The advantages and disadvantages of insurer-provider integration: what are implications for Dutch health care policy?

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Background: Health care costs in the Netherlands are rising rapidly. One possible contribution to slow down the growth of health care costs and increase quality is the alignment of incentives of health care providers and health care insurers through insurer-provider integration. The Dutch minister of Health, Edith Schippers presented a law proposal opting a prohibition of insurer-provider integration (with certain minor exceptions). This research tries to examine advantages and disadvantages of vertical integration and the implications it might have for Dutch health care policy. Methods: Advantages and disadvantages of vertical integration were collected by literature review. Both theoretical and empirical implications of vertical integration were found, mainly in US literature. Besides, some interviews are executed with different actors in the Dutch health care field to hear opinions about vertical integration. Findings: Vertical integration can lead to various positive outcomes, like better health outcomes and cost reductions. This thesis therefore concludes that a prohibition might exclude major potential benefits. To prevent the market from negative consequences, competition is required, regulatory agencies play an important role.
“I tell our trustees, "When you walk into [name of medical group], you are walking into the arms of an organized group practice. You walk into our competitor, you walk into the equivalent of a farmers’ market where there are a bunch of people sitting there in stalls, selling their wares, and leaving at the end of the day when they are done. They don’t particularly care what the farmers’ market is like as long as the bathrooms are clean and the lights are on. They don’t particularly care who is selling stuff next to them because they are not integrated."

Anonymous physician of a medical group (Shortell & Schmittdiel, 2004)
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THE ADVANTAGES AND DISADVANTAGES OF INSURER-PROVIDER INTEGRATION: WHAT ARE IMPLICATIONS FOR DUTCH HEALTH CARE POLICY?
CHAPTER 1 INTRODUCTION

1.1 BACKGROUND

The costs of health care are soaring through the roof. Last year (2012) the Netherlands spent 92.7 billion Euros, which is a growth of 3.7% compared to 2011 (CBS, 2013). The costs of curative care are expected to grow with 4.4% each year (Ewijk et al., 2013), while the Dutch Gross Domestic Product (GDP) grew with -1% in 2012 (Dutch National Government1), indicating that health care absorbs more of the available resources (figure 1).

![Figure 1: Share of collective health care expenditures as a percentage of GDP (source: National government budget, 2012)](http://www.rijksoverheid.nl/nieuws/2013/05/08/verantwoordingsdag-2013-dalend-tekort-ondanks-tegenvallende-economie.html retrieved on July 29, 2013)

In politics and society people are concerned about containing these costs and securing the availability of health care services for the future. In order to enhance efficiency in the health care system, the Netherlands switched in 2006 to another health care system with regulated competition. In this new system, Dutch citizens over eighteen are compulsory insured and choose freely between health insurers, which differ in insurance premium and contracted health care providers. The assumption is that a critical and well-informed patient can choose for the best care at the lowest price, due to competition among health insurers. These health insurers are attractive when they have contracted efficient and qualitative health care providers. Due to competition among insurers it can be assumed that they act in the interest of patients. If the health insurers want to stay competitive, they have to seek out for the best price/quality ratio of their health products.

Unfortunately, a system with different actors often contains information asymmetry and therefore asks

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for coordination. Insurers and health care providers should negotiate about the prices, quality, quantities and the price/quality ratio of care. Besides, insurance companies have an information lag about the necessity of treatments prescribed or done by general practitioners or medical specialists (see for example Blomqvist, 1991). A welfare loss might occur since the actors all have their own interests due to different (for example financial) reasons and behave in favour of their own interest (e.g. McGuire (2000) or Rizzo and Zeckhauser (2003)). Shortell and Schmittstdiel (2004) describe a non-integrated health care system as: ‘a collection of autonomous professionals providing largely self-defined expert care within organizational, payment, and regulatory environments involving conflicting incentives, goals, and objectives’. Their description applies to the organization of the current Dutch health care system. Therefore, it might be a good idea to align the interests of health providers and health insurers. When they merge into one company (vertical integration) both parties have a common interest to provide health care at the lowest possible price or with the least medical interventions. However, in Dutch politics there is little enthusiasm for this idea of vertical integration (Tweede Kamer II, 2011-2012, 33 362). The current minister of Health, Edith Schippers, fears that vertical integration will violate the core values of health care: quality, accessibility and affordability. She fears that health care organizations (the merger of health care provider and health insurer) would probably be unable to take care for the medical needs of their insured patients and might be more influenced by own (f.e. financial) interests. The minister amended the current legislation, in which vertical integration is allowed, into a prohibition of permanent vertical integration. However, in the United States (U.S.) vertical integration occurs frequently. Although the U.S. health care system differs in many aspects from the Dutch health care system, it is interesting to look at potential benefits and disadvantages of vertical integration we might learn from. This is what this research intends to do.

1.2 RESEARCH QUESTIONS

In this thesis, advantages and disadvantages of vertical integration in the Netherlands will be explored. The central research question addressed is: ‘The advantages and disadvantages of insurer-provider integration; what are the implications for Dutch health care policy?’. Like this question implies, these findings will be applied to the Dutch health care policy. The central research question is divided in six sub-questions. Each sub-question will be answered in a separate chapter. These sub-questions are:

1. How is the Dutch health care system organized and what is the role of health care insurers?
2. What is insurer-provider integration?
3. What are the theoretical advantages and disadvantages of insurer-provider integration in health care?
4. What is the empirical evidence of insurer-provider integration on quality, accessibility and affordability of health care?
5. Which rules and regulations prevent potentially negative effects of insurer-provider integration?
6. What is the rationale behind the government plans for a prohibition of insurer-provider integration in Dutch health care?

With the answering of these questions I reach a conclusion about the desirability of insurer-provider integration in the Dutch health care system. Thereby developing a statement opinion about the reasonability of the law amendment of the minister of health care.

1.3 Methods

The answer of the research question 'The advantages and disadvantages of insurer-provider integration, what are the implications for Dutch health care policy?' will be based on the answers of the six sub-questions. The answers of the first two questions contain an introduction about the Dutch health care system, the role of insurers and vertical integration, and will explain the relevance to focus at insurer-provider integration. The articles found are health economics, health policy and (health) law literature and originate from databases like EBSCOhost, PubMed and ProQuest. The third question 'What are theoretical benefits and disadvantages of insurer-provider integration in health care?', will be answered with the help of a literature review. In chapter five the benefits and disadvantages of insurer-provider integration derived by Health Maintenance Organizations in the USA will be explicated in order to answer the question: 'What is the empirical evidence of insurer-provider integration on quality, accessibility and affordability of health care?'. As I use literature from various years and from various regions, examination of the definitions used and background of these articles is required in order to compare these articles and draw conclusions. Sub-question five is: 'What rules and regulations apply to insurer-provider integration in the Dutch health care system?' and will be mainly answered with relevant law articles, like the Health Insurance Act (de Zorgverzekeringswet), the Health Care Market Regulation Act (Wet Marktordening Gezondheidszorg) and the European and Dutch Competition Act (de Mededingingswet). With the relevant articles it is possible to see whether and under what conditions vertical integration is allowed nowadays. Besides, I want to examine whether negative effects of insurer-provider integration as discovered in chapter four and five can be hindered or prevented by current law. The last question is: 'What is the rationale behind the government plans for a prohibition of insurer-provider integration in Dutch health care?' and will explore the rationale behind the government plans and whether or not a prohibition is necessary to effectuate public values. For this section the law proposal of the minister of Health will be studied and examined against the background of the answers of the former questions. Also the viewpoint of other researchers concerning this law proposal will be elucidated.

The conclusion answers the central research question by using the outcomes of the sub-questions. As an illustration and understanding of viewpoints of different actors, several interviews are held. It is not my objective to do standardized qualitative research, but to come up with opinions and alternative ideas of actors in the field in addition to literature. I have interviewed a policy maker of the NPCF (Nederlandse Patienten Consumenten Federatie, Dutch Consumer Patient Federation), to take stock of their opinion about the prohibition of vertical integration as proposed by the minister, and what their expectations are.
with regard to the benefits or drawbacks of vertical integration. I also had an interview with a program manager of the Dutch health care insurer Achmea, which is the health care insurer with the highest market shares (over 33% in 2012 (NZa 2012)). To discover the opinion of hospitals in respect to vertical integration, I contacted the NVZ, Dutch hospital Association (Nederlandse Vereniging van Ziekenhuizen). Finally, I have spoken with the chief executive of Zorgverzekeraars Nederland (the branch organisation of health care insurers) to hear the viewpoint of health care insures on vertical integration.

The relevance of this research is twofold. At the one hand this research is relevant to society. As explained in the introduction, health care costs are rising rapidly. With the examination of vertical integration, a way to contain these costs is studied which results in a practical advise. On the other hand, this research contributes to knowledge about options and ideas of vertical integration in the Netherlands.
CHAPTER 2  THE DUTCH HEALTH CARE SYSTEM AND THE ROLE OF HEALTH CARE INSURERS

To gain an understanding about the benefits and disadvantages of insurer-provider integration in the Netherlands it is essential to outline the current Dutch health care system. This section focuses on how the Dutch health care system is organized nowadays and the main objectives upon which this system is built. Thereby, the assigned role of health care insurers will be explained. Since the role of health care insurers is limited in the long-term care sector (at least nowadays), the focus will be on the sector for cure, and short-term health care provision. This chapter answers the question: How is the Dutch health care system organized, and what is the role of health care insurers?

Alain Enthoven has been of great influence on the Dutch health care system. In his work of 1978 and 1988, Enthoven elaborates on the moral basis of a health care system. According to him, agreed and applied by many countries, everyone should have access to a decent level of health care. The provision of health care for all citizens is seen as a public concern. To protect all citizens from at least the financial burden of medical expenses associated with uninsurable risks, Enthoven argues for a system of social health insurance. Collective action of all citizens is appropriate and necessary to protect all persons from the high cost of medical care and to seek efficiency in attaining this goal (Enthoven, 1988). His perspective on social health insurance is widely shared across Europe. The three health care objectives of the Dutch health care system - quality, accessibility and affordability (Van de Ven et al, 2009) - are based on these moral principles. Quality is defined as safety, timeliness, and effectiveness of care that is patient oriented. Accessibility refers to financial and physical accessibility, and affordability contains expediency and macro-affordability. To ensure a decent and affordable health care system for the future, cost containment is also of concern and an interpretation of affordability.

The Netherlands followed the idea of Enthoven and committed to the obligation for its citizens to participate in basic health insurance (see for example Enthoven & van de Ven (2007) and Van de Ven & Schut (2008)). Based on the idea of collective participation provided by Enthoven (1978), each person over eighteen years old, who lives or works in the Netherlands, is obliged to take health insurance and pay a premium. Two types of health care insurance are possible (article 11 sub 1 Health Care Insurance Act): insurance in kind and reimbursement. In kind health care insurance obliges the insurer to provide care to their enrollees if needed. The health care insurers have the duty to care of their enrollees (NZA, 2011). In reimbursement insurance, a patient can choose a provider and pays the service. The insurer will financially compensate the price of care afterwards (Essers et al. 2008). The insurer has the ability to steer patients to preferred providers by contracting health care providers selectively. If the enrollee of an insurer with limited contracts decides to take care from a not contracted provider, article 13 of the Dutch Health Care Act declares that this enrollee has the right to be compensated by its health care insurer. The insurer can decide on the amount of this compensation.
The package of health care insured is determined by the minister of Health and can vary by year. Next to the premium of around €100 per month, citizens also pay an income-dependent contribution in taxes. Furthermore, for cost-containment purposes and to make citizens aware of costs, enrolees have to pay the first €350 of their health care costs as well. Some kinds of care are excluded from these out-of-pocket payments, for example visiting a general practitioner or care given by obstetricians. About two-thirds of the Dutch households receive an income-related subsidy for equity reasons and to ensure that people have enough financial resources to buy insurance. This subsidy is based on an average premium and is unrelated to the premium of an individual insurer. Insurers are required to accept each applicant. As a consequence of this obligation, insurers have to accept sick or unhealthy citizens of which they know in advance that they will be unprofitable. To avoid big risk inequalities between insurers, and to avoid that insurers make themselves unattractive for chronically ill patients, a risk equalization fund is developed which calculates these inequalities and compensates insurers who have patients insured who are associated with predictable losses. This risk-equalization fund is financed by the income-related revenues. Next to the mandatory insurance, citizens are free to purchase supplementary insurance including care of which politics thinks it does not include necessary care. This care is considered above the decent minimum defined by Enthoven (1988) and therefore not ensured in the basic package. Examples of these arrangements are physiotherapy, eyeglasses, alternative medicine, and cosmetic surgery.

The basic benefit package is not described in terms of providers but in functional terms. This creates room for insurers to decide how, and by which provider, care should be given. For example, a patient is entitled to proper care in case of diabetes. The insurer has the ability to decide whether a general practitioner, a nurse practitioner or a medical specialist should give care. The same holds for pharmaceuticals, an insurer has the obligation to provide pharmaceuticals in case of an illness, but can decide to exclude certain brands from this service. Insurers are obliged to provide an overview of the entitlements.

In 2006, the Health Insurance Act (zorgverzekeringswet) was implemented. The intention of the act was a more passive government, a bigger focus on the responsibility of market actors and distanced surveillance (Baarsma et al, 2009) to achieve higher quality and accessibility for all. The guiding idea in this system is that health care insurers purchase care for their enrolees (care in kind). They can negotiate about prices and quality. A competitive insurance market forces insurers into fierce negotiations with health care providers. Which will, at least in theory, result in lower prices. In a competitive market, predictable profits will not last, so average costs will go down in favour of the insured. The same is true for the healthcare insurer, since a healthcare insurer compete with other healthcare insurers in the market, they are forced in fierce competition and substantial predictable profits are not likely, since new insurers will accede. The objective of selective contracting by healthcare insurers is the appraisal of preferred providers for the delivery of efficient and qualitative care. Health care insurers can compete for enrolees by having done this task well (Halbersma, Manen & Sauter, 2012). In 2012, the Netherlands had twenty-six insurers belonging to nine organizations. However, the largest four insurers (Achmea, CZ, VGZ and Menzis) occupy about 90% of the market (NZa 2012). The duration of a health care contract is one year. Each year, before
the first of January, patients can switch to another insurer. Each year, more patients switch to another insurer (NZA, 2012), which indicates that patients become more sensitive for differences between insurers and are more willing to switch.

The insurer-provider purchasing construction is not without difficulties. There are, for example, time coordination problems; both insurer and provider have to know how many patients a particular insurer enrols to negotiate effectively about prices and quantity. On the other hand, patients should make an enrolment decision based on the contracted parties by the insurer. This is a conflicting situation, represented by the Achmea-Slotervaart case in the Netherlands at the beginning of 2013. Achmea and Slotervaart Hospital did not reach an agreement about the price and quantity of the services of Slotervaart hospital, which resulted in a situation without a contract between these two parties. Slotervaart Hospital wanted to provide higher quantities of care than Achmea was willing to pay for. Enrolees of Achmea noticed that they were not able to use the services provided by Slotervaart Hospital, while they could not have known this at the time of decision for an insurer. In March 2013, the parties finally reached an agreement\(^2\). Nevertheless, this incidence illustrates the complexity of cooperation between insurers and providers.

Another problem is a lack of useful information on which health care insurers can make proper decisions, since the key for a well-functioning market is the available information about the price/quality ratio of goods or services (Schut & Varkevisser 2009). With this information, we can objectify demand of goods and services and enable consumers to maximize total satisfaction (Wennberg, et al, 1982). Since it is too complicated for every patient to find the best price/quality ratio, this task is dedicated to healthcare insurers. However, it is questionable whether healthcare insurers have the knowledge of this quality information. In the ideal situation, the healthcare insurer can objectively judge quality of a health care provider and on the basis thereof, negotiate on price. However, the healthcare system contains information asymmetry, a situation in which one party has more information (most likely health care provider) than the other party (healthcare insurer). Healthcare providers and healthcare insurers serve different interests. Since insurers pay most healthcare providers fee-for-service, providers might have the financial incentive to produce. Healthcare providers, like a physician, have more knowledge about the disease and the treatments needed, but the health insurer is dependent on this physician who can create demand if that is of interest for him (Rizzo & Zeckhauser (2003), Schut & Varkevisser (2009)). The health insurer on the contrary, receives a fixed amount of money per patient per year (ex post compensation for substantial losses for healthcare insurers will be entirely abrogated). Therefore it is in the interest of the insurer that the provider does not provide more care than necessary, which will otherwise result in financial losses for the insurer. The insurer most likely has to raise prices of the health insurance next year, which will result in a higher financial burden of healthcare for society. This information problem might occur concerning the quantity of care, but also concerning the quality of care that should be given. Providers often know more about the quality of their care than the insurer does. For below average

\(^2\) \url{http://www.nrc.nl/nieuws/2013/03/21/slotervaart}
quality, the insurer is not willing to pay a high price. But since the provider is financially dependent on the insurer, he might engage in window-dressing or manipulation of quality. Therefore, it looks like a good idea to financially align the interests of health insurers and health care providers. The next section will explain one of the possible ways to align these interests, namely vertical integration.
CHAPTER 3  INSURER-PROVIDER INTEGRATION

We speak of vertical integration when two or more firms who previously operated separately but whose products or services are inputs to or outputs from the production of one another’s services integrate into one single firm who execute these activities (Shortell & Conrad (1996) and Perry (1989)). A classic example of vertical integration is a miller who decides also to bake bread. Figure 2 will illustrate the virtual difference between horizontal and vertical integration.

![Diagram of vertical and horizontal integration](image)

**Figure 2**: vertical and horizontal integration illustrated.

The two main reasons for organizations to engage in vertical integration are a possible reduction of average production costs (by sharing common inputs) and lower transaction costs (Shortell & Conrad, 1996). The costs of making contracts, collect information and enforcing them are the main transaction costs and these costs are likely to disappear. If market prices are distorted by the relative favourable bargaining power of providers and health plans, or if the inequality of information encourage opportunistic behaviour by providers or plans, vertical integration can eliminate those inefficiencies directly by eliminating the conflict of interest between those different stages in the healthcare value chain (Shortell & Conrad, p 11). Shortell and Conrad make a distinction between classical integration and virtual integration. Classical integration is a form in which firms that were previously separated, merge into one single firm. Virtual integration is based on exclusive contracts, operating agreements, between two organizations. I will focus on classical integration, since this is the form of integration the minister of Health will prohibit.

3.1 **Vertical integration in health care**

With vertical integration in health care, a situation is meant in which insurers have a legal or factual say over health care providers. Insurer-provider integration is a form of vertical integration, these terms are used interchangeably. The most classical form of vertical integration is an insurer exploiting ‘own’ health care institution, for example, a health care insurer establishes its own pharmacy (Rijken, 2009). Another form of vertical integration is participation, when a health care insurer takes part of, or has shares in, a health care provider. (Profound) cooperation between insurer and provider is disregarded in this paper.
The relevance of vertical integration in health care has been stated in the article of Shortell & Schmittdiel (2004) by a citation of a physician leader of an organized delivery system who said:

I tell our trustees, “When you walk into [name of medical group], you are walking into the arms of an organized group practice. You walk into our competitor, you walk into the equivalent of a farmers’ market where there are bunch of people sitting there in stalls, selling their wares, and leaving at the end of the day when they are done. They don’t particularly care what the farmers’ market is like as long as the bathrooms are clean and the lights are on. They don’t particularly care who is selling stuff next to them because they are not integrated.”

This fragment tries to illustrate that there is little alignment between different providers when they are not integrated. They do not serve the common good. Brown and McCool (1986) illustrate vertical integration in health care as follows: ‘In a system of vertically integrated services, a patient presents himself or herself for primary care and moves from one level to another as is medically appropriate, using the most economical and best service necessary and remaining within the ambit of the same provider’. They add that vertically integrated systems also provide financial services, ‘much as General Motors provides financial services such as loans to assist in buying a car so that consumers can use its products’ (Brown & McCool, 1986, p. 8). In health care sciences, vertical integration is often considered as a form of managed care (Folland, Goodman & Stano 2006). Managed care delivery structures consist of, on the one hand, payment mechanisms and insurers and, on the other hand, providers of care including physicians and hospitals in one organization. All actors in the delivery chain work closely together.

3.2 EXAMPLES OF VERTICAL INTEGRATION

The most common examples of integrated health care systems are Health Maintenance Organizations (HMOs) in the United States. Luft (1978, p. 1336) created the following definition: a health maintenance organization ‘assumes a contractual responsibility to provide or assure the delivery of health services to a voluntarily enrolled population that pays a fixed premium that is the HMOs major source of revenue’. In a HMO no third-party payer is present who reimburses an independent provider as is usual in a fee-for-service system: a HMO combines insurance and delivery functions (Strang, 1995). HMOs own a population of firms from the larger health industry. The most traditional form of a health maintenance organization is the pre-paid group practice (PGP), where an organization has its own medical doctors and other caregivers on the payroll, has close contracts with or ownership over hospitals to provide a wide range of care to patients insured by this PGP. Since PGPs are closed groups, they are efficient in planning. Allowance for hospitalization or other medical interventions, are only given by the medical staff or medical director. Usually, medical doctors are financially dependent on the financial results of the total system, the PGP (Van de Ven, 2009).

One of the biggest and best-organized HMOs is Kaiser Permanente (Strang, 1993 and Gitterman et al, 2003). In 1933, the founder of this organization, physician Sidney Garfield, wanted to set up a hospital for
construction workers in the desert of California. Since it was impossible to set up a fee-for-service hospital in such a remote area without any health care structure, prepayment proved to be the best way to organize health care to concentrated groups (Strang, 1993). Henry Kaiser, an industrialist who owned some of these construction workplaces, hired Garfield to set up similar plans in other places. In 1945, the Kaiser Permanente group was born. Nowadays, Kaiser Permanente operates in nine states in the US and is the largest managed care organization of the US with an estimated net income of 2.1 billion dollars over 2012.

The Netherlands is also familiar with vertical integration, albeit on a smaller scale. In the late nineteenth and early twentieth century, general practitioners and pharmacists developed sickness funds (Companje, 1997). They offered middle class citizens the possibility to participate in a sickness fund by paying a (week or monthly) premium with which they insured the citizen to their care provision if needed. They provided this insurance both out of philanthropic motives, but they simultaneously assured themselves of a steady income. Caregivers were both insurer and provider. Nowadays, this situation is less common. The Authority Customer and Market (Autoriteit Consument en Markt) was for the first time involved in a case of vertical integration in the health care market in the case of the health care insurer DSW who wanted to financially take over the Vlietland hospital. Next to this case, there are insurers who have general practitioners on the payroll like Menzis has (Berg et al, 2007), who own pharmacies (Menzis, Bruinsma3, 2007) or have a stake in a health center, like Agis (part of the Achmea concern).

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3 Bruinsma (2007)

CHAPTER 4  THEORETICAL BENEFITS AND DISADVANTAGES OF ININSURER-PROVIDER INTEGRATION

This chapter will provide an answer to the question: what are the benefits and disadvantages of insurer-provider integration in health care? Theory provides us with different expectations of vertical integration in relation to the three main health care objectives, affordability, accessibility and quality of care. I will first mention financial advantages and disadvantages; thereafter I will explicate what has been found in literature about accessibility and quality.

4.1  FINANCIAL ADVANTAGES AND DISADVANTAGES OF VERTICAL INTEGRATION ACCORDING TO THEORY

4.1.1 Financial advantages

Literature provides a lot of positive theoretical outcomes of insurer-provider integration. One of the most mentioned positive prediction is that integration will lead to cost reductions. Schut and Varkevisser (2009) for example, state that it might be cost reducing and more effective for health insurers and providers to merge into one organization. They assume that because of lower transaction costs achieved within one organization (a situation with less information asymmetry than in case of two parties cooperating) cost reduction and more effectiveness for health care insurers can be reached. Following Shortell and Conrad (1996), transaction costs can be lowered if these stages are all integrated within one single organization. Information asymmetry is a situation in which one party (the agent) has more information than the other party has (the principal). The principal is dependent on the provision of services by the agent, who has the skills to provide care and is assuming better informed about the quality and necessity of their medical provision. Blomqvist (1991) for example, argues that insurance companies have an information backlog about the necessity of treatments prescribed or done by general practitioners or medical specialists. This dependency can be costly, authors like McGuire (2000) or Rizzo and Zeckhauser (2003) argue that general practitioners and medical specialists act in their own (for example financial) interest, which might lead to a welfare loss for insurance companies. Shortell & Conrad (1996, p. 11) therefore argue that if the inequality of information encourages ‘opportunistic’ behaviour by providers or plans, vertical integration can reduce those inefficiencies directly by eliminating the conflict of interest between those different stages in the healthcare value chain. Capitation payment (an agreed maximum amount of money to be received) can change provider incentives to population-based and cost-conscious behaviour (Robinson & Casalino, 1996). Walston, Kimberly & Burns (1996) argue that integration creates dependency and trust, and thereby can reduce costs of monitoring and negotiation. Given the pervasive information asymmetries between health care insurers and providers, it is not
unexpected that a reduction of these costs will give the biggest cost advantage (Bijlsma, Meijer & Shestalova, 2008). According to these authors, vertical integration may reduce the information asymmetry since it makes information about costs available to the insurer, which leads to better monitoring and containment of costs. Another argument for cost reduction of vertical integration in health care is the economies of scale argument, mentioned by Ackerman (1992) and many others. When two vertically related firms integrate, costs can be saved in for example human resources, management and customer-service divisions, but also in housing and the purchase of the inventory. Baarsma et al. (2009) add another component to cost reduction. When two separate organizations with market power trade vertically, both are likely to add a profit to their products. This is called double marginalization and leads to a higher price of the end product and thereby reduces consumer welfare. According to Eggleston et al (2004), vertical integration will lead to an integral price consideration (singular marginalization) and thereby to efficiency gains and consumer welfare.

Next to economies of scale and aforementioned reductions of costs by aligning incentives, is the possibility for insurer-provider integrated firms to manage care more properly. According to Enthoven and Tollen (2005), a system prepaid for total costs, as is the idea of an insurer-provider integrated firm, examines the full spectrum of care to find opportunities for cost reduction. The whole system, including doctors, is rewarded for keeping patients healthy and for seeking efficient ways to solve problems. Integrated delivery systems are able to manage and coordinate care more properly (Enthoven & Tollen, 2005). For aggregated health care systems, it makes sense both clinical and financial to use for example a more costly drug that reduces the need for hospitalization. Enthoven & Tollen (2005) state that in a non-integrated setting the use of lower costs drugs would benefit some parties (for example the patient) but harm other parties, dependent on the way the system is financed.

Other presumed financial effects of vertical integration in health care are increased market and negotiating power (see for example Johnson (1993), Conrad & Dowling (1990), Shortell (1989). Health care insurers can negotiate more effectively when there is an option for the insurer to start up or take over own health care providers. Strategic management literature also mentions drawbacks of this increased market power. Consolidating upstream suppliers and/or downstream distributors moves a firm closer to monopoly or quasi-monopoly power (Walston, Kimberly & Burns, 1996). The firm receives additional bargaining power; the ability to raise prices and increased entry and mobility barriers might arise (Lieberman, 1991). Vertical integration might be beneficial for the integrated firm, but it may not always benefit society. Therefore, this aspect is also mentioned as disadvantage.

4.1.2 Financial disadvantages
As explained earlier, if a firm receives additional bargaining power by integration, the ability to raise prices and increased entry and mobility barriers might arise. A potential danger of vertical integration is reduced competition. Higher prices and reduced service might be the ultimate consequence (Walston, Kimberly & Burns, 1996). Baarsma et al (2009) mention the problem of foreclosure, which arise if an up- or downstream firm denies or hinder access to its inputs or customers. This can harm competition in the
market and thereby reduce consumer welfare. Ma (1997) demonstrates that in a market with two homogeneous insurers and two differentiated hospitals, a vertical merger can result in foreclosure of the competing insurer to upstream inputs (hospital services). Douven et al. (2011) add that if consumers differentiate between hospitals, insurers and providers can be triggered to adopt exclusive strategies with possible anticompetitive effects. When the market power of one of the vertically related firms is substantial, antitrust concerns arise. This can be the case for large regional hospitals, academic hospitals or hospitals specialized in specific diseases for which consumers have no alternative. The integrated firms can use their market power to hinder new entrance in the geographic or product market. Bijlsma et al. (2008) elaborated on this topic and distinguished three effects of vertical integration that can hinder competition. They first mention the effect of exclusivity, which hinder competition in two ways. If economies of scale are achieved by the provision of certain healthcare services, vertical integration can hinder the access of other hospitals to this market. It is unclear whether the financial disadvantages of foreclosure of competitors outweigh the financial benefits achieved by integration (Bijlsma et al. 2008).

The other way in which exclusivity can hinder competition is a situation in which one of the providers has significant market power. If this hospital has a contract with one insurer, all consumers who are bound to this hospital do not have a choice for insurer anymore which might lead to a reduced effort by the insurer and its powerful provider (Gal-Or, 1996).

The second possible consequence of vertical integration mentioned by Bijlsma et al. (2008) is the waterbed effect. If insurers with significant regional market power have strong relations with a provider in that region, other insurers can be excluded and the market power of this insurer becomes even bigger. The powerful insurer (buyer) reduces the price the firm is willing to pay to the provider, the latter is forced to increase its selling prices to other, less powerful health care insurers. It is argued that vertical relations or integration increase already substantial bargaining power of existing large health care insurers even further.

The last effect is sabotage and arises if prices are regulated. The vertically integrated firm can excludes or hinders patients from other insurers to make use of a certain hospital. According to Bijlsma & Shestalova (2008), vertical integration is not necessarily a threat to competition and thereby welfare reducing. They argue that foreclosure cannot arise in perfectly competitive markets. Thereby, for foreclosure to be anticompetitive, the negative effects of being anti-competitive should outweigh the potential efficiency gains of being vertically integrated (Bijlsma & Shestalova 2008). Douven et al. (2011) also admits that important efficiency effects can be gained, which could outweigh the possible anticompetitive effects of exclusive vertical restraints.

4.2 Accessibility advantages and disadvantages of vertical integration according to theory

About accessibility of care under vertically integrated systems little theories have been founded. Shortell
et al. (1994) assumes that prepaid health care systems create incentives to under provision of care. If the incentive is to provide less care instead of more which is the case in a fee-for-service payment system, easy accessibility to care provision might be harder. Thereby, enrolling in an insurer-provider integrated system might restrict access to care of other providers which are not part of this integrated firm. On the other hand, if insurer-provider integrated systems are able to reduce costs (as they are expected to do), the insurance premium can be lowered (at least in theory) and more people are able to buy health insurance, which makes health care accessible for a greater group of people in countries where not everyone is compulsory insured.

4.3 QUALITY ADVANTAGES AND DISADVANTAGES OF VERTICAL INTEGRATION ACCORDING TO THEORY

4.3.1 Quality advantages

Although most authors focus on financial advantages of insurer-provider integration, there are also authors providing theories about quality and vertical integration. Vermaas (2006) for example argues that the separation of insurer and physician causes information asymmetry concerning quality. ‘The third party may face difficulties assessing the physicians’ quality, as it is the physician who has the information about his knowledge and experience, his intentions, etc. The physician has no incentive to reveal this information or may be tempted to exaggerate it.’ (Vermaas, 2006 p. 64). By aligning business and incentives, main reasons to obscure this information disappears, which can enhance quality. When one insurer owns a health care provider, it is expected that this insurer is more likely to invest in innovations (Baarsma et al. 2009). When a hospital is contracted with several insurers, insurers are not likely to invest since it gives the other insurers the possibility of free riding. The lack of innovations as a consequence of this reluctance of insurers is called a hold-up problem. Thereby, vertically integrated firms can provide more continuity of care, both in the long and short term. In contrast to contracting relationships, vertical integration has the advantage of unified ownership, giving the potential to coordinate effectively adaptations to changing environment circumstances (Robinson & Casalino, 1996). Both insurer and provider share the same vision and have the same unity of control, enabling the firm to act effectively in changing environments.

4.3.2 Quality disadvantages

Since health care providers under this, as called by Shortell et al. (1994), ‘new economics of managed care’ have another financial incentive than they had under fee-for-service, some authors question whether insurer-provider integration leads to a deterioration of health care provision. The benefit of this organization is optimal when little care is provided, this organization of health care might create an incentive for underuse of care (Shortell et al 1994). However, health care insurers admit that providing less care or less quality (cheaper) care may give benefits in the short, but not in the long run (Zorgverzekeraars Nederland, personal communication).
4.4 **Conclusion: Theoretical effects of vertical integration**

Theory expects vertical integration to be cost reducing because of several related aspects. When two parties work together, information asymmetry arises and if actors serve different purposes, welfare losses are likely to be obtained. The costs of monitoring partners’ behaviour can be substantial and eliminated by vertical integration. Besides, economies of scale can be attained. A vertically integrated firm can gain market power, which might be beneficial for this firm, but can harm society. Since an economic powerful position creates the ability to rise prices or derogate quality. The information asymmetry argument also counts for quality information. When firms are vertically integrated, they have access to quality information and thereby the possibility to act upon this information. Quality of care can also be enhanced by better coordinating capabilities of insurer-provider organized firms. Thereby, it is expected that integration will encourage investments in technology, which enhance quality of care. On the other hand, insurer-provider integration might lead to a reduction of quality of care, since the system contains an incentive to provide less care.
CHAPTER 5  EMPirical evidence on insurer-provider integration

To see whether the theoretical expectations mentioned in the previous chapter work out in reality, we should assess empirical literature. Since insurer-provider integrated care is a common organizational form for health care provision in the US, lots of empirical literature comes from the US. Plenty of benefits of integrated care are mentioned in the literature, but they are, like the theoretical literature, all based on two aspects: costs and quality. For the purpose of the Dutch main health care objectives, I will also take accessibility of care into account. At the end of this chapter, the experienced disadvantage of difficult implementation will be explained.

5.1  FINANCIAL PERFORMANCE

The bulk of literature concerning costs and insurer-provider integration is arranged in three aspects: costs of a fragmented health care system, handhold on health care use and use of costly resources. Most of the text elaborates on findings explicated in the earlier part of the chapter.

5.1.1 Costs of a fragmented health care system

Since integrated care systems are pre-paid for each patient, it is in the interest of the integrated care organization to examine the full spectrum of care to act in the most efficient way. When care is not funded by pre-payment but by fee-for-service, in which more provision these incentives do not exist to this extent. The same counts for organizations that are not integrated, costs made by another organization do not bother you as much as when they were part of your own organization and thereby influencing your financial result. Integrated care systems can engage in planning in a way that disaggregated providers cannot. Newhouse (1993) found that because integrated systems are able to arrange care in the first line (general practitioners) instead of the second line (for example, specialist care or hospitalization) they could provide care for significant lower costs. His research was corrected for selection effects, the effect that HMOs generally attract younger enrollees with lower care dependency (Buchanan & Cretin, 1986).

Former minister of Health, Ab Klink, recognizes this problem. He recently admitted that was made a mistake in financing pharmacists. In order to reduce the costs of pharmaceuticals, the fee per recipe for pharmacists was reduced from 8 Euro to 6 Euro. According to Klink, this assault on their income make them focus more on the activities on which direct revenues could be obtained. Where in the past much attention was paid on, for example, therapy loyalty, this has nowadays less attention. This saves time for pharmacists, but can cause more costs somewhere else in the system, for example in bigger hospitalization costs or more internists visits by incorrect use of medicines. This fragmentation in healthcare can in this way lead to higher overall costs in the sector. When interests of providers and insurers are aligned, unnecessary cost turnovers can be decreased since integrated delivery systems have
the potential to manage total costs.

5.1.2 Control of health care use

When incentives of health care providers and health care insurers are aligned, it can be expected that supplier-induced demand will not play a role as it does under our current system. The integrated system as a whole benefits from the savings gained; there are no incentives anymore to do more than necessary for a proper health or patient satisfaction. In line with this idea, there is some evidence that enrollees in integrated care systems make less use of care than enrollees under another system of health insurance. In the ten studies found by Miller & Luft (2002), the finding of differences in ambulatory care use between HMOs and non-HMOs varied. These studies found no differences between HMOs and non-HMOs in the care visits per enrolee or the percentage of enrollees with at least one visit. Reschovsky et al. (2000) found HMOs enrollees having significant lower likelihood of a specialist visit, whereas Long and Coughlin (2001) found no difference in care use among children. A more recently published study by Bindman et al. (2005) did report significant differences of average monthly hospitalization rates between the three different delivery models of Medicaid; fee-for-service, voluntary managed care and mandatory managed care. Calculated with data from Californian hospitals the averaged ambulatory care sensitive condition hospitalization rates per 10,000 persons were 5.76 in voluntary managed care, 6.49 in mandatory managed care and 9.12 in fee-for-service. For non-ambulatory care these differences where much smaller. These authors corrected for demographic characteristics and concluded that differences in ambulatory care hospitalization rates are a product of the organization of the systems. Prepayment encourages ambulatory care for patients with chronic conditions which result in reduced hospitalization needs for ensured under managed care.

For the analysis of hospital use per enrolee, two studies have been found. One study by Christensen and Shinogle (1997) found that integrated health plans had fewer inpatient days per enrolee than other patients covered by other types of insurance have (32.1% lower than under fee-for-service and 23.8% lower under employer benefits supplements). Reschovsky et al. (2000) in contrast found only small differences in hospital use of children between different insurance types. The authors remark that this difference between studies might arise from the different population studied. HMOs might affect use of hospitals more for elderly patients, which gives huge differences in the study by Christensen and Shinogle (1997) and relatively little differences in the study among children by Reschovsky et al. (2000).

5.1.3 Use of costly resources

Eight of thirteen studies found and analysed by Miller & Luft (2002) concluded that HMOs use predominantly less costly resources, like cataract extractions (Goldzweig, et al 1997), than non-HMOs do. No studies have been found proving the opposite result. Miller and Luft did the same study in 1994, where they found the same results: insurer-provider integrated health care plans used significantly less expensive resources and procedures (Miller & Luft, 1994).

5.1.4 (Anti-) competitive effects of insurer-provider integration
Haas-Wilson and Gaynor (1998) conclude in their research on implications of the rapid transformation of health care financing and delivery system that vertical consolidation can enhance efficiency, but also has consequences for competition. Entry barriers often characterize vertical integration. They call for active antitrust enforcement. Ho (2009) provides empirical evidence that market power of hospitals can be responsible for vertical constrains in the health care market.

Although one might relate vertical integration to anticompetitive effects, insurer-provider integration also might enhance or maintain competition. In the merger case of West Penn Allegheny (health care provider) and Highmark (insurer) the maintenance of competition in the health care market was the reason to merge. West Penn and UMPC are the only two providers on the Western Pennsylvania health care market. When West Penn was in financial trouble, Highmark wanted to ensure its market position by acquiring West Penn Allegheny. Highmark wanted to take over the hospital because they considered it important that West Penn survived, taken that at least two providers are needed for competition in the marketplace. According to Penn and Highmark representatives, the take-over of a hospital system by a health care insurer does not reduced competition, but enhanced it. Without this take-over, West Penn would have gone bankrupt and UPMC would have been the only health care provider left (Lee, 2011).

5.1.5 Conclusion empirically found financial performance of vertically integrated systems

Considering the literature mentioned above, the cost consciousness of vertically integrated firms seems evident. Integrated firms are better able to control costs over the total spectrum of care, which enable integrated firms to be more efficient compared to fragmented health care delivery systems. Thereby, integrated systems are better able to control health care use. When incentives are aligned, unnecessary and ineffective treatments are less likely to be given, since no one would benefit from it. This effect is most apparent in the use of costly resources. However, vertical integration should be treated with caution, since it might hinder competition.

5.2 ACCESSIBILITY PERFORMANCE

Insurer-provider integration procures positive and negative to the accessibility of health care. According to Long & Coughlin (2001) managed or integrated care is not without risks since it can diminish access to care by limiting the choice of providers and its incentives to reduce use of care by its enrollees. They found out that children insured by an integrated care system were less likely to have a usual source of care, but that these children were more likely to see the same doctor when they receive care, indicating better continuity. On average, however, they did not found major differences between children insured under managed care or other indemnity, fee-for-service insurance. Miller & Luft (2002) found results favourable to non-HMOs, non-HMOs scored somewhat better than HMOs on accessibility of care. Of the ten studies found, two studies were favourable and four studies were predominantly unfavourable to HMOs. The other studies did not report significant differences. The authors note, however, that the measured indicators underlying these results differed between studies. Some took potential access (presence of a usual source of care, continuity of care, convenience of care, enabling services) as a measure of
accessibility others took realized access as a measure of accessibility (actual use of health care services). Shortell & Schmittdil (2004) found in the literature that prepaid group practices scored lower on experience of accessibility of care, based on longer waiting times to receive an appointment and waiting time in a physician’s office. However, some big Health Maintenance Organizations like Kaisers Permainente tries to enhance accessibility by making booking of appointments or requests of refills available online. In contrast to authors arguing that insurer-provider integration diminish accessibility of care, Cutler, McClellan and Newhouse (2000) compared patient data by databases gained from a traditional indemnity insurance plan and a health maintenance organization in Massachusetts (US). They showed that differences in spending could be explained by lower unit prices of care provision between indemnity insurance and HMOs. Differences were neither caused by lower quantity of services provided by HMOs, nor did it lead to worsened health outcomes of the insured.

Thereby, insurer-provider integration can also attribute to the accessibility of health care. The example of West Penn both showed that vertical integration can maintain competition, and thereby the accessibility of care.

5.3 Quality performance

Multiple authors compared the performance of insurer-provider integrated systems (mainly HMOs) with other non-integrated health care providers. Miller and Luft (2002) underline the complexity of comparing outcomes of different studies to quality of care provided by HMOs and other providers. ‘It rarely involves randomization of subjects and the interventions, endpoints, settings, and measures are highly variable. Thus, it is difficult to simply ‘add’ results together’ (p.1). Therefore, I have split the aspect of performance in three aspects; quality of care, safety, and patient satisfaction. These aspects are sometimes intermingled. One by one comparison is not likely to provide us with proper information about the association between the performances of the different systems, since health care providers can differ in more aspects than only in the way they are financed. Miller and Luft (2002) however combined multiple studies that compared performance between managed care organizations and non-managed care organizations; they performed a meta-analysis with results of studies measuring performance of HMOs and non-HMOs in the period of 1997 until 2001. To assess whether integrated care systems perform better than non-integrated care systems, they measured differences in quality of care, access to care and satisfaction between HMOs and non-HMOs.

5.3.1 Quality of care

Out of the 47 studies of quality-of-care findings examined by Miller and Luft (2002), 14 studies found results favourable to HMOs, 15 studies where found predominantly unfavourable to HMOs, the rest was mixed, not significant or reported similar results for HMOs and non-HMOs. The outcomes differ somewhat per disease. When HMOs and non-HMOs were compared based on mortality, morbidity and process
outcomes, sixteen studies found favourable results, sixteen studies found unfavourable results and forty-one studies presented no difference between HMOs and non-HMOs. To illustrate the nescience of this aspect of insurer-provider integration, two on first sight similar types of research found completely different results. Chernew et al. (1998) used conditional-choice models to estimate the probability that patients were treated in a certain hospital based on hospital attributes (including quality) and the type of insurance a patient has (indemnity or HMO). They found that the likelihood a HMO covered patient was treated in a certain hospital was positively associated with quality of that hospital. The correlation between quality and the choice of a particular hospital was greater for patients insured under HMO than under indemnity insurance. In contrast, Erickson et al. (2000) proved the opposite: children under managed care insurance were less likely to be assigned to a low-mortality hospital for cardiac surgical procedures than children insured under indemnity insurance. Given these mixed results it is hard to draw conclusions about whether or not quality of care is definitely better under integrated care than it is under other systems of care.

5.3.2 Safety
Shortell & Schmittdiel (2004) assessed performance of prepaid-group practices. According to these authors no study thus far has addressed differences in the ability of prepaid group practices to increase patient safety or reduce medical errors compared with other organizational or financial arrangements. No evidence is found that such studies currently exist. However, integrated groups are better able to invest in large and expensive information technology systems (Shortell & Schmittdiel 2004). Also Casalino et al. (2003) found that organized delivery systems are more likely than non-integrated, fee-for-service health care providers to have the financial incentives and access to capital to invest in clinical information systems. These investments are intended to lead to the development of electronic medical records that can provide timely, accurate information about patients to enhance quality of care. A number of integrated care systems (like Kaisers Permanente, Intermountain Health Care, the Mayo clinic and Henry Ford Health System) have made these multi-billion investments in ICT. Kaiser Permanente recently won the prestigious Eisenberger Award for patient safety and quality efforts. The award recognizes the implant registries, which lead to an improvement of quality of care provided to its 9 million members. Statistical analyses and integrated data systems were used to monitor patient outcomes, evaluate new established device technologies and identify and facilitate implementation of clinical best practices. The hold-up problem described by Baarsma et al. (2009) seems to disappear among vertically integrated firms.

Quality and safety of care is enhanced by the absence of unnecessary treatments, since medical treatments always contain a certain risk. Therefore, if you can eliminate major medical interventions by prevention, we should consider this as quality of care. Seen from an economic perspective, investments in preventive care can be financially profitable. If an integrated care plan for example prevents cardio-vascular diseases by prescribing relatively cheap blood thinners by their population at risk, they will save a lot of money in the long run. HMOs invest on average a lot in preventive care. Seven out of the ten studies found by Shortell & Schmittdiel (2004) showed clearly positive results for HMOs. No unfavourable findings for HMOs were found. HMOs covered much more preventive services than non-HMOs did. Kaiser Permanente
was rated by the California Cooperative Health Care Reporting Initiative as one of the best in providing breast and cervical cancer screening, comprehensive diabetes care, cholesterol management in patients with heart disease and follow-up after hospitalization for mental illness. As a consequence of these preventive practices, cardiovascular disease is no longer the leading cause of death among Kaiser Permanente’s Northern California population, nor in the population at large (Shortell & Schmittdiel (2004). The decrease in cardiovascular death can be attributed to implemented guidelines (Pheatt et al. (2003)). Intermountain Health Care also made some progression in quality of care. It increased the percentage of post-heart attack and congestive heart failure patients using ACE inhibitors and beta-blockers from 60 to 90%. With this increased use of medicines, they saved 450 lives per year! They also saved about $3 million per year by reduced hospitalizations (Shortell & Schmittdiel, 2004).

5.3.3 Patient satisfaction
The biggest difference in performance between HMOs and non-HMOs was found in patient satisfaction. Of nine studies measuring satisfaction differences, eight reported lower patient satisfaction scores for HMOs than for non-HMOs (Shortell & Schmittdiel, 2004). The other studies did not found big differences. Another aspect, closely related to patient satisfaction is the degree of trust a consumer has in health care provision, which is generally much lower among consumers insured by an vertically integrated firm (HMO), than among consumers insured in traditional (non-integrated) plans (Miller, 2006). Only 30% of the insured by managed-care organizations trusted their health plans in receiving the right amount of care if needed, and 61% of the enrollees believed their health plan being more concerned with saving money than with the care for patients, giving the patient the right treatment. These results were much worse than the answers given by insured under traditional health plans (Dranove, 2000). Mechanic (2001) explains where patient dissatisfaction comes from. Patients have a low opinion on insurance companies, and an even lower opinion on managed care. Meanwhile, patients trust their physicians and seek assurance that the doctor is their advocate, who behaves in their interest. Trust is gained when the physician does what the patient expects, when he, for example, prescribes the expected tests, gives the requested medicines or therapies (Mechanic, 1996). It is found that the choice of physician is a significant base of trust (Kao et al, 1998). If an assigned physician is part of a broader health maintenance organization, patients might wonder whether the physician is concerned with their problems. It is hardly surprising that judgements to delay or withhold services are mistaken by patients (Schuster et al. 2005) and are seen as rationing policies. HMOs understand the importance of patient satisfaction and tries to enhance it. But they could not preclude the managed care backlash. Blendon et al. (1998) agrees with Mechanic and many other researchers that the reason why managed care plans have a hard time to survive is a lack of trust. Although managed care plans perform very well, Blendon et al. conclude, people in managed care have greater fears, opposed to insured in traditional (reimbursement) insurance, that their plan will fall short when they are in need of care (Blendon et al., 1998). According to Miller & Luft (2002) higher concentration or penetration rates of HMOs are associated with more preventive practices, less use of expensive resources, less access, and lower employer health premiums, lower Medicare FFIs expenditures
and reduced hospital cost growth. A higher concentration of managed care in the particular (US) state was negatively associated with the percentage of uninsured low-income patients. Higher market penetration was positively associated with the percentage of fee-for-service covered woman adhering breast cancer screening (spill-over effect). Miller and Luft (2002) conclude that based on the available literature about the performance of HMOs that compared to non-HMOs, integrated care systems had roughly comparable quality of care, less use of expensive resources like hospitalization days, more prevention activities and lower access and satisfaction ratings.

5.3.4 Conclusion empirically found quality performance of vertically integrated systems

When quality was assessed based on quality outcomes or usage of high quality hospitals by HMO enrolees, mixed results were found. However, other authors who examined safety of care found positive results for HMOs. Positive effects of HMOs were found in relation to preventive care, HMOs provided more preventive services than non-HMOs did. Several big HMOs proved the value of their preventive services. It cannot be concluded that HMOs are a threat to accessibility of care. However, patient experience the accessibility to be lower than under indemnity insurance. Patient satisfaction among HMOs insured is lower than it is for other insured. However, it is hard to draw conclusions. On average, HMO enrolees are younger and have less co-morbidity. Studies often try to compensate for this effect, but the results will be somewhat biased. The authors also mention the publication bias. Some researchers try to prove the weaknesses of HMOs since they have heated feelings against integrated care. On the opposite are researchers who try to prove its strengths.

5.4 IMPLEMENTATION ISSUES

Besides of these performance indicators we should take a look at the feasibility of insurer-provider integration. Robinson (2004) argues that broader economic literature (not specifically health care) is rather sceptical about the efficiency and viability of vertical integration. Although vertical integration can result in efficiency gains by the coordination of supply, production and distribution, nonexclusive contractual mechanisms can outperform unified ownership. Independent producers can achieve economies of scale by producing for multiple buyers, and they can benefit from volume-related learning curves. Other authors, however, argue that most providers already produce maximum output. The optimal size, for example, of a hospital is around 275 beds (Kristensen et al, 2008), therefore, one can argue these theories not to apply for hospitals except for a very few smaller ones, since most hospitals already have a capacity above this optimal size. Further expansion to achieve economies of scale will not result in additional benefits. Vertical integration forces the firm to participate in sectors of another scale and scope. The optimal size of health insurance market is often regional or national, while the health care market is often local which can lead to inefficiency (Robinson, 2004). Vertical integration survived only where HMOs enjoyed larger economies of scale compared to non-integrated competitors, and where HMOs constituted a large proportion of the local market. Thereby, in order to survive, HMOs offered sufficient physician choice. The reason why Kaisers Permanente succeeded in California and Oregon, and failed in
Kansas City, Raleigh-Durham and Dallas, was that the large scale that was possible in the former but not in the latter (Robinson, 2004). Gitterman et al., (2003) mention the same reason for the failure of Kaiser Permanente in North Carolina. Kaiser Permanente was able to build scale in the 1950s through 1970s, when the industry was young and medical groups were scarce. These authors argue that at least 100,000 enrollees are needed to support a provider network. However, an executive of Kaiser Permanente suggested that as many as 500,000 enrollees are needed to provide a spectrum of integrated care (Ho, 2009). Nowadays, the industry in the US is mature and competitors abound, which make it hard, according to Robinson (2004), for Kaiser Permanente and other vertically integrated firms to expand.

Another potential problem is the willingness of consumers to enrol in vertically integrated health care systems. Generally, consumers have strong preferences for hospital choice (Ho, 2009), and might not be willing to bind themselves to an insurer with a narrow supply of health care providers. In addition, health care is an experience good, the choice made for a particular provider relies heavily on the experiences and recommendations by others in the social network. If none of the members of your social network is familiar with this integrated care form, it is unlikely that enormous amounts of people will enrol. This is what Kaiser Permanente also experienced when they tried to expand their activities to neighbouring areas. In areas close to the original health care plan, these were more successful than in areas on a more substantial distance to their former area of coverage. A Kaiser representative (in Ho, 2009) argues that the most plausible reason underlying this difference is that more ex-Kaiser enrollees have likely been moved to these areas, enrolled themselves again to a Kaiser plan and recommended this plan to their friends. Next to the fact that health care is an experience good and the choice of provider thereby relies heavily on experiences of others, a potential barrier to entry for a vertically integrated firm is switching costs (Ho, 2009). Engaging in a health care plan might require switching doctors, which can be uncomfortable for patients, and switching often requires a lot of paperwork and time to find out whether switching would be beneficial.

Thereby, the focus on preventive care by vertically integrated health systems can lead to adverse selection of enrollees with chronic diseases (Ho, 2009), which can lead to an unsuccessful start of an integrated health care organization if these enrollees are predictable losses. Integrated health plans might be attractive for these groups by the provision of regularly health check ups, to intervene early and prevent high costs of hospital admission.

### 5.4.1 Conclusion implementation issues of vertically integrated systems found in empirical literature

According to US literature, there are several difficulties for health maintenance organizations entering the market. Some authors argue that if health insurers and health care providers integrate, they both do not function on their ideal capacity. If an insurer decides to take over a hospital and only provides care in that particular hospital, both do not function on their optimal scale. The insurer usually benefits from a larger pool of insurers than the ones in the neighbourhood of that particular hospital, whereas the hospital most
likely has to expand which make it works above optimum scale. Another and probably the most important problem is the unwillingness for people to enrol in a health maintenance organization.

5.5 CONCLUSION: EMPIRICALLY FOUND ADVANTAGES AND DISADVANTAGES OF INSURER-PROVIDER INTEGRATION

Analysing the multiplicity of empirical and theoretical literature, the following conclusions can be drawn. As to the aspect of costs, vertically integrated organizations are expected and found to operate more efficient and cost-effective. An alignment of interest of insurer and provider are the main reason for this finding, together with savings by economies of scale and better coordination of care enabling the vertically integrated firm to control total costs. Whether vertically integrated firms perform better than non-integrated firms with respect to quality is not evident. Some argue vertical integration leads to an integration and coordination of health care services, which will lead to an increase in quality. Based on the results found, it cannot be concluded that vertical integration derogates quality. However, it has been found that patients often are less satisfied with their health care services under a vertically integrated system. Since healthcare is mainly an experience good and there are multiple providers available, satisfaction of patients is crucial for a health care provider and insurer to survive in this market. The results are not clear-cut. The central question is whether this uncertainty is sufficient to prohibit vertical integration. We cannot be sure whether potential benefits and drawbacks work out in reality in the Netherlands. Because of this uncertainty, we should pay attention to possible negative effects and prevent the market from the worse case scenario; quality goes down because integrated health care firms spare on the health care provided and prices go up because of worsened competition. Does the current Dutch legal system prevent this worse case scenario? Or is alternative legislation needed? The next chapter will elaborate on this topic.
CHAPTER 6  LEGAL FRAMEWORK CONCERNING VERTICAL INTEGRATION

In the previous chapter we concluded that the advantages and disadvantages of vertical integration are not easy to catch and that it is hard to predict the outcomes vertical integration will have in the Netherlands. Besides potential efficiency and coordination benefits received by insurer-provider integration, there might appear undesirable side effects. A dominant vertically integrated firm might harm competition in the market, which can result in higher prices. Thereby, a reduction of competition can take away intentions to strive for best health care quality provision. To prevent these undesired effects, a prohibition of vertical integration, as the minister proposes, is an option. However, current law might be sufficient to prevent the health care market from these negative effects. This chapter will describe a legal framework and explicates what rules and regulations currently might hinder any negative effects of vertical integration. The question answered in this chapter is: What rules and regulations prevent potentially negative effects of insurer-provider integration? As an illustration of the functioning of the regulatory agencies the DSW-Vlietland case will be explicated.

Under the former Dutch health care system, vertical integration was explicitly forbidden. In the current system, it is not. Article 12 sub. 1 and article 13 sub. 1 of the Health Care Insurance Act (ZVW), admit that health care insurers can employ health care providers. However, insurers are held by insurance directives provided by the European Union and health care insurers have the prohibition of providing side-line activities as described in article 3:36 of Financial supervision Act (Wet op Financieel toezicht). The pertinence of this article for insurer-provider integration depends on whether or not the provision of health care is an immediate consequence of this health care insurance firm. Provision of health care under reimbursement insurance is considered not to be a direct consequence of insurance activities, but for ‘in kind’ insurance it is (Loozen et al. 2011). Therefore, vertical integration for ‘in kind’ insurance types is allowed.

6.1  INTRODUCTION OF REGULATORY AGENCIES

There are several institutions applying several legislations to make sure that the health care market serves our health care goals (quality, accessibility and affordability of care). Most important institutions engaged in surveillance of the Dutch health care market are the Authority for Customers and Markets (Autoriteit Consument en Markt, the former Dutch Competition Authority, hereafter named by its abbreviation, ACM), the Dutch Health Care Authority (Nederlandse Zorg Authority, hereafter named by its abbreviation, NZa), and the Health Care Inspectorate (Inspectie Gezondheidszorg, hereafter named by its abbreviation, IGZ). I will first briefly explain these agencies, their functions and abilities.
6.1.1 The Authority for Consumers and Markets
The ACM is a major player in competition regulation, it deals with the Dutch Competition Act. On the grounds of article 34 of the Dutch Competition Act (DCA), it is forbidden to establish a concentration before the ACM is consulted. The ACM can give fiat for vertical integration after examination of economical dominance of actors involved. The DCA defines economic dominance as the possibility of an undertaking to effectively hinder competition on (a part of) the market by having the possibility to act independently of competitors, suppliers, providers or end-users (Article 1i DCA). The ACM will assess both the product as the geographical market. How this applies to health care will be explicated in further detail in the next paragraph: the process of examining anticompetitive effects. Next to merger control, the ACM has ex-post repressive power when parties with economic dominance are abusing their market power (article 23 Dutch Competition Act) or engage in cartelization.

6.1.2 The Dutch Health Care Authority
The NZa is mainly concerned with the Health Care Market Regulation Act (Wet Marktordening Gezondheidszorg) and the Health Care Insurance Act (Zorgverzekeringswet). The NZa does not have the legal ability like the ACM to assess concentrations. Although they are only asked by the ACM to give their opinion, this opinion should be taken seriously. The main function the NZa has is a regulatory function and monitor whether the actors, health care insurers and health care providers, act according to regulations. In contrast to the ACM, which can after allowing a concentration only ferule parties when abusing market power, the NZa can take preventive measures to prevent parties from utilizing market power. The NZa uses a comparable definition to define market power as the ACM does. The NZa assesses whether parties have significant market power (AMM), with which is meant: ‘the position of one or more health care providers or health care insurers to, alone or together, disturb the development of competition on (a part of) the Dutch market by the possibility to act independently of: competitors, healthcare insurers in case of being health care provider, health care provider in case of being a health care insurer, consumers’ (Article 47 of the Health Care Market Regulation Act).

When the NZa decides to start an examination of the significant market power on a specific market, three questions are to be answered: 1) How should the geographical or product market be defined? 2) Is significant market power found? 3) Has this significant market power the potential of an abuse of market power, in other words, does this significant market power leads to (potential) restriction of competition? Significant market power can be assessed in many ways; the NZa often applies the Elzinga-Hogerty test, the Logit Competition Index or the Option Demand method. If significant market power is found and there is a potential to disturb competition, the NZa can take various preventive actions (Article 48 of the Health Care Regulation Act). For instance, the NZa can force health care providers and health care insurers to divulge information, impose rules to health care providers or insurers concerning treatment of patients from other insurers.

6.1.3 The Health Care Inspectorate
The IGZ is concerned with quality issues. They have the responsibility to maintain and assess quality of care on the basis of the Quality Act for Health care providers. The IGZ has several instruments to maintain
or steer quality. The IGZ can take penalty measures, for example starting investigation to behaviour or mistakes, but can also take measures by administrative law, they have the ability to close institutions, all in concordance with the minister of Health (IGZ, 1008).

6.2 PROCESS OF EXAMINING ANTICOMPETITIVE EFFECTS OF VERTICAL INTEGRATION

As explained in chapter 3, insurer-provider integration raises questions about anticompetitive effects. In some cases, integrated firms can exclude other parties or hinder new entrance in the geographic or product market. Exclusion, or the ability to raise prices for competitors can also increase costs for competitors, in extreme cases; this cost difference can lead to dissertation of competitors. To recap: Bijlsma et al. (2008) distinguished types of foreclosure which can arise with vertical integration: exclusivity, the waterbed-effect and sabotage. Exclusivity is a situation in which a health care provider with market power has a contract with only one insurer, this vertical contract can limit competition since patients who are bound to this provider have no choice anymore for another insurer, which might lead to reduced effort by the insurer and its powerful provider (Gal-Or, 1996). Waterbed effect arises in a situation in which insurers with significant regional market power have strong relations with a provider in that region. Exclusive contracts or a merger between a regional powerful insurer and a health care provider enlarge the negotiating power of this insurer. Lower prices for the merging firm are at costs for the market share of competitors, which have to pay higher tariffs if they want to make use of this hospital.

If the insurer-provider integrated party translates the benefits directly to the consumers by lower insurance premiums, these enrollees benefit. In the most far-reaching theoretical scenario, enrollees of other insurers have to pay a higher premium, the likely result is that these enrollees switch to the insurer-provider integrated firm and other insurers are no longer able to stay in the market.

If prices are regulated, a dominant health care actor cannot impose its power by prices but by other, non-price related aspects. A vertically integrated firm can for example hinder patients from other insurers to make use of this hospital, by enlarging waiting times. These effects only occur under significant market power of one of the parties integrating, but medical ethics of doctors will also prevent these effects.

Generally, we may conclude that the effects described by Bijlsma et al. (2008) arise if one of the actors has significant market power. Therefore, we should prevent the market for having this situation.

If parties operating in health care want to vertically integrate, they need the permission of the ACM (article 34 Dutch Competition Act). The ACM will decide whether or not a licence is required to establish the concentration. If the concentration leads to real hindrance of competition on (a part of) the market as a result of economic dominance, the license will not be given (article 41 sub. 2, Dutch Competition Act). Parties should ask for this permission if the parties have a cumulative turnover of 55 million Euro, or if individual parties have a turnover over 10 million of which at least two of the parties have a annual turnover by providing health care of over 5,5 million (Richtsnoeren voor de zorgsector (2010) pnt 115).
These turnover indications are lower in health care than they are for other sectors. If the ACM receives a licence request by parties who intend to merge, the ACM will investigate whether these parties or the new merger will have economic dominance. When two parties with economic dominance want to merge, this merger will have more impact on competition than a merger of little parties will have. The relevant product and geographical market should be examined to see whether there is competition and who are competitors. The ACM underlines the case-by-case approach needed for this examination. In the next sections I will explain briefly how the geographical and product market are defined. Thereafter I will explain how the ACM examines market power in horizontal concentration cases. The way the ACM examines economical dominance and the effect on competition of vertical integration is related to the assessment of horizontal cases. Thereupon, I will illustrate the way ACM deliberates a vertical merger case by explaining the process of DSW, a health care insurer that wanted to take part of Vlietland Hospital.

6.2.1 Examination of product market

The relevant product market entails all products and/or services which are substitutable for the customer on the basis of their features, prices and the use of destination. To assess the relevant product market, the specific features of a product and the use of this product should be analysed, to see whether there are any alternatives. In health care, we should for example make a distinction between University Medical Centres and ‘ordinary’ hospitals. The assessment of the merger between a University Medical Centre and an insurer is a different case than a merger between an ordinary hospital and insurer. The Market for University Medical care, which is higher specialized, is much more concentrated than the market of ordinary hospital care. Thereby, possibility and difficulty for a consumer to change products will be taken into account (demand substitution) and the possibility and difficulty for other providers to serve this market will be taken into account (supply substitution).

6.2.2 Examination of geographical market

The relevant geographical market is defined as the area in which involved enterprises play a role in the demand and supply of products and services wherein the competition conditions are homogeneous, the adjacent areas can be distinguished on the basis of clearly distinct competition conditions (European Commission, 1997). It is the geographical area in which the involved enterprises operate and in which they experience competition of other enterprises. Assessing geographical market in health care is mainly based on willingness to travel, which often differs for different types of care. Willingness to travel for a GP might differ from the willingness to travel for a medical specialist or a University medical centre. For health care insurers, the geographical market is often considered nationwide as could be seen in case 5682/Delta Lloyd-Agis-Menzis.

6.2.3 Procedure of assessing concentrations by ACM

The procedure of assessing integration is as follows. If the parties exceed the turnover threshold, they need to announce their intended concentration by the ACM. In this announcement or first phase, the ACM examines whether this concentration will affect competition by creating or strengthen economic dominance. The NZa is invited to give an opinion about the case. The NZa takes the advise of the IGZ into
account. If the ACM concludes that the real competition will not be affected significantly by this concentration, no license is required and the merger can be executed. If the ACM decides a license is needed because the ACM foresees potential hindrance, the licensing phase starts and closer examination is required. Undertakings involved have the ability to withdraw their request or change their request. In this licensing phase, the ACM applies extensive examination. The license will be given only if this research investigates that the merger will not significantly hinder competition on the relevant (product and geographical) market. During this procedure, the undertakings involved have the ability to offer remedies, conditions under which negative effects can be excluded. In the announcement phase and in the license phase, the NZa is asked to share their opinion about this intended concentration. Since only the ACM has the ability to block a merger, close cooperation between the IGZ, NZa and ACM is required. Based on the outcomes of their research, a license is refused, provided or provided with certain remedies. I will first explain how horizontal mergers are assessed, as it provides the basis on which vertical mergers are judged.

6.2.3.1 Horizontal mergers

A horizontal merger, a merger of two horizontally related firms (like two hospitals) are in essence only allowed if this merger does not lead to economic dominance and a hindrance of competition in the market. In the assessment of horizontal mergers, the ACM applies the rules provided by the European Commission. Article 15 of this policy guideline (2004/C 31/03) argues that the market share after a merger is the sum of market shares of these undertakings before the merger. Article 17 of this guideline explains that if a merger results in a market share over 50%, this in itself is an indication of market power. Market shares under 50%, and sometimes even below 40%, are also not unlikely to result in market power. The guideline also provides another instrument. The degree of concentration on a market can be deduced from the competition situation. The Herfindahl-Hirschman Index (HHI) gives an impression of the competition situation before and after the concentration. The HHI can be calculated by summing up the squared individual market shares. If 10 undertakings all have a market share of 10%, the HHI is 1000. If 2 undertakings have both 50% of the market, the HHI is 5000. The difference between these two values indicates the difference caused by the concentration. According to article 19 and 20, it is unlikely that the ACM will prohibit mergers if the HHI is below 2000 (2004/C 31/03). Besides having high market shares on a particular market, other factors are taken into account by the ACM. For example whether merging entities are competitors (article 28) or whether customers have the possibility to change provider (article 31).

6.2.3.2 Non-horizontal/vertical mergers

As is the case for the assessment of horizontal mergers, in the assessment of non-horizontal/vertical mergers, the ACM applies a guideline provided by the European Commission (2008/C 265/07). The ACM and the European Commission are in essence not opponents of vertical integration. Articles 13 and 14 of this European guideline (2008/C 365/07) underline the potential economic benefits of efficiency and coordination improvements of vertical integration as does the guidelines provided by the ACM. Article 11
admits that vertical integration in general is less likely than horizontal integration to significantly hinder competition. However, article 23 declares that vertical integration does have the potential to have market power if at least one of the parties integrating already has market power. If parties want to integrate vertically, the ACM should test whether one of the parties has a dominant economic position, before looking to potential impacts on competition of integration between both parties. According to the European Commission, vertical integration can lead to two types of negative effects: non-coordinated effects and coordinated effects. Non-coordinated effects (often mentioned as foreclosure) 'will be used to describe any instance where actual or potential rivals' access to supplies or markets is hampered or eliminated as a result of the merger, thereby reducing these companies' ability and/or incentive to compete. As a result of such foreclosure, the merging companies — and, possibly, some of its competitors as well — may be able to profitably increase the price charged to consumers. These instances give rise to a significant impediment to effective competition and are therefore referred to hereafter as 'anticompetitive foreclosure'. (2008/C 365/07, article 18).

The other potential negative effect, the coordinative effect is explicated in article 19: "Coordinated effects arise where the merger changes the nature of competition in such a way that firms that previously were not coordinating their behaviour, are now significantly more likely to coordinate to raise prices or otherwise harm effective competition. A merger may also make coordination easier, more stable or more effective for firms which were coordinating prior to the merger." Both effects only arise if one of the merging parties has market power in the particular market. Existence of a significant degree of market power in at least one of the markets concerned is a necessary condition for competitive harm, but is not a sufficient condition. Therefore, to assess whether competition is in danger, the European Commission developed a test instrument. According to article 25 of this guidance, it is unlikely that the European Commission will hinder vertical integration if the market share of the new entity on both markets is not above 30% and the Herfindahl-Hirschman Index is below 2000. If there is significant market power on one of the markets (health insurance market or health provision market), the ACM will examine whether this power is enough to sufficient to cause coordinative and non-coordinative effects.

In addition, the ACM will also investigate whether the undertakings involved have the incentive to do so, and what the effect of potential foreclosure will have on the effectiveness of the market. Merging firms might have other than only financial reasons to merge. As in the case of West Penn, described in chapter five, a merger can maintain or enlarge competition if one of the parties would otherwise disappear from the market. In this case, the firms can use the failing firm defence and ask for permission to merge although it might result in market power. In the Dutch case, the NZa can dictate preventive measures, remedies. There are two exceptional situations possible in which the ACM can allow concentration although it will lead to significant market power. Undertakings can argue an efficiency defence and an failing firm-defence (article 89 of guideline 2004/C 31/03).

## 6.2.4 Role of NZa and IGZ

As outlined in the procedure of merger assessment, the NZa is allowed to provide its opinion about the consequences of this merger for public interests (quality, accessibility, affordability) (NMa (2010), line
The NZA should follow the opinion of the IGZ concerning the expectations of quality effects of a vertical merger. The NZA therefore has an advising role in the process of merger control. The ACM should take the opinion of the NZA seriously into account, when the opinion of ACM differs from the NZA, they have to motivate why they will not follow their advice.

With the significant market power instrument, the NZA is able to trigger the market towards a proper price/quality ratio, for example by creating transparency (NZA, 2010). However, the NZA is not able to coerce providers directly to provide care of a certain quality. Another organization has this ability, the IGZ. Health care providers are by law required to offer proper care (article 2 Quality Act Healthcare Providers, Kwaliteitswet Zorginstellingen). The IGZ has the responsibility to monitor whether health care providers fulfil this obligation. If they find any violations of this act by a certain health care provider, the minister will be informed and drastic measures can be taken (article 9 Quality Act Health Care Providers). The IGZ thereby can ensure a minimum quality of care provided by health care providers.

6.3 **Concentration surveillance in practice: the DSW-Vlietland case**

As an illustration of how the authorities handle vertical mergers in health care, I want to describe the DSW-Vlietland case. On January 6th of 2009, DSW and Vlietland Hospital announced a potential cooperative ‘Vlietland’, an undertaking of the Vlietland Hospital with six regional health care providers (e.g. GP’s nursing homes) and health insurer DSW. DSW has a stake 37% in this cooperative. This (financial) stake of DSW in this cooperation made them financially committed to this hospital. One objective of this cooperation was the achievement of better alignment of care between these different providers. DSW could play a coordinative role and has the incentives to organize efficient care. Thereby, Vlietland hospital had major financial problems. Since DSW had a lot of insured in the market of this hospital, DSW was willing to support financially.

On the 5th of May 2009, this intended cooperation was announced by the ACM. The ACM assessed the three vertical relations included in this cooperative: the merger of general practitioners and the hospital, nursing homes and the hospital and health insurer DSW and the hospital. For the relevance of this case for this research (insurer-provider integration), I will only analyse the process followed for the vertical integration between insurer and Vlietland Hospital.

6.3.1 **Assessment of concentration**

6.3.1.1 **Product market**

To assess potential problems, the ACM examined both the product market of health insurance and hospital care was assessed. Since Vlietland Hospital provides ‘ordinarly’ (neither top-clinical nor academic) hospital care. For hospital care, the market for clinical and non-clinical general hospital care was distinguished and both assessed. For health insurance, no distinction was made between in kind insurance and reimbursement insurance; they were seen as substitutes. Since most insured buy their
supplementary insurance by the insurer of their basic health care insurance, the ACM decided to see basic and supplementary health care insurance as one product market.

6.3.1.2 Geographical market
To assess the relevant geographical hospital market, the ACM should assess whether patients are willing to travel to alternative surrounding hospitals (due to an increase in price, or reduction in quality). The ACM admits that no perfect instrument is available for the assessment of this effect (ACM case 6669/194). Therefore, they used information from different sources, like place of residence of patients, travelled time of patients to come to this hospital and the time to be travelled to other hospitals. Analysis of this information provided the conclusion that 90% of all patients came from Schiedam, Vlaardingen en Maassluis, which indicates that this hospital has a small regional function. The ACM concludes that it is unsure whether patients are willing to travel to other hospitals and what the market power of this hospital is.

As mentioned before, the ACM considers the health insurance market to be national. However, DSW has a strong regional market position in the Vlietland area, whereas they have little market shares on a national level.

Although the geographical market is hard to assess, the ACM concludes that both DSW and Vlietland Hospital have a market share over 30% in the smallest geographical market (ACM case 6669/194 pnt 74). Therefore, in line with the European guidelines, possible negative effects should be assessed.

6.3.1.3 Potential risk 1: Foreclosure of hospitals
ACM argues that the intended concentration contains a possible foreclosure of other hospitals if DSW offers its enrollees only care, or the reimbursement of care, provided by the Vlietland Hospital (pnt 75), or when DSW decides not to fully reimburse care taken by other providers. It should be assessed whether DSW has the intention and possibility to reduce its quality or raises prices. DSW has the legal opportunity to steer patients to certain health care providers, however this does not happen in practice (pnt 84). The ACM argues that DSW will not have the incentive to make an exclusive contract with Vlietland Hospital, since there are enough other health care insurers available and patients will switch insurer. Since alternatives are available and easily accessible, it is unlikely that DSW has significant market power. ACM concludes in point 89 that it is unlikely that DSW, as a result of the proposed concentration, has an increased incentive to steer insured through financial incentives to encourage the use of Vlietland Hospital. The NZa was asked to provide its opinion. Based on their analyses to significant market power, they concluded that DSW was not able to restrict consumer choices. Therefore, the NZa did not expect negative effects in relation to public interests (NZA, 2010).

6.3.1.4 Potential risk 2: Foreclosure of other insurers
Hospitals have the legal possibility to contract exclusively with particular insurers (pnt 97). If patients in that region are largely dependent on Vlietland Hospital, and DSW is the only insurer contracted with this hospital, all inhabitants will take insurance of DSW, other insurers are excluded from this market. The
ACM however, argues that DSW will not have the incentives to exclude patients from other insurers. If other hospitals are available, exclusive behaviour and abuse of this behaviour (for example asking higher prices or provide less quality) will not be beneficial, since inhabitants will choose another insurer. In the case of Vlietland Hospital, enough other hospitals were available. The risk of excluding other insurers will therefore only happen if Vlietland has significant market power. The NZa also assessed whether Vlietland possessed significant market power, but none of the applied tests (Elzinga-Hogarty test, Logit Competition Index and Option Demand method) indicated significant market power.

6.3.2 Conclusion DSW and Vlietland Hospital

According to case 6669-194 (pnt 112) the ACM concludes that DSW and Vlietland Hospital have no potential to foreclose other insurers or hospitals from the market. Therefore, it is not plausible that the intended concentration between DSW and Vlietland Hospital will have in itself a negative effect, which might hinder competition significantly.

The overall conclusion of the ACM was that a licence was required for this merger, due to potential problems of integration between general practitioners and the Vlietland hospital and nursing homes Vlietland hospital. Parties involved did not decide to request a licence.

6.4 CONCLUSION OF LEGAL FRAMEWORK CONCERNING VERTICAL INTEGRATION

The Netherlands know several regulatory agencies, which all have specific abilities. The IGZ tries to maintain health care quality, and the ACM and NZa monitor and ensure the market from being competitive which results in accessibility and affordability of health care. An illustration of the procedure to be followed if parties want to merge is found in the case DSW-Vlietland. In this chapter I described these actors and the assessment, but it can be questioned whether these regulatory agencies and their procedures are effective enough to prevent from the negative effects of vertical integration. In the next chapter, the proposal of the minister will be assessed, and the accurateness of these agencies will be considered.
CHAPTER 7 LAW PROPOSAL CONCERNING VERTICAL INTEGRATION

This chapter answers the question: what is the rationale behind the government plans for a prohibition of insurer-provider integration in Dutch health care? I will first describe the content of this law proposal. Thereafter I will present the reasoning underlying this proposal by the minister and some other actors in the field. The strength of arguments and the proposal will be discussed.

7.1 CONTENT OF THE PROPOSAL

As mentioned earlier, the Dutch minister of Health wants to limit vertical integration between health care insurers and providers. She fears that vertical integration will corrode public values: quality, affordability and accessibility of care. Therefore, the minister of Health opts for a prohibition of insurer-provider integration in both the care (long-term health care) as well in the cure (short-term health care) sector, health care insurers are not allowed to have juridical or factual control over health care providers (Tweede Kamer, 33 362:6). 'Control' is described in article 26 of the Dutch Competition Act (Mededingingswet) as having a decisive influence over the activities of a health care provider. The minister proposes an additional fourth paragraph to article 40 in which she obliges insurers to expose information of whether they obtain administrative influence on particular health care providers, and the degree of financial interest health care insurers have in health care providers. The explicit prohibition of vertical integration of insurers and providers will be incorporated in article 49 of the Health care Regulation Act (Wet Marktordening Gezondheidszorg). However, two exceptions are formulated (Tweede Kamer 33 362:7-8). Article 20 of this Act will contain an obligation for the NZa to announce when a specific case of vertical integration is allowed by one of these exceptions.

7.1.1 Exemption in order to fulfill obligation to care

If a patient is insured in kind, the insurer has an obligation to provide care, the insurer should do everything necessary to ensure care for the insured. If vertical integration is necessary to fulfil this obligation, the insurer can ask for exemption by the Dutch Competition Authority. For example, an insurer has a contract with a health care provider in a small peripheral area and its enrollees are insured in kind. If the health care provider goes bankrupt halfway the contract period, the health care insurer must fulfil its obligations and ensure care provision for its insured. In this case, a financial take-over in order to save this health care provider might be necessary to fulfil the obligation to provide health care. Some insurers already have their own general practitioners, like Menzis has in Groningen (Berg et al., 2007). Menzis started this care provision because of a shortage of general practitioners in this area. For this kind of 'emergency' situations in which insurers are not able to fulfil their obligations, the proposed article 49 will contain an exemption.
7.1.2 **Exemption in order to effectuate a specific innovation**

The ACM is also able to allow insurer-provider integration if this integration has innovative intentions. With innovation is meant the implementation and application of a product or treatment, which leads to better health care results. The innovation can be technical, for example new treatments or methods, and non-technical, for example process and organization development. The proposal is ambiguous whether cost-reduction is considered as a form of innovation. The exemption of prohibition of vertical integration can only be made if there are no alternatives ways to reach these benefits. Since an exemption can only be given for a period of 4 years, permanent vertical integration is not possible.

7.2 **ASSESSMENT OF VALIDITY OF OBJECTIONS**

The objections of the minister is based on three central arguments which will be explicated in the paragraphs below:

1. Insurers will probably no longer act objectively in the interest of the patient.
2. The current instruments are not sufficient to prevent the market from undesirable effects.
3. When vertical integration will be introduced on a larger scale, the development towards a demand-driven health care system will be disturbed.

These arguments have overflow, but I try to handle them separately.

7.2.1 **'Insurers will no longer act objectively in the interest of the patient'**

The main objective proposed by the minister is the risk that insurers are no longer objectively and not acting in the interest of the patient (Tweede Kamer, 33 362:3). The system is designed with different actors each serving a particular role. Insurers should serve the interests of the insured, and the government want purchasing of care by insurers to be objective, unequivocal and based purely on quality and effectiveness for insured and patients. In the purchasing process, all health care providers should have similar positions from the start; the chance of being contracted should solely depend on quality and price and price/quality ratio. Providers should only be preferred by higher quality or efficiency, not because of other interests an insurer might have, for instance because of financial commitment. According to the minister, it is undesirable when interests of a company (continuity, profit) are more important than interests of patients (quality, price). When health care insurers have financial interest in a health care provider, transparency and the maintenance of patient preferences are at odds with the financial commitment of insurer and provider (Tweede Kamer, 33 362:4). Moreover, tension can arise between medical objectives and other objectives, which makes patients vulnerable to the vertically integrated firm. The health care systems contains a lack of transparency concerning costs and quality of care, which is problematic since it makes it hard to find out whether an integrated firm acts in own interest or in the
interest of the patient (Tweede Kamer, 33 362:5). According to the minister, patients are unable to judge about quality and price of care supplied, and are thereby unable to judge about the quality of the care purchased. If consumers switch insurances, the main motivation is price, not quality (Tweede Kamer, 33 362:4). Therefore, insurers should act as their agent, since they are better informed about quality of care than individuals are.

However, taken the empirical quality findings described in chapter 3, there are no clear indications that vertical integration derogates our health care objectives. With respect to quality, integrated firm performance was, broadly speaking, found to be comparable with non-integrated systems. In terms of accessibility, integrated health systems did provide, on average, less care, but this did not lead to diminished health outcomes. If an integrated health care organization operates on a competitive market and this vertically integrated organization wants to stay competitive, it has to deliver accessible and proper quality care and it should provide quality information in order to convince and attract patients.

The Dutch competition authority will only allow vertical integration when enough alternative providers or insurers are available in a specific market (or when it is the only way to achieve public interest, the failing firm or efficiency defence). This implicates that vertical integration are only present under a condition in which consumers have alternatives; the insurer-provider integrated firm is in competition with these alternative firms. Since patients have the possibility to switch health care insurer every year, this organization has to compete for clients by offering trustworthy care and low prices. The organization should build up, and/or enhance reputation. If an integrated system cannot prove to perform better than non-integrated care settings, it will not succeed. Lint (2011) argues that insurers, who own providers, will still have the incentive to contract other providers if they are performing better. Vertical integration does not necessarily mean that a health care insurer will no longer buy health care from other providers. It would be irrational for a health care insurer not to purchase care from a health care provider who provides higher quality or lower prices. If this organization does not contract this popular provider, the consumer will not enrol with the insurer-provider integrated firm but will take insurance by insurer who contracts this competitor. Given the fact that vertical integration will only occur in a competitive market, it is unlikely that a vertically integrated system will act solely in its own interest. The organization has to prove its strengths for patients. In the provision of quality information by (vertically integrated) firms, a danger of ‘window dressing’ (dressing up quality information) appears. But this is not only a risk for integrated firms, but for all health care providers, since they all compete for contracts and clients. If the information provided by the health care firms themselves is mistrusted, the IGZ should take its role and puts, for instance, health care providers under closer examination.

7.2.2 ‘The current instruments are not sufficient to prevent the market from undesirable effects’

The minister argues that the existing instrument possessed by ACM, NZa and IGZ is not sufficient to prevent negative effects. Although the Dutch Competition Act provides discretionary power for individual cases, the ACM cannot prohibit concentration unless competition is significantly hindered. But besides hindrance of competition, the minister expects other negative effects of vertical integration, like conflicts
of financial and medical interests (Tweede Kamer, 33 362:24). The minister opts for a bigger role of the NZa in vertical concentration. If parties want to merge based under the proposed legislation based on one of the exceptions, the NZa will be more closely involved (Tweede Kamer, 33 362:11). I will first focus on the inability to prevent other negative effects by the current regulatory agencies. Thereafter, I will make some notes about the effectiveness of the current regulatory agencies.

The minister argues that in the current system, each actor should play its own role, the insurer should insure and buy care, and the health care provider should provide health according to medical standards. The insurer can objectively (meaning having no personal interests) assess the quality provision of different providers. Achmea shares this opinion and admits that the strength of an insurer lies in its comparing abilities and negotiating powers. However, information asymmetry is present under this system. Providers might not be willing to expose their quality figures, if the insurer owns a provider this information is easy to trace. As explained in the previous paragraph, insurer-provider integrated organizations have incentives to prove their quality. Thereby, if this competitive mechanism does not work, there are other institutions that can monitor price and quality information. With respect to quality, the IGZ tries to guarantee a minimum quality standard of health care institutions. However, other measures might be needed to take positive measures to increase quality of health care provision. In contrast to Achmea, others argue that integration is the most far-going and natural way of health care purchasing, the potential to take over or the potential to build up another provider in the region will force providers to deliver good quality care for a proper price (ZN). Insurers might even have the incentive to prove their quality provision as a way to enhance trust and attract enrollees.

7.2.3 ‘When vertical integration will be introduced on a larger scale, the development towards a demand-driven health care system will be disturbed’

The minister fears reduced choice and influence for patients. When vertical integration will be introduced on a larger scale, the development towards a demand-driven health care system will be disturbed (Tweede Kamer, 33 362:5). Patients have to become familiar with the fact that not every provider has a contract with the chosen health care insurer. If the health care insurer restricts the amount of providers, patients must be certain that this happened for proper reasons and not for a conflict of interests. The minister points to the needed trust of citizens in the current health care system. Patients should trust their insurer in acting in their interest, if patients have doubts about his, it can damage the effectiveness of the system (Tweede Kamer, 33 362:5). ‘Yet the chance that these aforementioned scenarios will occur, are reason enough to prohibit vertical integration in this phase of health care system development.’

As I outlined above in the former paragraphs, according to competition theory and legislation it is unlikely that vertically integrated organizations will not operate in the interest of the patients. As long as there are alternatives for a patient, the vertical integrated firm should strive for the favour of patients. Insurers will

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4 ‘Nota naar aanleiding van het verslag’, July 2, 2013
respond to this ‘demanding’ patient as long as patients can switch provider every year. Therewithal, the minister is afraid that large-scale vertical integration will affect the demand-driven system. However, given the explicated implementation aspects discussed in chapter five, it does not seem likely that vertical integration will emerge on large scale. I will first translate the implementation issues found abroad to the Dutch system. Thereafter, I will explain the likeliness of broad-scale insurer-provider integration.

Robinson (2004) argued that HMO’s only survived if they were able to achieve sufficient economies of scale. A substantial amount of enrollees are needed to set up a vertically integrated system, some authors argue for 100.000 enrollees (Gitterman et al., 2003), others for 500.000 enrollees (Ho, 2009). Loozen et al. (2011) did not see the 100.000 enrollees criterion as a barrier, they argue that given the substantial regional concentration on the Dutch health care insurance market, this minimum quantity to work effectively should not be a problem. Vertical integration is only allowed if enough alternatives are available, given these economic lower limits and these legal rules, it is unlikely that hospitals can easily vertically integrate with a certain insurer except for some densely populated areas. Insurer-provider integration is more likely on a smaller scale; it might be beneficial for an insurer to integrate with general practitioners, pharmacies, or home care providers. The problem of willingness to enrol might be a bigger problem. As we saw, patient satisfaction in vertically integrated systems is often lower; people have less trust in insurer-provider integrated systems. These US experiences will likely also count for the Netherlands. The Netherlands is not used to restricted provider choices, and patients do often not trust their health care insurer (Bes et al., 2013; Boonen and Schut, 2009). Therefore, it is unlikely that ‘Dutch HMOs’ will arise and succeed.

Even if insurers are able to vertically integrate, it is questionable whether they are willing to do so. I discovered in the interviews I had that insurers are aware of the potential benefits insurer-provider integration has, but are cautious for several reasons. One reason is that the actors are not familiar with this type of health care provision; during the former Dutch health care system, vertical integration was forbidden. They consider the legislation as ambiguous and uncertain. The minister caused a lot of uncertainty for insurers engaging in vertical integration. In this situation they are unlikely to make a lot of policy costs if they are faced with a probability of total prohibition. Political uncertainty is a major barrier for health care insurers to engage in these ‘new’ kinds of care organization. But the most important reason not to engage in vertical integration is the public and the political negative opinion: insurers do not dare to take the risk to engage in these practices for image reasons. Some insurers are more willing to engage in vertical integration (Menzis, DSW) than other insurers are (Achmea), but they all are thoughtful. In addition, not only insurers hesitate to engage in vertical integration, it is questionable whether providers are willing to merge with insurers. The Dutch Hospital Association (Nederlandse Vereniging van Ziekenhuizen) announced that they do not prefer a majority stake of insurers in hospitals.

US literature mentions a third barrier to entry for vertically integrated firms, adverse selection. Adverse selection is the effect that high quality provision will attract people who are most in need for this, which are at the same time the people who are financially not attractive for this organization. The high degree of preventive services in vertically integrated firms is attractive for chronically ill, which might undermine the financial success of the firm. In the Netherlands, however, the attraction of chronically ill might not
directly lead to financial losses, since insurers are ex-ante compensated for high-risk enrolees. Chronically ill might be even more attractive for this firm since most savings can be achieved, higher amounts of money are received beforehand than this firm might need to care for this patient. This important barrier abroad therefore should (theoretically) not count for the Netherlands. Although the last barrier might not apply to the Netherlands, the aforementioned problems make it unlikely that vertical integration will emerge on large scale.

7.3 Annotations

In this section, two preconditions are continuously adapted: the ability of patients to switch providers and the accurateness of regulatory agencies. I will briefly make two, to my opinion, necessary annotations with regard to the obviousness of these conditions.

One precondition towards the achievement of public objectives under vertical integration is patient choice for health care insurance and the ability to switch. Without the ability for patients to punish health care insurers by switching to the competitor, insurer-provider integrated firms are not forced to serve the interest of the insured: the possibility to switch insurer is the foundation of our health care system. The NPCF remarks that this assumption is often too easily made: for the most vulnerable (old and/or ill) people, switching insurance is not always an option. For additional insurance no acceptance obligation for the insurer exist. Therefore, it might be the case that patients do not want to switch insurers since they have the probability not to be accepted for additional insurance. Since insurers are, as explained before, struggling with reputation issues, they are not likely to reject requests for additional insurance. Thereby, if these patients already had additional insurance by their former insurer, it is forbidden for their former insurer to end the additional insurance (article 120, Health Care Insurance Act). Nevertheless, it might be complicated for vulnerable patients make deliberative (often complex) choices and to switch. We should take this barrier to switch, for people who are most care dependent, into account. However, no enormous shift of insured is needed to trigger insurers to strive for enrolees. Only the possibility for enrolees to switch, or a small percentage of consumers actually switching insurers, can be disastrous for the (financial) position of an insurer.

The second related precondition worthwhile to mention is the presence of a competitive health care market. The aforementioned health care regulatory agencies should not allow vertical integration if competition is harmed, but some authors doubt the effectiveness of these regulatory agencies. Several authors gave their opinion about the effectiveness of the Dutch legislative and institutional framework concerning competition in health care. The commission Baarsma (Baarsma et al. 2009) did not found any indication of failure of our current merger control system. Apparently, with the law amendment proposed by the minister, the minister expresses the distrust in performance of the institutions ascribed above. Considering the decisions made by the NMa and NZA concerning potential effects of vertical integration,
Loozen et al. (2011) conclude that there is no motive to suppose a lack of possibilities by authorities to prevent negative effects of vertical integration on competition. According to these authors, the ACM and NZa proved to accurately judge vertical mergers in a way public values are guaranteed. Besides, the advice division of the Council of State (Raad van State) of the Netherlands argues that the NZa should be effective enough with their less far-going preventive measure (advise doc. W13.12.0097/III). However, some marginalia should be placed. Although Loozen et al (2011) argue that the current surveillance system has the ability to prevent the market from anticompetitive effects; they have not proved their effectiveness on large scale yet. Among lawyers and (health) economists are critics who dispute the decisiveness of these institutions, the ACM seems to be inclined to allow mergers (Varkevisser & Schut, 2008). Unfortunately, there are not many examples of decisions made by the ACM concerning vertical integration to examine how critical they are in their assessment and judgement of vertical mergers. But the ACM has showed its opinion about horizontal mergers and market power in health care in multiple cases. In November 2012, the ACM allowed three mergers of hospitals in South Limburg, Tilburg and Haarlem/Hoofddorp. The argumentation given by the ACM was that the increased market power gained by these mergers was compensated by an increased market power of insurers and that enough other providers were available in this market (Jansen, 2013). If the ACM is inclined to accept horizontal mergers easily, it is not unlikely that this agency will even more easily allow vertical mergers since they are considered to be less competition reducing (article 11 European Guideline 2008/C 265/07). Thereby, if the ACM allows horizontal mergers easily, fewer possibilities are open for vertical integration. Since horizontal mergers reduces the amount of providers, and thereby less alternatives for consumers, vertical mergers are more easily a treat to competition in that particular market. To assure that these institutions take their legal ability to prevent mergers if necessary, close attention of their decisive behaviour in both horizontal and vertical merger cases is required.

7.4 Conclusions law proposal

The most important and central argument of the minister is that vertical integration creates a probability that insurers and providers will no longer act in the interest of patients. Quality is the central theme and might be derogated if the critical third party purchaser changes into the owner of health care providers. Where former health care insurers strived for enrollees by purchasing the best quality for the lowest price, vertical integration might change objectives and creates incentives to provide less or lower quality/cheaper care. I argued it is unlikely for insurer-provider integrated firms to act solely in their own interests for several reasons and under precondition of the presence of competition.
CHAPTER 8  CONCLUSION AND DISCUSSION

8.1  ANSWERS OF SUBQUESTIONS AND MAIN QUESTION

This section will briefly conclude the findings of the previous chapters\(^5\). Thereafter, it will answer the main question: The advantages and disadvantages of insurer-provider integration; what are the implications for Dutch health care policy?

8.1.1  How is the Dutch health care system organized and what is the role of health care insurers?

The Dutch health care sector is organized in order to fulfil three main health care objectives: quality, accessibility and affordability of care. To attain these objectives for all citizens, collective action is required and citizens are compulsory insured. Insurers should act as agents of individual insurers, since it is expected that insurers have more knowledge and power to purchase good quality and affordable care. Since the Health Care Insurance Act of 2006, the market gained responsibility in order to create more efficiency by enhanced competition. By selective purchasing of health care insurers, health care providers are forced in competition in order to be contracted. Since citizens have choice for different insurers, insurers are also in competition and strive for affordable insurance policies and high quality care contracts. However, information asymmetry is present between insurer and provider concerning costs, quality and necessity of treatments. Providers often have an incentive to produce, whereas an insurer does not want to pay unnecessary. Alignment of insurer and provider might eliminate perverse incentives.

8.1.2  What is insurer-provider integration?

With vertical integration in health care, a situation is meant in which insurers have a legal or factual say over health care providers. The most classical form of vertical integration is an insurer exploiting ‘own’ health care institution, for example, a health care insurer establishes its own pharmacy (Rijken, 2009). Another form of vertical integration is participation, when a health care insurer takes part of, or has shares in, a health care provider. The most common examples of integrated health care systems are Health Maintenance Organizations (HMOs) in the United States. But there are also other forms, like managed care organizations, or prepaid group practices. The key factor is financial dependency of actors on the total result of the integrated firm. The Netherlands is not familiar with large scale vertical integration.

8.1.3  What are the theoretical advantages and disadvantages of insurer-provider integration in

\(^5\)For an extensive overview of the references behind these conclusions, please consult the whole chapter.
8.1.5 Which rules and regulations prevent potentially negative effects of insurer-provider integration?

Theory expects vertical integration to be cost reducing. Integration will lower transaction costs because of a reduction in information asymmetry. Alignment of incentives probably leads to a reduction of unnecessary treatments and opportunistic behaviour. Thereby, economies of scale can be achieved and integrated firms are better able to coordinate the total cost spectrum of care. If insurers have the possibility to start up own health care provision, other providers are forced in more fierce competition. This increased bargaining power is not without risk, when a particular insurer is dominant, it might lead to foreclosure and other anticompetitive effects.

With respect to accessibility, theory expects a probability of reduced accessibility, since the incentive of the total firm is to provide less instead of more.

Theory also provides expectations of vertical integration for quality of care. The incentive to obscure quality information by providers disappears if insurers and providers are integrated. Thereby, vertical integration can enhance innovation and continuity of care. However, since the incentives of a vertical integrated firm is to provide less care (or cheaper care) instead of more (or more expensive) care, quality might be deteriorated.

8.1.4 What is the empirical evidence of insurer-provider integration on quality, accessibility and affordability of health care?

Based on the multiplicity of empirical literature, the following conclusions can be drawn. As to the aspect of costs, vertically integrated organizations are expected and found to operate more efficient and cost-effective. An alignment of interest of insurer and provider are the main reason for this finding, together with savings by economies of scale and better coordination of care enabling the vertically integrated firm to control total costs. Whether vertically integrated firms perform better than non-integrated firms with respect to quality is not evident. Some argue vertical integration leads to an integration and coordination of health care services, which will lead to an increase in quality. Based on the results found, it cannot be concluded that vertical integration derogates quality. However, it has been found that patients often are less satisfied with their health care services under a vertically integrated system. Since healthcare is mainly an experience good and there are multiple providers available, satisfaction of patients is crucial for a health care provider and insurer to survive in this market. A distrust of patients in insurer-provider integrated firms is found as a barrier for vertically integrated firms to enter the market. The results are not clear-cut. The central question is whether this uncertainty is sufficient to prohibit vertical integration. We cannot be sure whether potential benefits and drawbacks work out in reality in the Netherlands. Because of this uncertainty, we should pay attention to possible negative effects and prevent the market from the worse case scenario; quality goes down because integrated health care firms spare on the health care provided and prices go up because of worsened competition.
Several regulatory agencies, all with specific abilities are regulating the market. The IGZ tries to maintain health care quality, and the ACM and NZa monitor and ensure the market from being competitive which results in accessibility and affordability of health care. They apply the Health Care Regulation Act, the Health Care Insurance Act, the Dutch Competition Act, the Quality Act and follow European Guidelines concerning horizontal and vertical integration. An illustration of the procedure to be followed if parties want to merge is found in the case DSW-Vlietland.

8.1.6 What is the rationale behind the government plans for a prohibition of insurer-provider integration in Dutch health care?

The most important and central argument of the minister is that vertical integration creates a probability that insurers and providers will no longer act in the interest of patients. She argues that quality might be derogated if the critical third party purchaser changes into the owner of health care providers: where former health care insurers strived for enrollees by purchasing the best quality for the lowest price, vertical integration might change objectives and creates incentives to provide less or lower quality/cheaper care. However, it is unlikely that vertical integration will derogate quality, as long as preconditions (the absence of competitive threats and the ability for citizens to switch insurers) are fulfilled. If regulatory agencies are able to prevent the market from anticompetitive effects, insurer-provider integration is unlikely to harm patients. Since public opinion is against vertical integration, vertically integrated firms should prove their abilities in order to receive trust and succeed.

8.1.7 Central question: the advantages and disadvantages of insurer-provider integration: what are implications for Dutch health care policy?

As can be seen in theoretical and empirical literature, there are several promising effects which can lead to major cost reductions which contributes to the affordability of health care, a major advantage for society. Thereby, vertical integration can increase quality in various ways. Vertical integration also has disadvantages, but regulatory institutions can prevent these negative effects of vertical integration with respect to affordability, accessibility and quality. Given the potential benefits of vertical integration, I would argue that the Dutch government should give the positive effects of vertical integration in the Netherlands a chance. If the preconditions are fulfilled (competition, regulatory authority, patient mobility), it is unlikely that vertical integration will harm our health care objectives, quality, accessibility and affordability of care. Vertical integration can contribute to these objectives. Therefore, I discommend the law amendment proposed by the minister. A prohibition of all forms of vertical integration will exclude any possible benefits and is therefore not desirable. Minister Schippers should withdraw this proposal and maintain the possibility for vertical integration. Politics should provide stability of the
market and clarity of rules. Some insurers are willing to vertically integrate but hesitate since there is a substantial chance that the minister will prohibit insurer-provider integration and time and/or money of exploring the possibilities to integrate will be wasted. Since health care insurers have to proof their intentions and performance in vertical integration to the public in order to be trusted and to succeed, it is not likely that quality will be decline. However, it is important that the preconditions are fulfilled: attention should be paid to the way the ACM, the NZa and the IGZ take their initiating role of preventing the market from uncompetitive effects, and its undesired consequences like diminished quality of care, reduced access and higher prices. Taken the official decisions of the ACM into account, they have seen no reasons to prohibit a proposed merger. It is important that they will prohibit (both horizontal as vertical) integration in cases when parties attain significant market power or economic dominance. The IGZ should sustain a minimal level of quality for health care providers; although in a competitive market health care insurers or vertically integrated firms will strive for the best quality care in order to attract enrolees. Besides, attention should be paid to the possibility of patients to switch health care insurance. There are no clear indications that insurers are able to act independently of the critical choice of enrolees, but since (potential) patient mobility it is at the foundation of competition on the health care market, this precondition should be fulfilled.

8.2 LIMITATIONS OF STUDY

Looking afterwards, I would have done things the same way if I could have start over again. The extensive time-consuming orientation in the first phases seemed like a waste of time without any output, but it enabled me to understand literature and to get overview of literature. The actors I interviewed were selected carefully. I have heard patients (represented by NPCF), insurers (Achmea and the branch organization, ZN) and providers (NVZ) and provided me a broad overview of opinions of different field actors. The opinion of other key actors was easy to find, but if I had more time the total spectrum of actors and interest groups could be heard (other insurers, other providers (for example, general practitioners or pharmacists). More information about the opinion of more actors would enable me to provide a more extensive overview of supporting and opposing actors, giving insight in the likelihood of a future of vertical integration in the Netherlands. Since I have interviewed, to my opinion, most important actors, I do not think that additional interviews would have changed my conclusion dramatically.

I admit that a systematic literature review would have enhanced the scientific value of this research, although I acted objectively as possible. I did not searched for literature in a particular time period, or searched for particular terms to present a thorough overview of outcomes of all available literature for a particular time period. Instead, I searched more freely for relevant literature concerning vertical integration, recent as possible. Sometimes this more free approach was even necessary, since authors often meant different things by, and used different terms of, vertical integration. Since I included all (both positive and negative effects) of vertical integration and assessed what the authors actually meant by vertical integration (instead of searching for particular terms) I do not expect my research to be
unscientific or biased.

8.3 RECOMMENDATIONS FOR FURTHER RESEARCH

Considered the political situation, uncertainty and a negative public opinion; I do not expect a spurt of vertical integration in the Netherlands. But if it does, it would be interesting to see whether vertically integrated firms meet their expectations. The possibilities for less far-going alternatives for vertical integration can be assessed.

It might be interesting to determine why the political and public opinion about health care insurers is as negative as it is today. When the core of distrust in health care insurers is explored, insurers have guidance how to improve integrity image. When insurers gain trust, they might have more abilities to steer patients and organize care.
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*Achmea*

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