with the five small HI's; (SHI's). The results can be found in table 12 and 13. For the physiotherapists, three factors are significant and for the GP's one factor is significant.

To identify differences in the CSF's per HI the $Chi^2$-analyses regarding all start factors is conducted (table 14 and 15). Again the small HI's are taken together as the 'SHI's'. Furthermore due to the segmentation of the total survey group, based on dominant or preference HI, all Long List Factors (LLF's) are taken into account to identify the discriminating factors per HI. Next, due to the small sample size per HI, only Wilks Lambda is mentioned and not "what percentage of cases is divided in the correct success group", as in the overall model is done.

**Table 14. Significant differences in Short List Factors and CSF's per HI for physiotherapists**

| Health insurer | Short List Factor | P | Discriminant | Critical Success Factor | Wilks Lambda. | P |
|---|---|---|---|---|---|---|
| VGZ | Assessment of the quality of care by the health insurer. | **0,020** | 1 | A precise definition of rigths and obligations of both parties mentioned in the contract and / or negotiations. | 0,62 | **0,033** |
| Menzis | - | **-** | 1 | Early publication of the timetable of contracting by the health insurer. | 0,7 | **0,043** |
| Achmea | Involvement of the profession on the quality of care. | **0,001** | 1 | Involvement of the profession on the quality of care. | 0,66 | **0,000** |
| | A reasonable time to examine the contract proposal. | **0,031** | 2 | Sufficient availability of the healtcare insurer for questions and comments about the contract. | 0,54 | **0,000** |
| | Agreement of both parties (both physiotherapists and health insurer for the contract signing). | **0,021** | 3 | Timely involvement of the healthcare provider, by the health insurer, in the procurement process. | 0,45 | **0,000** |
| | A platform proposed by the insurer to upload data, to measure the status of agreed targets. | **0,016** | 4 | A platform proposed by the insurer top upload data, to measure the status of agreed targets. | 0,39 | **0,000** |
| | | | 5 | A protocol on the accessibility of the health insurer for questions and comments about the contract. | 0,32 | **0,000** |
| | | | 6 | Legible and understandable contracts | 0,26 | **0,000** |
| CZ | - | **-** | - | - | - | **-** |
| SHI | A clear definition of quality of care. | **0,007** | 1 | A clear definition of quality of care. | 0,34 | **0,003** |
| | Unambiguous content of the contracts of health insurers. | **0,007** | 2 | Communications throughout the year via newsletters and or presentations on the purchasing policy of the insurer | 0,23 | **0,003** |

**Table 15. Significant differences in Short List Factors per HI for GP's**

| Health insurer | Short List Factor | P | Discriminant | Critical Success Factor | Wilks Lambda. | P |
|---|---|---|---|---|---|---|
| VGZ | Sufficient availability of the healthcare insurer for questions and comments about the contract. | **0,018** | 1 | Sufficient availability of the healthcare insurer for questions and comments about the contract. | 0,375 | **0,011** |
| | Evaluation of the contracting of the previous year between health insurer and healthcare provider. | **0,018** | 2 | A platform proposed by the insurer top upload data, to monitor the quality of care. | 0,167 | **0,005** |
| | | | 3 | Sufficient clarity in the structure of the prescribed tariffs. | 0,062 | **0,002** |
| Menzis | - | **-** | 1 | Agreement of both parties (both general pracitioner and health insurer) for the contract signing. | 0,467 | **0,062** |
| Achmea | Agreement of both parties (both general pracitioner and health insurer) for the contract signing. | **0,017** | 1 | A platform proposed by the insurer top upload data, to measure the status of agreed targets. | 0,331 | **0,000** |
| | A platform proposed by the insurer top upload data, to monitor the quality of care. | **0,002** | 2 | Evaluation of the contracting of the previous year between health insurer and healthcare provider. | 0,255 | **0,000** |
| | A platform proposed by the insurer top upload data, to measure the status of agreed targets. | **0,000** | | | | |
| CZ | Communication throughout the year via newsletters and or presentations on the purchasing policy of the insurer. | **0,003** | 1 | Communication throughout the year via newsletters and or presentations on the purchasing policy of the insurer. | 0,286 | **0,001** |
| | | | 2 | Agreement of both parties (both general pracitioner and health insurer) for the contract signing. | 0,167 | **0,000** |
| | | | 3 | Timely involvement of the healthcare provider, by the health insurer, in the procurement process. | 0,1 | **0,000** |
| SHI | Agreement of both parties on clear and realistic objectives. | **0,008** | 1 | Communications throughout the year via newsletters and or presentations on the purchasing policy of the insurer | 0,5 | **0,116** |

### *Notable base results in both groups*

In the context of the healthcare contracting survey, some eye-catching base results are identified in the survey. For the physiotherapists, it's prominent that "Negotiation about the content of the contract, per healthcare professional or practice" is absent in the healthcare contracting of 96% of the survey respondents. Furthermore 96% of the physiotherapist respondents mention that "Evaluation of the contracting of the previous year between HI and HP" is absent. From the physiotherapists, 86% stated that there was no "possibility of making changes to the contract by the representatives of the profession". Whereas the most eye-catching result is that 97% of the physiotherapists' mentioned that there was no "Fair payment for executed transactions". For the GP's it's also prominent that "Negotiation about the content of the contract, per healthcare professional or practice" is missing in 89% of the cases and 84% of the respondents didn't notice "Evaluation of the contracting of the previous year between HI and HP". The involvement of a care broker within the healthcare contracting is noticed in 10% of the cases. Furthermore clearness in segment three is missing, 77% of the GP's misses clear communication about healthcare innovation in segment three, and 75% mentions that there are no clear demands in how to build a business case which can be approved for compensation by the HI.

### *Overall results*

*To be conclusive overall results show a mismatch regarding the CSF's and the PSF's. The highly discriminant factors aren't perceived as very important by the HP's, where they should be, based on the results of the analyses. Furthermore the PSF's who aren't very critical are often overrated by the non-satisfied group. Which means that the non-satisfied group perhaps focusses on the wrong factors as "Important". These results show that HP's are not sure what factors are influencing the outcome of healthcare contracting and how important they are. In the perspective of the base results, it can be seen that important factors are missing within the current healthcare contracting. An essential difference is the absence of a fair tariff for the physiotherapists, were the GP's do not mention income problems. Both HP's would like to have some sort of negation and evaluation of the contracting, which currently are mainly absent although influence on the quality of care of the profession is seen as most important. Next it is identified that there are differences between HI's and between HI groups. The SHI's seem to offer a more "even-position" between HI and HP's, than the major four. There is a significant difference in presence of one CSF("Legible…contracts") for SHI's versus Major four HI's. Issues regarding healthcare contracting should be analysed per HI not in general, more about these differences is mentioned in chapter 9.3*

# 8. Conclusion

Regarding the CSF's and PSF's there is a mismatch regarding the statistical importance and perceived importance of success factors. In both groups, there is only (small) partial overlap between what "is important" and what "is perceived as important" regarding the successful healthcare contracting.

CSF's for healthcare contracting for GP's and Physiotherapists in the Dutch healthcare sector differ. The main differences seem to be the perception of the CSF's. They differ between both groups, although both groups show that overestimation of non-critical success factor for the "non-success" groups is present. Also can be concluded that a lack of understanding of the content of the healthcare contract seem to influence the level of success in healthcare contracting. The secondary analyzes also shows that there are differences between HI's, mainly between the SHI's and the four Major HI's. SHI's show multiple CSF's more often than major four, perhaps this is an sign of better healthcare contracting present at SHI's.

It can be concluded for VvAA that a lack of understanding of (different) healthcare contracts by the physiotherapists can apparently evolve in other needs regarding help or assistance compared to GP's and in other perceived success factors.

Furthermore this study shows that the GCP's published by the NZa do not match the perceived influence of success of healthcare contracting, the focus of these GCP's is not the same as the focus of the CSF of both HP groups. Furthermore both groups identified "Agreement of both parties…." as an important CSF, which means that some kind of agreement is a prerequisite for successful contracting. This may mean that for both groups of healthcare professionals the imposition of an unilateral healthcare contract by the HI seems an indication of healthcare contracting failure in the primary healthcare sector.

Identified barriers, seem lack of understanding of the contract by the HP's and with it missing (identified) opportunities of acting on the contract. Furthermore, the lack of clear communication of taken steps by the HI's (in their policy). Last is missing clearness in opportunities and conditions of innovations for the HP's.

# 9. Discussion

| | | | Phy | GP | |
|---|---|---|---|---|---|
| • | SF | Start Factor | 50 | 50 | |
| • | LLF | Long List Factor | 40 | 31 | |
| • | SLF | Short List Factor | 12 | 13 | |
| • | PSF | Perceived Success Factor | 4 | 1 | *What seems important for HP's.** |
| • | CSF | Critical Success Factor | 3 | 4 | *What is (statistically) important.** |

* Regarding outcomes for healthcare contracting.

This study aimed to identify critical success factors and barriers in healthcare contracting for General Practitioners and Physiotherapists in the Dutch healthcare sector. Different as well as partially similar CSF's were identified between both groups, which can be translated into recommendations and further research. In this chapter first results and conclusions for physiotherapists can be found, followed by results and conclusions for GP's. Then a paragraph is dedicated to the similarities and differences between all HI's and between two groups of HI's, followed by comparing GCP's and new regulation of NZa with outcomes of the survey. Then healthcare purchasing policies of HI's is evaluated and last theoretical results regarding healthcare purchasing in the framework of the Kraljic product portfolio.

This study give rise to a critical reflection of the results, for this critical reflection interpretation of the writer is included. Next to the analyses of the CSF's and PSF's also a secondary analysis is conducted to identify differences between HI's and groups of HI's. As mentioned earlier, four major HI's (Achmea, CZ, VGZ and Menzis) represent 90% of the market and the five small HI's (Zorg en Zekerheid, ONVZ, DSW, A.S.R. and ENO) only 10%. The outcomes of the survey also needs to be evaluated per HI because of the possible differences between them. These identified differences show possible front-running or laggard HI's. These differences between HI's can be converted into targeted advices per HI and to show "HP complaints" are not always applicable to all HI's. Also possibilities to learn from each other can be distilled from this analyses.

Also due to the out of balance market proportions of the HI's (oligopoly), perhaps groups of HI's can learn from each other (SHI and major four). Another possibility of differences is not between different HI's, but between types of HI's (table 12 and 13). The four major HI's all have over two million insured people, whereas the five small HI's all have less than one

million insured people. Due to this differences in size and assuming that SHI's have less HP's in their contracting domain, it could be possible that they score different on LLF's. Perhaps SHI's are being able to spend more time per HP, also they are only preference/dominant in small geographical area or do not have a core region at all (A.S.R., ONVZ), which could result in different presence scores of LLF's. Again it can be used to show: "HP complaints" do not always apply to all HI's.

The origin of the differences between HI's are further explored and will be discussed in chapter 9.5. First, HI's may differ in their policy, second HI's may differ in the way they communicate their policies. To identify possible differences between HI's, the purchasing policies of the HI's are analyzed. This can identify if differences are the consequence of differences in policy or perhaps lack of being able to communicate taken steps. If clear communication seems the problem for HI's, targeted improvements and recommendations can be proposed.

Furthermore NZa policy (GCP's) and regulation are evaluated. These guideline and regulation are constructed by NZa to positively influence the healthcare contracting. Although, are these guidelines and regulation appropriate for the current healthcare contracting from the perspective of the HP's? Or can these GCP's and regulation be improved?

Last is the analysis based on the product portfolio matrix of Kraljic combined with outcomes of this study. This analyses makes it possible to identify how HI's assess physiotherapists and GP's in the framework of purchasing management. Also in perspective of the Carter matrix it is possible to identify how HP's assess their own products. Combination of both models with the outcomes of the study can show possible mismatches in purchasing policy of both parties and perhaps targeted recommendations can be constructed.

## 9.1 Physiotherapists

The discriminant analysis, demonstrates that the three most important CSF's can divide 70,5% of the cases in the correct group.

- The most important CSF is "Uniform conditions for obtaining a higher tariff from the health insurers" which may imply that the physiotherapists who are more successful in contracting, recognize this opportunity and are better able to get a higher tariff. This is underpinned by the fact that a fair payment for executed transactions is seen as very important (table 7).
- The second most important CSF regarding the success of healthcare contracting in physiotherapists is "Agreements of both parties for the contract signing". This means

that some kind of agreement is necessary to come to successful contracting.

- The third CSF is: “Legible and understandable contracts”, which is in line with and reinforces the first and most important CSF. If healthcare contracts would be easier to read and to understand or if physiotherapists would understand them more, they might be able to obtain a higher tariff and work with the contract instead of counteracting on the contract due to lack of understanding.

### *Differences between CSF's and PSF's of Physiotherapists*

Comparison of Critical Success Factors and Perceived Success Factors only show small partial overlap. In the analyses the three discriminating CSF’s are compared with the most important subjectively rated success factors. From the fourteen highest ranked success factors on importance only one is really critical regarding discriminating power. This is CSF “Legible and understandable contracts” (56% very important). On the other side, the other two CSF’s are not mentioned as very important. These are: “Uniform conditions for obtaining a higher tariff from the health insurers” and “Agreement of both parties (both physiotherapists and health insurer for the contract signing)”. This analysis shows that physiotherapists underestimate the importance of the CSF’s. This seems an outcome of the fact that the subjective rating of importance by physiotherapists does not match with the statistical determined CSF’s. When the CSF’s and PSF’s are ranked, we can see dissension between the importance and significance ranking of CSF’s with the highest discriminating power in table 16. The higher the rank, the higher the discriminating power for the CSF and the more important this factor is for the PSF.

**Table 16. Critical Success Factors and Perceived Success Factor ranks of physiotherapists**

| Critical Success Factor | CSF rank | PSF rank |
|---|---|---|
| Uniform conditions for obtaining a higher tariff from the health insurers. | 1 | 15 |
| Agreement of both parties (both physiotherapists and health insurer for the | 2 | 24 |
| Legible and understandable contracts | 3 | 6 |

Comparison of the CSF and PSF ranks shows the underestimation of all statistical important CSF’s. From the perspective that 41 Long List Factors were evaluated, analyses shows that two of the three PSF factors are scored in the higher half of the importance score and one in the lower half (PSF rank 24). On the other hand, CSF “Legible and understandable contracts” is scored at rank 6, which is still a relatively high rank regarding the total of 41. These results indicate that physiotherapists underestimate the importance of the identified CSF’s in healthcare contracting and see other non critical factors a more important. Perhaps this dissension emerges due to the fact that different factors are missed by HI’s in recent contracting and this “missed factor” than is mentioned as highly important.

Another comparison is made regarding the importance scoring of the three discriminating CSF's in table 17. Regarding the importance of these CSF's analyses shows differences in these three CSF's are small. The most important CSF is slightly underestimated by the "'unsuccessful"' Physiotherapists, although CSF 2 is slightly overestimated. CSF 3, "Legible and understandable contracts" is slightly underestimated by the "non-successful" group. This indicates that this group does not seem to fully understand healthcare contracting. As a consequence of not understanding or not being able to fulfill the set targets, they indirectly score a lower success level of their contracting. Since two of the three most important CSF's are underestimated by the "'non-successful" group, this might negatively influence the outcome of the healthcare contracting for this group.

**Table 17. Ranking CSF's by physiotherapists between groups and its importance score**

| Number | CSF | Satisfied very Important | Satisfied Important | *Satisfied Importance* | Non satisfied very Important | Non satisfied | *Non satisfied total* |
|---|---|---|---|---|---|---|---|
| 1 | Uniform conditions for obtaining a higher tariff from the health insurers. | 39,0% | 53,7% | ***92,7%*** | 58,3% | 29,2% | ***87,5%*** |
| 2 | Agreement of both parties on clear and realistic objectives. | 34,1% | 48,8% | ***82,9%*** | 51,1% | 36,2% | ***87,3%*** |
| 3 | Legible and understandable contracts. | 52,5% | 45,0% | ***97,5%*** | 59,6% | 31,9% | ***91,5%*** |

### *Conclusion related to the physiotherapists*

*The suggestion is that healthcare contracting in this paramedic sector should at least contain three essential elements.*

1. *Uniform conditions between the HI's in obtaining a higher tariff from the HI.*
2. *Agreement of both parties when the contract is signed.*
3. *The contracts should be legible and understandable for the physiotherapists.*

*It is identified that physiotherapists seem less able to correctly identify the critical success factors, they underestimate the importance of these factors. Physiotherapists aren't able to correctly identify what is important and what does only seem important (perceive) as important regarding healthcare contracting. Perhaps the missing of a factor in recent contracting now results in the perception that this factor now is important. Only the critical success factor "Legible and understandable contracts" is statistically important and is also perceived by the physiotherapists as important.*

## 9.2 GP's

The discriminant analysis, demonstrates that the four most important CSF's can divide 81.0% of the cases in the correct group.

- The most important CSF is: "A platform proposed by the HI to upload data to monitor

the quality of care". This is in line with the identified high importance of insight in quality of care. Perhaps HI's are more open for conversation if HP's digitally monitor their quality of care, which also results in HI insight in quality of care.

- Second, differentiation in contracts and rewards between different performing HP's. This means that some kind of differentiation between different performing HP's seems important in reaching successful healthcare contracting. Perhaps HP's who more agree with differentiation between GP's are more successful in contracting, whereas HP's who are "against the system" do not want this differentiation and have less success.
- Third are "agreements of both parties on clear and realistic objectives", some kind of agreement seems necessary to come to successful contracting and some agreement is also seen as important (table 9).
- Last are "communications throughout the year via newsletters and presentations on the purchasing policy of the HI" which mean that HI can directly influence the outcome of healthcare contracting by at least communicate about their purchasing policy. This CSF's stands out because it was also identified as a significant differing factor between the satisfied and non-satisfied group (table 8). Absence and perceived unimportance of this factor seems omens of failure in healthcare contracting.

### *Differences between CSF's and PSF's for GP's*

If the Short List Factors and Perceived Success Factors are compared with each other we see only partial overlap in the SLF's and PSF's. From the eleven SLF's who are scored highest on importance, only one is really critical: "Agreement of both parties (both general practitioner and health insurance) for the contract signing (55%). Outcome of this analysis shows that the GP seem to underestimate the importance of CSF's. This due to the fact that the subjective rating of importance does not match with the statistical determined CSF's within this study (table 18).

**Table 18. Critical Success Factors and Perceived Success Factor ranks of GP's**

| Critical Succes Factor | CSF rank | PSF rank |
|---|---|---|
| A platform (eg. Vecozo / Vektis) proposed by the insurer to upload data, to monitor the quality of care. | 1 | 29 |
| Differentiation in contracts and rewards between different performing healthcare providers. | 2 | 27 |
| Agreement of both parties on clear and realistic objectives. | 3 | 2 |
| Communications throughout the year via newsletters and or presentations on the purchasing policy of the insurer. | 4 | 26 |

Whether a CSF is overestimated or underestimated is clarified by comparison of the ranks of the CSF and the PSF. This analyses clearly shows the underestimation of three of the four

statistical important CSF's. Regarding the fact that 30 factors were evaluated, we see that three of the four most statistical important success factor are scored at the bottom of importance in PSF, only one was scored important. These results indicate that GP's clearly underestimating the importance of these recognized CSF's in healthcare contracting practice.

Table 19 shows the differences between successful and non-successful GP's from the four, step-by-step identified CSF's, in percentage of importance ranking. Again it's shown that three out of four CSF's are perceived as less important in the non-satisfied group. The two most important CSF's are underestimated by the non-satisfied group of the GP's. The third CSF is ranked as important about the same for both groups. This CSF is rated according to discriminant significance level and slightly overestimated in the non-satisfied group. Furthermore the fourth CSF shows a significant underestimation between the satisfied and non-satisfied groups. It is found that the two most important CSF's for healthcare contracting success for GP's are underestimated by the group of non-satisfied GP's. This could indicate that these underestimations can be an important reason why these GP's do not reach their healthcare contracting goals; or that their healthcare contracting "failed". CSF 4 is even statistically significant differing between both groups.

**Table 19. Ranking of CSF's for GP's regarding importance**

| Number | CSF | Satisfied very Important | Satisfied Important | *Satisfied Importance* | Non satisfied very Important | Non satisfied Important | *Non satisfied total imporance* |
|---|---|---|---|---|---|---|---|
| 1 | A platform (eg. Vecozo / Vektis) proposed by the insurer to upload data, to monitor the quality of care. | 13,3% | 53,3% | ***66,6%*** | 4,8% | 42,9% | ***47,7%*** |
| 2 | Differentiation in contracts and rewards between different performing healthcare providers. | 16,7% | 46,7% | ***63,4%*** | 9,5% | 42,9% | ***52,4%*** |
| 3 | Agreement of both parties on clear and realistic objectives. | 46,7% | 46,7% | ***93,4%*** | 66,7% | 33,3% | ***100,0%*** |
| 4 | Communications throughout the year via newsletters and or presentations on the purchasing policy of the insurer. | 26,7% | 63,3% | ***90,0%*** | 0,0% | 73,0% | ***73,0%*** |

### *Conclusion GP's*

*This study suggests that the fundament of a good healthcare contracting practice can be reached if:*

1. *The HI suggests a platform to work with, so insight in quality of care can be realized.*
2. *Differentiation between contracts of different performing GP's is present.*
3. *Agreement of both parties on the (differentiated) contract targets before signing.*
4. *The HI should communicate throughout the year what its purchasing policy will be.*

*The dissensions between CSF's and PSF's are considerable; from the four identified CSF's, only one is perceived as very important by the GP's. The importance of the other three*

*CSF's was underestimated. GP's aren't able to correctly identify what is important and what does only seem important (perceive) as important regarding healthcare contracting. Only Agreement of both parties on clear and realistic objectives" is (statistically) important and is also perceived as important by GP's. Perhaps CSF's (e.g. CSF 1 and 2) are of such importance for HI's, that if CSF's are present, the HI becomes more cooperative and open, which results in a more "even" position between both parties and more success in contracting for GP's.*

## 9.3 Differences between HI's

*Entrepreneurship and difference in dominant HI do not seem to influence the success significantly of healthcare contracting. Furthermore, differences in outcomes between different HI's and GP's and physiotherapists are found. Four factors significantly differ in the physiotherapists group between HI's and two factors significantly differ in the GP group between HI's.*

The first hypotheses that stands out is that the level of entrepreneurship could possibly influence the outcomes of the survey. This due to the fact that a more entrepreneurial minded HP, possibly answered in a more entrepreneurial oriented way. For both professions, entrepreneurship within their practice can have a different outcome. The results of this analyses, are non-significant for both professions, although there were differences in outcome. The GP's showed more variation in the answers depending of their use of segment three than the physiotherapists from the perspective of level of tariff. Nevertheless these results were non-significant for both professions. In the results is identified that four of the physiotherapist factors significantly differ between different HI's and two factors differ significantly for the GP's.

### *9.3.1. Differences between all health insurers*

For the factor 'Sharing, discussing and understanding the potential of joint value creation' (shared savings) it is found that this is only mentioned at Achmea and CZ as present (table 10). For HI's sharing their goals and possible ways of saving money can be a way of showing shared savings, if they also mention what the role of the HP can be in that framework. Achmea and CZ both have module contracts and do not negotiate with loose physiotherapists, perhaps they have named their ways of saving money in their standard contracts or communication regarding their purchasing policy.

Furthermore, all of the Menzis respondents mentioned presence of clear mirror information. Consultation between the HI's on how to communicate and represent mirror information as a HI could positively influence this factor, as long as Menzis is taken as an example. It is found that Menzis publishes all rules and regulations regarding the mirror information and the

consequences (in a figure) of the different steps and outcomes of the mirror information as one appendix on their website.

A third significant finding is that “Offering of multi-year contract by the HI” is present often by Menzis versus scored very low at VGZ and the SHI’s. The significant higher scoring of Menzis could be the fading result of the earlier brand “Menzis Topzorg” which used multiple multi-year contracts for physiotherapists, now it no longer exists. Furthermore Menzis uses three levels of practice rating, the profile three (highest profile), automatically obtains a multi-year contract. VGZ seems to significantly offer less multi-year contracts. VGZ only wants to offer multi year contracts to frontrunners, to obtain the status of front runner, next to numerical conditions the physiotherapists should hand in a ‘motivational paper’. This motivational paper gives VGZ the space to reject a frontrunner physiotherapists based on its motivational paper and not on predefined numbers and conditions. Some SHI’s do only offer standard one year contracts for physiotherapists and until this moment do not differentiate between different performing physiotherapists.

The last factor of the physiotherapists that significantly differ is the factor about rules and agreements of clinometric results by the HI. It is found that rules and agreements about clinometric information are more often present at Achmea and absent by SHI’s. This can be a result of the lack of differentiation between different performing physiotherapists by SHI’s. For Achmea, it can indicate that Achmea communicates clearer rules and agreements about the use of clinometric results due to the fact that it uses this clinometric information more to steer the physiotherapists, although this is an assumption.

For the GP’s it is found that two factors significantly differ (table 11). The first factor is “A regional meeting in which HI provides the healthcare provider with information on contracting”. It can be seen that this factor can roughly be divided into three parts. First the ‘100%’ part, in which VGZ and Menzis are present. All the respondents with this preference HI mentioned a regional meeting. The second part is the ‘about 75%’ group, three quarters of these respondents mentioned presence of a regional meeting with their preference HI. HI’s with this 75% score are CZ and SHI’s, this stands out due to the fact that SHI’s only are preference SHI in small regional areas. Where it was the expected that SHI’s in their small regional areas would be able conduct regional meetings for all HP’s. Whereas less than half of the respondents (48%) with Achmea as their preference HI mentioned presence of a regional meeting. Achmea is the biggest HI in the Netherlands, seen from the geographical perspective, they are dominant in regions from “Hoek van Holland” till “Dokkum” which could indicate that their broad regional spread indicates lower presence of a regional meetings.

A second significant relation was found in the factor “A platform proposed by the insurer to upload data, to measure the status of the agreed targets”. It is found that respondents of Menzis significantly more often notice this factor (86%). It can be assumed that Menzis could be trendsetter regarding the use of digital data, for example mandatory ‘Electronic Patient Files’ to monitor the status of the agreed targets. By making more use of this real-time data could place Menzis in a position to ‘real-time’ coordinate and steer their contracted GP’s based on their ‘real-time’ data and not correct them afterwards.

### *9.3.2. Differences between groups of health insurers*

*Within physiotherapists four factors significantly differ between both groups (small or major HI), whereas for the GP’s group only one factor differs significantly. Based on the outcomes it can be (carefully) concluded that Small Health Insurers (SHI’s) are better able to fulfill the wishes of their (smaller group of) HP’s.*

The first factor ‘Legible and understandable contracts’ differ significantly. This difference can have multiple reasons: First, the SHI’s have relatively smaller contracts with less conditions that a physiotherapist needs to meet. A clear difference is the contract of Achmea, which is 24 pages of conditions and rules, versus the contract of Zorg en Zekerheid which is three pages long. Second, some of the HI’s do not differentiate between different performing physiotherapists, they only have one optional contract and no differences in their tariffs and so contracts. This smaller contracts, with lesser conditions seems to result in more legible and understandable contracts. This factor is also a CSF, which means that it’s high in importance regarding the success of healthcare contracting. This difference between both groups in CSF can influence success of healthcare contracting, perhaps HP’s with SHI’s as preferred HI are more able to have success in contracting.

A second significant difference is in t rules and agreements about the use of clinometric data by the HI. In the SHI’s present by only 9% of the respondents, whereas the Major four, 42% of the respondents meant this as present. This can be a result of a higher degree of use of the clinometric by the major four HI’s, perhaps for steering of the HP’s or lack of communication about use of clinometric data by SHI’s.

The third significant result is a ‘Prompt availability of criteria used in the contract’. This difference can be a result of the shorter lines and smaller group of physiotherapists a SHI represents, which makes communication easier. But it can also be a result of lower level of criteria within a contract of a SHI versus a major four HI.

For the GP’s only one factor significantly differed between both groups. The factor that significantly differed is ‘Agreement of both parties (both GP and HI) for the contract signing’. In this study this means that in regions where SHI’s are dominant, an agreement of both

parties seems more often present. This could be a result of the fact that SHI's represent less HP's and so can adapt more to the wishes of their 'smaller group' of HP's in their (smaller) core region. It could mean that the feeling of a TROG-contract is less present in the SHI preference groups than in the major four group. As a result of this it could be assumed that SHI's more often have "Negotiations on the content of the contract" than major four have. It is found that in the SHI's negotiation is present more often (22%) than in the major four group (10%), although this difference is not significant. Despite the fact that this difference isn't significant, it still remains very important, due to the fact that some form of "agreement" seems necessary in healthcare contracting and is also a CSF. This is the second CSF which differs between both groups of HI's. It can be concluded that two CSF's are more present in SHI's than in the major four HI's, which probably will result in better healthcare contracting for the HP's with an SHI as their preference HI.

*The CSF's differ between the different HI's in both groups, although separately identified CSF's are also identified in the general analyses. However, the discriminating factors differed within the group of the physiotherapists but not in the GP group.*

The CSF's and discriminating analyses are also conducted per HI respondent group (table 14 and 15). First, looking at the outcomes of the SLF's it is seen that five of the identified SLF's match with the SLF's of the total respondent group. Only within Achmea, two other SLF's are identified; "A reasonable time to examine the contract proposal" and "A platform proposed by the insurer to upload data, to measure the status of the agreed targets". There are clear differences between HI's in SLF's. This can support the assumption that success factors can differ between HI's. For the GP's it is found that only one SLF within the groups apart differs from the SLF's within the total group, only CZ shows "Evaluation of the contracting of the previous year between health insurer and healthcare provider" as SLF, while it is not in the whole group of respondents. Again, just as in the physiotherapists, the SLF's between the HI's differ greatly, which means that between HI's are clear differences in policy, rules and negotiation possibilities. These differences between HI's seems to mean that perhaps HI can improve their healthcare contracting by better listening to their HP's instead of HP's in general.

CSF's between HI's also differ, it needs to be noticed that these differences in discriminating power or factors are a consequence of the segmentation of the total population of the HI's within this secondary analyses. A discriminant analyses shows the factors which can divide the group in two or more subgroups, due to the segmentation of the whole group these factors can shift. Possible important CSF's can be found per HI in table 14 for the physiotherapists and table 15 for the GP's. For the physiotherapists only one discriminating

factor correspond to the discriminating factors of the whole group ("legible and understandable contracts") whereas for the GP's three from the four discriminating factors of the total group can also be identified in the segmented table 18. It could be possible that this lack of agreement for the physiotherapists arises from the fact that physiotherapists contract with all HI's apart, which means that groups of one dominant HI can be contaminated with problems they perceive of other HI's. This lack of solo direction of one HI, can evolve into a more fuzzy representation of the CSF's. Due to this fuzzy representation, the discriminant analysis seems less able to pinpoint the CSF's in a good way. For the GP's this problem does not arise, they only contract with their preference HI and the rest of the HI's will follow. For the GP's the CSF's are found in four out of five HI's. Only Menzis does not show one CSF's within its analyses. Only "Differentiation in contracts and rewards between different performing healthcare providers" cannot be found in table 15. The other three discriminating factors are also mentioned in one, or multiple HI's apart. Due to differences between the HI's it can again be concluded, that also for GP's, the HI's should focus more on their own clients(HP's) and their wishes instead of the general representation of the whole profession.

## 9.4 Good contracting and Regulation Practices

*The NZa published the GCP's and a new regulation for healthcare contracting. Both seem suboptimal steps with respect to the improvement of healthcare contracting.*

Comparison of the GCP's with the outcomes of this study shows that some GCP's do not seem important prerequisites for good contracting in the eyes of the HP's (Appendix VIII). From the seven identified CSF's for healthcare contracting, only one is also a GCP (number 9 table 2), rest of CSF's are missing in GCP's. Although, what is then in GCP's? Seldom care agents are consulted, because HP's perceive this as unimportant and it is only observed by 10% of the HP's. Most important GCP for both groups is: "The profession organization and insurers have regular contact". Furthermore, both HP groups mentioned as number one and two of importance the GCP factor "Opportunity for profession organization to change parts of the contract and contact between profession organization and HI about content of the contract", although only observed in respectfully 41%, 46% and 14%, 28%. Also sufficient availability of HI's for questions during contracting period, was seen as very important, although only observed by 52% and 60% of the HP's. From the ranked most important GCP's (importance score above 0.90) three (partly) GCP's were observed in less than 30% of the cases for both HP groups; "Timely involvement of the (para)medic in the procurement process"; "Opportunity for the profession organization to change parts of the contract" and by the physiotherapists "Working with trailers which briefly state what is different from previous year" and by the GP's "Timely publication for assessing applications for innovative projects". These findings show that some of the GCP's needs to be

reconsidered and the guidelines should be adapted. Seen from the perspective of the new regulation “Regeling TH/NR-005 Transparantie zorginkoopproces Zvw”[90] some of the GCP’s are converted into an enforceable regulation by the ministry of VWS. Five of ten enforceable rules within the new regulation are included in the survey (appendix VIII). These factors are observed in about 50% of the cases (min. 39%, max 62%) by the HP’s. Due to the new regulation, all the HI’s are forced to include these factors in their health care purchasing from January 2017 on. Concluded can be that currently these factors aren’t present in all cases.

## 9.5 HI’s purchasing policy

*The HI’s seem quite unclear in their healthcare purchasing policy. Only one HI mentions negotiation about the contract as an option, one other HI mentions the presence of evaluation of the contract. All HI’s mention the influence of the profession on the contract, although it remains unclear what that influence exactly is.*

A summarizing table of this analysis of the policy of the HI can be found in appendix VII. This shows the factors which can be influenced by policy of the HI and if that factor is mentioned within published purchasing policy of the HI. For the first four factors, who could be found in both the GP and physiotherapeutic purchasing policy, it was identified that if this factor was present, it was present in the general purchasing policy document of the HI.

First notable results are described. From the nine HI’s only CZ and ENO mentioned opportunity to negotiate about the content of the contract per HP or practice. However, CZ mentions in their policy documents that based on a written response the HI and HP perhaps *“enter into consultation”.* Based on the outcome of this study, this seems a misplaced promise of negotiation, and does not take place in practice. ENO is the only HI which clearly mentions that there is an opportunity to negotiate and builds custom contracts for their HP’s. They put forward their small regional responsibility as an opportunity to build custom agreements. The other SHI’s did not mention this opportunity of custom contracts, perhaps due to the fact that they purchase their healthcare via Multizorg. Zorg en Zekerheid even mentions in their policy that they “cannot promise any form of custom contracts”.

The second factor regards evaluation of the contracting of the previous year. Only VGZ mentions this in their policy. VGZ mentions that they conduct evaluation research including, among other things, patients, insured and HP’s. The fact that all other HI’s do not mention any form of evaluation regarding contracting is peculiar. Especially because in the GCP’s “Evaluation of the contracting of the previous year” is mentioned. Despite this guideline it seems that HI’s do not evaluate the contracting (either way not per HP). HI’s do not seem to evaluate the contracting, and do not include the naming of an evaluation in their policy.

All HI's mention the possibility of making changes to the contract by representatives of the profession in their policy. Whether or not these representatives have influence on the content of the policy and contracting remains unclear. Due to the fact that only 14% of the HP's observed this factor as present, it can be concluded that the HI's are not very successful in communicating this influence of the profession. Another possibility is that the 'influence' is only input given by the representatives of the profession which the HI's set aside.

*Differences in outcomes between HI's are present, from the presence of shared savings, to, multiyear contracts and usage of clinometric. One factor is similar for all HI's; they are not able to communicate clearly about their policy and steps towards the wishes of HP are taken.*

First, the offer of a multi-year contract is named by all HI's in their purchasing policy, except for DSW which mentions that they had multi-year contracts for physiotherapists in the past but currently only arrange one year contracts. Still, 49% of the HP's is not able to observe an offer of a multi-year contract. This difference seems consequence of current contracting route of HI's for physiotherapists. Often HI's name in their policy that they offer multiyear contracts only for excellent or more than average performing practices. This means that average performing physiotherapists do not see the offer of a multiyear contract due to the fact that they are not qualified for this.

For differences in outcomes of the GP's, a regional meeting is mentioned in all HI's purchasing policies with exception of ONVZ and A.S.R. (both never preferred HI). ENO mentions that they organize meetings only in their basic region (Salland). However, regarding the outcomes of the survey, CZ and Achmea seem less able to communicate well about their regional meetings. They clearly name the meeting in their purchasing policy, although not all the HP's take notice of these meetings. This suggests that HI's are not able to clearly communicate about actions they take to positively approach the wishes of the HP's.

The second significant factor for GP's is a platform proposed by the HI's to upload data and to measure the status of the agreed targets. This is observed more often at Menzis than at other HI's. Perhaps Menzis uses the platform more than other HI's to steer the HP's in their agreed targets. One clear difference is that Menzis uses its platform in real time, whereas other HI's only use the outcomes of the HP's at the end of the year.

## 9.6 Healthcare contracting in the perspective of the Kraljic matrix

*Differences in archetype of HP's and perspective of the HI's can be further explained by using Kraljic Product Portfolio Matrix. HI's perceive physiotherapeutic care as a leverage product and GP care as a strategic product, whereas the HP's perceive their own product as a main segment product.*

The archetypes of both groups of researched HP's within primary care seem to differ. The Kraljic Product Portfolio Matrix can further explain these differences between HP's and the perspective of the HI's towards the different HP products. The physiotherapeutic healthcare is perceived as a leverage product by HI's. There are too many physiotherapists; the supply of physiotherapeutic care within the market is to large. HI's use a lot of framework contracts (blanket orders based on questionnaire outcomes) and do not negotiate with separate physiotherapists, which is also identified as a result of this study. Of the physiotherapists, 96% experience a lack of negotiation in the healthcare contracting process. Furthermore the absence of long-term contracts is obvious, multi-year contracts seem only available for excellent performing physiotherapists. Also, maximization of discounts can be identified in the current physiotherapeutic market, for several years in a row the tariffs for physiotherapeutic sessions have been reduced and currently 97% of the physiotherapists perceive the tariff as unfair. In the leverage quarter, the purchaser can assertively push for improvements of the supplier by maximization of specifications and performance. The HI's demand a lot of requirements from physiotherapists about their operations, based on quality measures and treatment averages, which demands increased administrative actions. An excessive administrative burden is also identified within this study, 90% of the physiotherapists put this drawback forward.

Physiotherapeutic care seems to be seen as leverage product for HI's, based on the outcomes of this study. In the perspective of the Carter matrix it seems that physiotherapists want their product to be perceived as a strategic product, although currently is a leverage product. Whereas the physiotherapists themselves see their product as a core segment product, this shows a mismatch. The HI represents a high relative value to the physiotherapist and has a high account attractiveness. The HI's tries to strengthen its position and to improve own profit, by using competition within the physiotherapeutic market. The physiotherapists should try to get out of this leverage quadrant and need to shift towards a more strategic product. Possibilities for physiotherapists are to lower the entry of new physiotherapists, get early supplier involvement, and start co creation of products together with HI's. Offer extra services (longer opening hours), gather positive references (patient satisfaction research) and differentiate the practice within the market (hire specialist physiotherapist).

The GP's who supply more urgent primary care and act as a strategic coordinator of the primary care seem to belong in another quarter of the Kraljic matrix. They have specific know-how; next to the medical knowledge they also have a coordinating function within the healthcare market (gate-keeper). Although multiple GP's are present in the market, they all have their own relatively small geographical area in which they operate. There is a balance in the GP's who enter and leave the market, although a greater part of the new GP's is female and most of them want to work part time[86]. This may results in a small shortage of GP's in the future[86]. Due to the "Hindrance criterion" and the "Duty of care" the HI's need to purchase enough healthcare for their consumer/patient population. Next to the blanket contracts, GP's are able to make personalized agreements, either per GP, or per healthcare group. It is clear that HI's assess GP's as strategic suppliers (41% of the GP's reached agreement between both parties versus 26% of the physiotherapists). The GP's miss negotiation, consultation and agreement within the healthcare contracting, even 89% of the GP's endorse this view.

A strategic purchasing approach is to make a shared vision with the supplier, so called 'shared savings' in healthcare. In the framework of GP healthcare this is described in segment three, where 'shared savings' worked out in business cases, can be submitted at the HI. Although the HI's continuously mention this in their policies, only 23% of the GP's meant this factor as present. Furthermore a strategic contract is often a multi-year contract. All HI's state that they (almost) only offer multi-year contracts for GP's. Within the strategic quart GP's should be alert that HI's will not perceive them as a leverage suppliers in the future. This chance of the HI's shifting their perception of GP products towards the leverage quadrant seems present because 89% of the GP's misses' negotiation about healthcare contracts and blanket contracts are increasingly used in recent years. In the perspective of the supplier; GP's see their product as a core segment product. Their attractiveness is high due the small geographical areas in which they conduct healthcare services and their relative value is high due to the balance within the market of the GP's. The strategic quart with a main core shows a good match with a potential long relationship. Whereas the GP's needs to be alert for the HI's shifting the GP product into the leverage segment by standardization and development of suppliers. Although HI's will be careful with GP's because of their trusted relationship with their patients. To remain a strategic supplier, conduct more secondary care operations, increase cooperation with the HI, for example in putting forward ideas for cost-effective innovations, create an expert status and share valuable knowledge with the HI.

# 10. Recommendations

The first part of this chapter contains process-orientated recommendations. These contain general recommendations, limitations of the study and suggestions for further research regarding the topic of healthcare contracting. Second in paragraphs 10.2 the practice oriented recommendations are mentioned.

## 10.1 Process orientated recommendations

This paragraph contains general recommendations, limitations of the study and suggestions for further research regarding the topic of healthcare contracting.

### *10.1.1 General recommendations*

The first general recommendation is to take notice of the outcome of this study regarding the identified CSF's and the mismatch with the perceived importance of these CSF's. HI's as well as HP's can reduce the risk of healthcare contract failing, by recognizing and acting on the identified CSF's of this study. The focus should be on the cooperation/negotiation between the HI organizations and organizations that represent the HP's. This means that some kind of cooperation and consultation between the professionals (in form of the profession organization) and the HI needs to be established. This is a prerequisite of successful healthcare contracting.

GP's expect quality measurements by a platform that is proposed by the HI, and communications throughout the year about their purchasing policy. GP's expect differentiations in contracts and rewards between different performing GP's. The presence of these CSF's depends mainly on the HI and to evolve these, it is necessary that the HI, in dialogue with representatives of the profession, proposes good healthcare contracting opportunities. Whereas physiotherapists, next to the agreement of both parties, expect legible and understandable contracts and uniform conditions to obtain a higher tariff.

Four of the success factors that were included in the questionnaire were derived from business literature[25]. One of them was "Agreement of both parties on clear and realistic objectives" which was perceived as an important CSF in both HP groups. Two of the three other business literature factors were also rated as significant in the GP group. Within the physiotherapists group not one of the success factors from the business literature was statistically significant. The GP's indicated two of the four business success factors as important, perhaps business literature can give more insight in how gain success in healthcare contracting.

GP's seem to be more aware of the right CSF's (match PSF and CSF). The interviews gave the impression that physiotherapists are more negative regarding healthcare contracting than GP's, possibly because healthcare contracting has repeatedly influenced the physiotherapists' tariffs and income negatively. GP's did not proclaim problems with a low income or tariff, probably because they have no reason to be dissatisfied, they earn a quite good salary (on average € 128.000, - per year). They mainly complain about multiple shifts of granted compensation and the more complicated (administrative) ways to get compensation for example in segment three. Urgency for better healthcare contracting seems highest for physiotherapists, their income is at stake.

The results of this study prove that the HP's underestimate the importance of the several CSF's. Increasing the understanding of the CSF's related to healthcare contracting in the mindset of the HP's, could positively stimulate the outcomes of healthcare contracting. "Agreement of both parties" is a clear CSF for healthcare contracting for multiple primary healthcare professions. The other CSF's and possible better outcomes of healthcare contracting should not be aimed at general awareness, but made "professional sensitive". Finally, the imposition of the unilateral healthcare contracts by the HI, without agreement of both parties, seems to be a harbinger of failure for healthcare contracting in the long-term.

### *10.1.2 Limitations of the study*

There are several limitations of this study. The relative small study groups, limits the degree of generalization to the total group of professionals. The response rates on both questionnaires was not very high which might have been affected by the moment the questionnaires were sent to the participants. This occurred during summer holiday. Both GP's and physiotherapists usually have busy lives and not all professionals have a contract with HI's. Some are employed and not independent HP's, and so don't close contracts with HI's. The participation degree of HP's with SHI's as dominant or preferred HI is to low, which resulted in the combination of these HP's under the denominator SHI is a clear limitation.

Another limitation is the measurement of success. As mentioned earlier it 's difficult to measure success in a correct way, partly because people tend to overestimate success. Although the questions were distracted from literature, it remains an assumption that level of success is correctly measured by asking the percentage of achieved objectives.

Some interviewed professionals mentioned "Please your signature in the right corner "TROG contracts, which fall beyond the objectives of this research. TROG contracts mean strangulation contracts, focus was not only on strangulation contracts, but on whole contracting.

Improvement can made in future research regarding this subject. First a better construct of "success" could be used by including several questions which together represent "success". This way multiple questions will be used to identify success. Furthermore, other stakeholders could be involved in the study such as the HI's and care consumers.

### *10.1.3 Suggestions for further research*

*Further research should expand the theory about healthcare contracting in the Netherlands. Other HP's should be included; "Opportunities within the contract" need to be explored further and differences between HI's need to be researched.*

Since theoretical substantiation of healthcare contracting is limited, it is difficult to find scientifically based implications in literature for improvement of healthcare contracting with respect to practice. More and more extensive research regarding this topic may add to development of scientific healthcare contracting theories in the Netherlands. Most important steps regarding healthcare contracting need to be developed as well as improvement of routing in healthcare contracting. First steps to achieve this target are made by the present study. The movement "HetRoerMoetOm ("A change is needed") can use this theoretical support. Further research on healthcare contracting will be conducted by the "Consumentenbond"; see appendix VI, the current media value of the publication about this topic is valued at about € 100.000[112]. VvAA represents HP's; perhaps the national media is a good way to focus political attention on this subject.

Second, this study shows that different HP's perceive different factors as influencing healthcare contracting success. This has consequences for the diversity in the supply of healthcare contracts. More extensive research is needed which includes other HP's, to identify problems and to improve specific healthcare contracting. Current GCP's are general but HP's seem to want a segmented focus, which can be adapted to their professional needs and wishes.

Third, both professions indicate options for improvement without the need of changing healthcare policy from the HI's or politics, the so called "Opportunities within the contract". Mentioned are options for improvement who are present but only seen by a small group of HP's. Improvement of the understanding and usage of the contracts also seem to be an option for further research. Further research and development regarding supportive models which support HP's to better understand the healthcare contracts and the boundaries and chances of these contracts.

Fourth, due to the secondary analyses it is found that outcomes differ between different HI's. Especially between major and small HI's. It is therefore suggested to further research the

differences between the HI's. With the outcomes of this research a general guideline regarding HI's can be constructed. An example is the good mirror information of Menzis, which can be generalized to all HI's, if shared and controlled. In this framework of differences between HI's also further research regarding the differences between all HI's seems proper. Perhaps within this research, communicating channels of the HI's also can get attention, to identify the best way an HI can communicate towards HP's.

## 10.2 Practical recommendations

This paragraph contains recommendations for the different players in the healthcare market (figure 1). Notification for paragraph 10.2.1 is that a separate report for VvAA will be composed, wherein the direct outcomes of the survey and only for VvAA important questions will be discussed (out of scope of this thesis).

### *10.2.1 VvAA*

First a general recommendation for VvAA is to cooperate with representatives of the profession(s). They try to help their members in the current healthcare contract on macro level by putting this subject on the political agenda. VvAA should cooperate with these member associations and together make a fist against the current form of healthcare contracting.

Second, if VvAA wants to offer help for healthcare contracting, it should take into account the identified differences between what is important and what is perceived important for HP's in the framework of healthcare contracting. The content of the "offering" for healthcare contracting should at least contain critical success factors. Whereas for the marketing of the "offering" also perceived success factors should be communicated towards the HP's.

Furthermore, recommendations for VvAA are split per profession. For the physiotherapists its also possible to build a calculating model. Each HI has a moderately different contract than the other. Is possible to build a model, which uses a checklist and variables from the physiotherapist to calculate tariffs, revenue, but also options the physiotherapist has to obtain a higher tariff by other HI's. This due to the fact that physiotherapists can have different tariffs by different HI's.

Another recommendation for VvAA regarding the physiotherapists is to build a "pearl system" so that physiotherapists can cooperate and together try to negotiate with HI's. With a "Pearl System" is mentioned a cooperation of non-competing physiotherapists who together can try to negotiate with HI's. Due to the fact that an average physiotherapeutic practice has an revenue of about € 80.000, it can be concluded that under the 'bagatelbepaling' even multiple competing physiotherapists together can try to negotiate with

HI's (table 1). The HI's defend their position of not negotiating saying that "there are too many physiotherapists to negotiate with all of them". Perhaps a concentration of physiotherapists into 'pearls' of cooperating physiotherapists can give physiotherapists more opportunity to negotiate and have benefit[15,18]. One of the interviews also mentioned this opportunity: *"I would like to negotiate as physiotherapist, not even myself although via a cooperation is fine, it's just unfair competition at this moment".*

To identify if a HP is being at risk with his healthcare contracting, perhaps VvAA can develop a risk-scan. This scan can ask several questions about the current healthcare contract and identify the risks a HP practice has. Perhaps such a risk scan can identify possible risks and ways to outrun or reduce these risks in the future. It can scan outcomes of the practice, in the framework of overproduction, volume discounts and other used criteria by the HI's.

Regarding the GP's the recommendation is to develop a model in which segment three revenue can easily be calculated. The nine HI's currently use several different calculations and prerequisites. It's recommended to build a model, which automatically calculates the possible revenues, costs and shows the prerequisites for a certain module in segment three. Also within segment three, providing help in launching a business case would be a good service for VvAA's members.

### *10.2.2 Healthcare Professionals*

A recommendation for the HP's is that the HP's should unite. The GP's are united in the LHV, while physiotherapists are segmented. If they unite they can pursue one goal. These can be used to convince powerful agencies (NZa, ACM) and the politics to follow well founded (evidence based) advises of the profession organizations. For HP's its recommended to use identified CSF's to step towards the media, especially for physiotherapists the CSF's are so uniform agreed upon by (almost all) HP's that uniting and media steps seem appropriate.

The second recommendation is aimed at the current form of healthcare contracting. For both professions opportunities to improve their status as HP within the current contracts are available. However, obviously the HP does themselves seem less able to detect these options. Seek help to investigate the contract differences and what steps are needed to take to retain more income if necessary. One of the GP's mentioned: *"I do not use modules in segment III due to the fact that I don't understand anything of it".*

### *10.2.3 Healthcare Insurers*

HI's should improve their communication to the HP's. This problem is identified in chapter 9.5, which shows that multiple factors, although present in the policy of HI's, are not

observed by HP's. A recommendation for HI's is to evaluate and reconsider their communication channels about their policy.

A second recommendation for HI's is to proactively research further improving possibilities the healthcare contracting process by using the outcomes of this study. Trends like 'HetRoerMoetOm' seem to grow in popularity and the ministry of VWS probably will take further steps towards a more balanced negotiation process in the future.

Third recommendation for HI's is possible "learning from each other". SHI's focus more on region than (countrywide) major four HI's, which results in better outcomes of themes "negotiation and agreement of the contract" (last is CSF in both professions). It is recommended for the major four HI's to act more regionally, just as SHI's. To not use "on size fits all"-contracts but by more regional focus can construct custom contracts, more based on the wishes of the (regional) HP's. Also on of the GP's interviewed mentioned this: "*There is currently no regional differentiation, which I would like to have".* Also SHI's score better on "legible and understandable contracts" (which is a CSF), perhaps the major four HI's can learn from the SHI's how to produce (smaller) more legible contracts. One of the interviewed physiotherapists mentioned *"There is to much to read, in total overall and each contract apart".* Last recommendation regards the mirror information from Menzis, which seems clear for all physiotherapists. One of the interviewed mentioned *"Clear display of my (mirror) data would definitely give added value".* Other HI's should try to arrange their mirror information as Menzis. Possibly "Zorgverzekeraars Nederland" together with NZa can play a directing role in creating clear contracting guidelines and displays for HI's.

Last, HI's can use base results of this study to identify what base results the HP's perceive as very important. With those factors HI's can actively steer on these factors to be improved for future contracting and with it reduce the number of complaints at NZa.

### *10.2.4 NZa*

First, NZa should reconsider the GCP's. Some GCP's seem important prerequisites for good healthcare contracting, while others are not evaluated as important by the HP's and consider adding new GCP's. NZa should further conduct research into the GCP's for as well the HI's as the HP's.

A second recommendation is to investigate the regulation TH/NR-005. It is shown that only about 50% of the HP's observed the obliged factors of the regulation. To maintain or to reacquire a good position as NZa in the eyes of the HP's, a strict control at the HI's of the new regulation is recommended.

Third recommendation is applicable for physiotherapists. One of the interviewed mentioned *"Basic agreements for all HI's would be nice"*. This is an important recommendation due to the fact that lack of legibility of the contract is a large problem for physiotherapists. NZa can construct base agreements for all HI's to make contracting of physiotherapists more unambiguously, which probably will increase understanding of the contracts. If physiotherapists can better understand their contracts, perhaps they can better act on them and will this eventually lead to lower costs of care.

Last and most important recommendation concerns participation of the profession organization, mentioned as very important by both HP's. All HI's mention in their policies that this factor is present, but this is not perceived as such. HI's do seem to listen to the profession organizations, although changes of the contract process seem not be made. The recommendation for NZa is to try to further investigate influencing power to representatives of the profession to store the quality of care and to redeem the most important desire of HP's: Offering excellent healthcare.

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