

Strategic alliances in health care

Moving towards integrated delivery systems in the Netherlands



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Summary

As of 2006, the Dutch health care system has transformed significantly with the introduction of market forces and competition among health insurers and health care providers. The term regulated competition was used to indicate that all actors involved in this competitive system are operating under a regulatory framework set out by the government to protect the public goals of affordability, accessibility and quality of care. Despite significant improvements in the preconditions necessary for this model to work, the full potential of regulated competition to increase efficiency and improve health care delivery has yet to be achieved. The current system is still characterized by fragmented and uncoordinated health care delivery, caused by the way health care is organized and financed. Major contributors to the rise in health care costs and the lack of coordinated health care delivery are the misaligned (financial) incentives embedded in the system. Other factors, such as the financial and organizational separation between primary and secondary care in the Netherlands, impedes collaboration between different health care providers and prevents the emergence of new initiatives that could improve the quality of care.

Here, it is argued that integration of financing and delivery of care will greatly improve efficiency in Dutch health care. Organizations that have fully integrated financing and delivery of care are known as integrated delivery systems (IDS), and they include both a delivery system (physicians, hospitals, other clinicians, clinics, etc.) and an insurance function (benefit plans, financing arrangements) under one roof. They have been described as a network of organizations that provides or arranges to provide a coordinated continuum of services to a defined population and is willing to be held clinically and financially accountable for the outcomes and health of the population served. Advantages of such an organization include aligned interests between providers, payers and patients, financial and clinical accountability, ability to coordinate health care delivery across the entire spectrum, use of information technology, and matching resources with the needs of the population served.

In this thesis, two options are proposed on how to move towards IDSs in the Netherlands, given the current organization and financing of the health care system. Firstly, hospitals could forge strategic alliances with insurers by taking over their contractual obligation to provide, or to reimburse, health care to their subscribers. Secondly, care groups could be given the financial and clinical responsibility to make sure their patients receive adequate health care. Both modalities resemble many of the characteristics that make up an IDS, such as per capita prepayment, aligned interests among payers and providers, increased financial and clinical accountability, and collaboration and coordination between primary- and secondary care providers. As such, these two approaches hold great potential to improve efficiency of the Dutch health care system while preserving the public goals of affordability, accessibility and quality of care.

1 Introduction

Developed countries are confronted with increases in health care costs. Total expenditures on health care as a percentage of national gross domestic product have almost doubled since 1960 for many of these countries, and is expected to continue rising.¹ In the long run, health care systems may financially become unsustainable and crowd out other important social programs, such as education. For that reason, health care system reforms are high on the political agenda. Over the past century, health care systems in developed countries have been reformed in roughly three waves.² The first wave entailed ensuring universal coverage and equal access to medical care, followed by a second wave of cost containment, expenditure caps and rationing tools. The third wave involves the introduction of incentives and competition. Health care reforms in the Netherlands have been described to fit this subdivision particularly well.^{3,4}

The first wave, which lasted till approximately 1970 in the Netherlands, entailed ensuring universal coverage and equal access to medical care. Due to the absence of constraints on the demand and supply side, health care costs were uncontrollable. As a result, the second wave (1970-2000) involved the introduction of constraints on the demand and supply side. To reduce demand and stimulate adequate use of health care services, patients were confronted with co-payments and deductibles. On the supply side, health care costs were contained by implementing expenditure caps, global budgets and rationing tools. However, strong supply side regulation and rationing policies resulted in an inefficient allocation of resources. Moreover, increased waiting lists caused societal dissatisfaction and both national and international courts ruled that long waiting times for health care was a violation of the citizens' right to health care. Due to increasing pressure from the public and the courts, the Dutch government decided to reinstate open-ended financing. Though, in the absence of adequate incentives and structures for an efficient use of health care resources on both the demand and supply side, this resulted again in a sharp increase of health care expenditures.⁵

These issues have led the Dutch government to reconsider their health policies, resulting in the third wave that involves the introduction of adequate incentives and regulated competition. The purpose of introducing incentives and competition in health care is to achieve an efficient allocation of resources, promote innovation and enhance the system's responsiveness to consumers' preferences.⁶ Beginning in the early 1990s, market-oriented reforms and de-regulation of the health care sector have gradually been implemented. The goal of these reforms was to increase efficiency of the health care system by allowing more competition at the level of both the health insurer and the health care provider. Health insurers have to compete with each other to obtain more subscribers, and health care providers have to compete with each other to get contracts with health insurers. Health insurers are expected to act as prudent buyers of care on behalf of their customers. Both health insurers and health care providers are limited in their actions by a regulatory framework set out by the government to guarantee the public goals of affordability, accessibility and quality of care. In order to combine regulated competition with these public goals, certain preconditions have to be fulfilled such as risk equalization, product classification, outcome and quality measurement, consumer information, and effective competition policy.⁷ However, many conditions necessary to enable proper competition

among health insurers and among health care providers are currently unfulfilled.⁸ As a result, implementation of regulated competition in the Netherlands is still a work in progress.

1.1 Misaligned incentives and uncoordinated health care delivery

In spite of significant increases in health care expenditures over the past century, concerns remain about the quality of health care delivery.^{9,10} The Dutch health care system is characterized by fragmented and uncoordinated health care delivery, caused by the way health care is organized and financed.

Currently, Dutch health insurers act as third-party purchasers of care on behalf of their customers. Information-asymmetry between insurers and providers, and the lack of adequate performance indicators, makes it difficult for insurers to properly assess the quality and costs of care provided by physicians. Moreover, both parties have to deal with costly and time-consuming negotiations about all health care services provided. Whereas providers have an incentive to deliver more care to increase their revenues, insurers have the exact opposite incentive. The result is a zero-sum game, in which the gains of one party come at the expense of the other party.¹¹ Misaligned incentives between insurers and providers results in cost-shifting and accumulation of bargaining power, with no additional value created for consumers.¹²

Traditionally, Dutch physicians were operating in a fee-for-service cost-based reimbursement system. In combination with well insured patients, this creates cost-inflationary incentives and lacks the stimulus to organize, coordinate, or improve care.¹³ Instead, such a system provides direct financial incentives to physicians to deliver more, and more costly, health care to their patients than strictly necessary. During the past years, bundled payment schemes have been introduced in both primary and secondary care settings. Although this has stimulated organizations to work more efficiently, patients are still often treated by multiple independent caregivers who do not always belong to the same team. As a result, conflicting economic interests may arise since investments made in one place may pay off in a different one.¹⁴ This inhibits collaboration between caregivers and hinders the development of coordinated health care delivery. Without proper communication among health care providers to ensure adequate exchange of information on patients, unnecessary duplication of health care provision is deemed to occur. Innovation and continuous improvement of health care delivery are not encouraged in such a system.

Other factors, such as the financial and organizational separation between primary and secondary care in the Netherlands, impedes collaboration between different health care providers and prevents the emergence of new initiatives that could improve the quality of care. Bridging the gap between these health care providers by aligning their interests and by creating adequate financial incentives seems to be a major step forward to better health care delivery. Additionally, aligning the insurers' and providers' interests could transform the zero-sum game in the health care purchasing market to a positive-sum game where all parties are focused on creating value for their customers.

1.2 Integrated delivery systems

In light of the introduction of regulated competition in the Netherlands and general concerns about the costs and quality of health care, the challenge is to find optimal ways of organizing and financing health care delivery while preserving universal coverage and meeting citizens' expectations. Since a free market in health care will not result in an efficient and equitable health care system,¹⁵ Enthoven argues that competition in health care should be carefully designed and managed.¹³ He advocates that competition and market forces in health care need to be carefully designed and managed by a sponsor (e.g. employer) in a system of universal health insurance based on cost-conscious consumer choice of competing health care financing and delivery plans.¹⁶ Managed competition is a hybrid between the opposite extremes of a completely socialized system of health insurance, and an unregulated private insurance market.¹⁷ It attempts to make use of the benefits of competition without sacrificing the public goals of affordability, accessibility and quality of care. As such, managed competition is very similar to the model of regulated competition in the Netherlands, since the Dutch system combines mandatory universal health insurance with cost-conscious consumer choice of competing health insurers.³

One key element of Enthoven's view on a competitive health care market is that competition should take place at the level of *integrated* delivery systems (IDS), which are health care organizations that provide both health insurance and health care delivery, and thus align the insurers' and providers' interests.¹⁸ These integrated health plans, also known as prepaid group practices (PGP), have been defined as a "network of organizations that provides or arranges to provide a coordinated continuum of services to a defined population and is willing to be held clinically and fiscally accountable for the outcomes and health status of the population served".¹⁹ Critical components of an IDS include, inter alia, a multispecialty physician organization, per capita prepayment, accountability for the quality and costs of care that is delivered, and a relationship between the delivery system and the insurance entity. The result is an organization with effective partnerships between medicine and management, enhanced information management capability, and strong accountability mechanisms. Additionally, there is no longer a need for costly and time-consuming negotiations between the insurer and providers about all health care services provided, and information-asymmetry between both parties is no longer an issue. By integrating the financing and delivery of care, these systems hold the potential to provide coordinated, efficient, evidence-based care, supported by state-of-the-art information technology.²⁰ However, such integrated delivery systems that provide high quality care in response to consumers' preferences are currently non-existent in the Dutch health care system. Nevertheless, steps can be taken towards integration of health care financing and delivery, as will be described below.

1.3 Strategic alliances

Collaborative networks of health care providers can be shaped in various forms, and numerous integration techniques are available to integrate financing and delivery of health care, thus creating a continuum of integrated systems.¹⁷ In this paper, two approaches to achieve more integration in health care financing and delivery will be described; on the one hand, hospitals could take the lead by forming strategic alliances with health insurers, while on the other hand primary care providers could be given the financial and clinical responsibility to make sure their patients receive adequate health care.

1.3.1 Hospital-insurer alliance

Despite the absence of integrated delivery systems in the Netherlands, proposals to align insurers' and providers' interests in Dutch health care have been brought forward.²¹ Here, it is argued that hospitals should take over the contractual obligation of health insurers to provide, or to reimburse, health care to their customers. The hospital receives a per capita prepayment from the health insurer, thereby reducing the incentive to provide more health care than necessary. In addition, it will encourage the provision of preventive services and stimulate hospitals to cooperate with primary care providers. By aligning the insurer's and hospital's interests and by creating adequate financial incentives, a zero-sum game can be prevented and both parties can focus on creating value for their customers. As such, the hospital and health insurer form a strategic alliance while retaining their independent positions.

1.3.2 Care group fundholders

A different approach to overcome fragmented and uncoordinated care is based on the British National Health Service where general practitioners are (partially) responsible for the costs of follow-up care of their patients.^{6,22} A similar approach is currently being implemented in the Netherlands, where health insurers are able to purchase care for their subscribers with diabetes mellitus, chronic obstructive pulmonary disease, or at risk for vascular complications, as a bundled product from so called *care groups*. A care group is a legal entity that consists of numerous primary care providers and is often owned by general practitioners.²³ These organizations receive a single fee from the insurer to cover all primary care services included in the bundle, thereby transferring the financial risk to care groups. This policy has shown to stimulate the formation of multi-disciplinary networks of primary care providers. In the future, this initiative could be expanded by making care groups fully responsible (clinically and financially) for all health care costs (i.e. both primary and secondary care) of their enrolled members, thereby stimulating prevention and coordination of health care delivery among primary and secondary providers.

1.3.3 Moving towards integrated delivery systems

In this thesis, it is hypothesized that these two approaches to integrate financing and delivery of health care hold great potential to improve efficiency of the Dutch health care system, while preserving the public goals of affordability, accessibility and quality of care. The objective of this thesis is to propose several options on how to move towards integrated health care delivery systems in the Netherlands, given the current organization and financing of the health care system. The Dutch institutional context and the competitive environment in which health insurers and health care providers operate, calls for extensive elaboration on how integrated delivery systems could improve efficiency in the Dutch health care system and how to get there. Both approaches to achieve integration of health care financing and delivery will be explained in more detail.

Against the above sketched background, the central research question of this thesis is as follows: “*Are integrated delivery systems a solution for the problems of misaligned incentives and uncoordinated health care delivery in the Dutch health care system and if so, how to get there?*” Sub-questions belonging to this research question are:

- How is the Dutch health care system currently organized and financed?
- What are the shortcomings and successes of the Dutch health care system?
- What are the principles and key elements of managed competition in health care?
- What are the advantages and disadvantages of integrated delivery systems?
- Can integrated delivery systems solve the problems of misaligned incentives and uncoordinated health care delivery in the Dutch health care system?
- How to move towards integrated delivery systems in the Netherlands?

In order to answer these questions, a literature study will be performed combining theoretical and empirical literature. In chapter 2, an overview will be given of the current Dutch health care system and how it is organized and financed. Recent reforms in Dutch health care will be evaluated in terms of its shortcomings and successes. In chapter 3, Enthoven's theory of managed competition will be discussed extensively, as well as the advantages and disadvantages of integrated delivery systems. Finally, chapter 4 will discuss how integrated delivery systems can solve the problems of misaligned incentives and uncoordinated health care delivery in the Dutch health care system. Two approaches of moving towards integrated delivery systems in the Netherlands will be proposed.

This literature study will provide an overview of proposals, theories and empirical results with regard to competition in health care and integration of health care financing and delivery. Lessons and experiences from abroad will be applied to the Dutch situation. This thesis thereby provides strong support to alter the organization and financing of health care delivery in the Netherlands. Consequently, this will stimulate health care providers and health insurers to reassess their current positions in the Dutch health care system, and contribute to a better and more efficient health care system.

2 Regulated competition in Dutch health care

To understand how integration of financing and delivery of care can improve efficiency in the Dutch health care system, it is first necessary to get an overview of how the Dutch health care system is currently organized and financed, and how this has resulted in the problems of misaligned incentives and uncoordinated health care delivery. This chapter will address the following two questions:

- How is the Dutch health care system currently organized and financed?
- What are the shortcomings and successes of the Dutch health care system?

2.1 Health Insurance Act

Following a period of ensuring universal access to basic health care services and a period of cost containment by the government, the 1990s were characterized by gradual implementation of market-oriented reforms. These reforms were the result of an advisory report published by a government-appointed committee, the Dekker Committee.²⁴ This committee recommended market-oriented reforms within the context of a national health insurance system. In order to combine competition and universal coverage, certain preconditions had to be fulfilled such as risk equalization, product classification, outcome and quality measurement, consumer information, and effective competition policy.⁷ During the twenty years following the Dekker-report, reforms were gradually implemented in order to meet these preconditions. Ultimately, these developments led to the enactment of the Health Insurance Act (HIA) in 2006.

In short, the HIA obliges each person who legally lives or works in the Netherlands to buy individual health insurance, with a legally prescribed basic benefit package, from a private insurance company. What is included or excluded in the prescribed basic benefit package is determined by the government. Insurers on their turn are legally obliged to accept each applicant for a basic insurance contract at a community-rated premium. Exclusion of coverage due to pre-existing conditions or risk-rating premiums are forbidden. An adequate system of risk equalization creates a level playing field among health insurers.

2.1.1 Mandatory basic health insurance

All Dutch citizens are obliged to buy basic health insurance from a private insurance company. Aside from a few exceptions, those who do not purchase insurance and pay their premium face a penalty. Individuals are allowed to purchase health insurance collectively. This can be any group of individuals (e.g. patient organization, sports club or employment) to which health insurers are permitted to give a group discount. Consumers have an annual choice of insurer and insurance products.

2.1.2 Basic benefit package

The government decides what is included and excluded in the mandatory basic benefit package. This includes, inter alia, care by general practitioners and specialists, as well as pharmaceutical care and hospital care (for up to 1 year). Long-term care and hospitalization beyond 1 year are covered by a separate scheme, the Exceptional Medical Expenses Act, which is subjected to a different financial and organizational regime.

Entitlements in the basic benefit package of the HIA are described in terms of functions of care (e.g. pharmaceutical care). The government determines *which* functions of care are included in the basic benefit package and *when* the insuree is entitled to receive this care; the health insurer can determine *where* and by *who* this care should be delivered. Insurers are permitted to contract selectively with health care providers, use financial incentives to channel their customers (e.g. co-payments when using non-contracted health care providers), and set procedural conditions to manage the use of health care services. Although the basic benefit package is the same for everyone, its implementation by insurers can be completed in several ways.

2.1.3 Open enrollment and community rating

Health insurers are legally obliged to accept all applicants at any time for each basic insurance contract for the same premium in each province (community rating per product). Insurance companies can offer various modalities of the basic insurance contract with regard to the use of contracted and non-contracted health care providers, the height of the premium, deductibles, and co-payments. Moreover, health insurers have a contractual obligation towards their subscribers. This obligation can be completed in two ways; either insurees are entitled to receive care in kind from contracted providers, or they are entitled to receive reimbursement of medical expenses. As such, many policy modalities can exist for the basic insurance contract, but for each product the insurer has to accept each applicant for the same premium. Risk-rating or exclusion of pre-existing conditions are not allowed.

Alongside the mandatory basic insurance, individuals are free to purchase voluntary supplemental health insurance for benefits not included in the mandatory basic benefit package (e.g. dental care). With regard to these additional insurance schemes, health insurers are allowed to refuse applicants and risk-rate premiums. Also, insurance companies are permitted to sell other insurance products (e.g. car insurance) along with health insurance.

2.1.4 Financing

Under the HIA, health insurers are financed in two ways (figure 1). Firstly, all individuals who are 18 years or older have to pay a community-rated premium directly to the chosen health insurer. Although the government decides what is included in the basic benefit package, each insurer sets its own premium per insurance product.

Secondly, all individuals have to pay an income-related contribution to the tax authority. Employers are legally obliged to compensate their employees for these contributions. The income-related contributions are deposited in a risk equalization fund (REF) which aims to create a level playing field among health insurers. For high-risk insured people, health insurers receive *ex ante* a risk-adjusted contribution from the REF, whereas for low-risk insured people, health insurers have to contribute *ex ante* to the REF. The sum of the income-related contributions equals around 50% of the total insurers' revenues, while the remaining 50% comes from the out-of-pocket premiums.

Under the age of eighteen, no premium payment is required. Instead, the government compensates these costs via a direct contribution to the REF. Moreover, households receive an income-related subsidy from the government to pay their out-of-pocket premium. Whatever portion of their premium is not covered by this subsidy, has to be paid out-of-pocket. Finally, a deductible of 220 euro per person per year (in 2012) is mandatory for all adults, regardless of the chosen insurer. It is possible to voluntarily increase this deductible in exchange for a premium rebate.

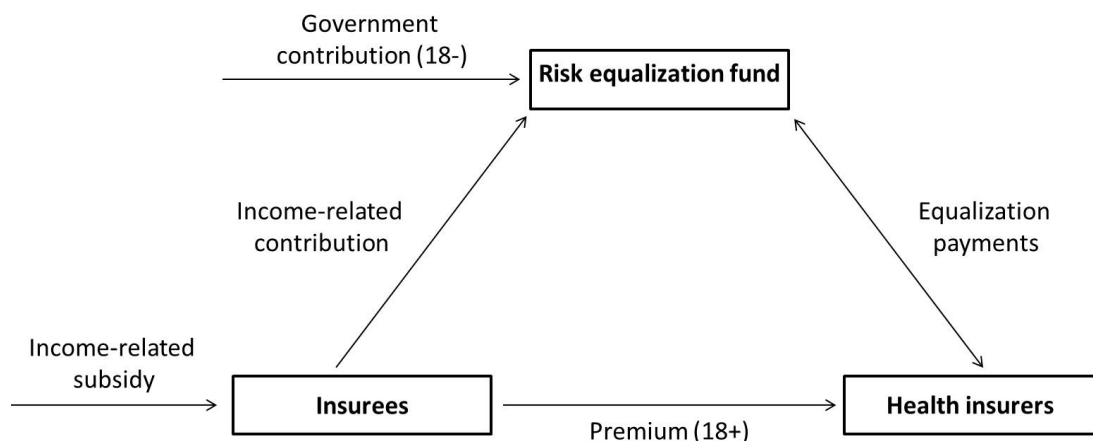


Figure 1. Overview of how the Health Insurance Act is financed. Insurers receive a contribution from the REF *ex ante* for high-risk members, whereas for low-risk members insurers have to contribute to the REF *ex ante*.

2.1.5 Preconditions

With the introduction of the HIA, health insurers have become key actors in the Dutch health care system. They have to compete with each other in the health insurance market to obtain more subscribers. In doing so, they have to act as prudent buyers of care on behalf of their customers and compete with each other on the basis of premium, service, and quality of care provided by their contracted health care providers. The threat of losing customers due to high premiums or inadequate contracting of health care providers motivates health insurers to purchase health care efficiently.

Health care providers have to compete with each other in the health care purchasing market to obtain contracts with health insurers. By reducing costs and/or improving quality, health care providers can acquire favorable contracts with health insurers. The pivot on which everything hinges is the extent to which insurees 'vote with their feet'. Insurees should critically assess the insurers' contracts

and policy conditions. Health insurers on their turn critically review the costs and quality of health care provided by physicians and hospitals, which pressures competing health care providers to operate efficiently. Ultimately, this upward spiral of pressure starting with consumer-based choice of competing health insurers should improve health care delivered to patients and increase overall efficiency of the health care system (figure 2).

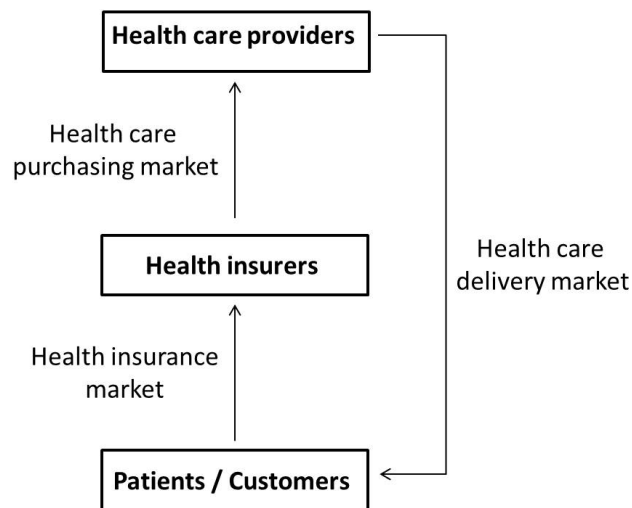


Figure 2. Upward pressure starting with consumer-based choice of competing health insurers; this stimulates health insurers to critically assess the quality and costs of health care provided by physicians and hospitals. This will then pressure competing health care providers to operate efficiently and improve health care delivery.

In order to combine regulated competition with universal coverage and to create appropriate incentives for all actors involved, certain preconditions have to be fulfilled.⁷ Risk equalization, product classification, outcome and quality measurement of health care providers, transparency and consumer information about insurers and providers of care, and an effective competition policy are of vital importance for a proper functioning of all submarkets. Without the fulfillment of these preconditions, competition and market forces in health care will not produce desirable results.¹⁵ Instead, the public goals of affordability, accessibility and quality of care may be at risk. Because the preconditions are currently not adequately fulfilled, both insurers and providers are constrained in their actions by regulations set out by the government to guarantee these public goals (e.g. not all health care services are freely negotiable). The government intends to relax these constraints gradually as the preconditions necessary for regulated competition to work are increasingly fulfilled. A generic competition authority (NMa) and a health care specific authority (NZa) monitor the health care system.

Adequate risk equalization system

Without a system of risk equalization, open enrollment in combination with community-rated premiums gives health insurers a strong incentive to select risks. The risk equalization model aims to attenuate this incentive by settling predictable differences between insured risks *ex ante* so that each insured represents an equal risk to the insurer. For each insurer, the expected expenses per enrollee are

calculated based on age, sex, socioeconomic status and indicators of disability and health/disease. Health insurers are then *ex ante* compensated for differences in risks in their insured portfolio, thereby creating a level playing field. Without an adequate system of risk equalization, insurers have an incentive to identify predictable losses (i.e. high-risk people and those with chronic conditions) and avoid their enrollment by inadequately purchasing health care for these groups of patients.

Product classification

Health insurers are expected to act as prudent buyers of care on behalf of their customers. A transparent system of product classification and medical pricing is essential for insurers in order to purchase care from providers. Without this, insurers would not be able to compare providers with regard to costs and quality of the services they need to purchase. It thus enhances transparency and increases competition among providers.

Outcome and quality measurement

If health insurers want to purchase adequate health care for their subscribers, information is needed about the costs and quality of care provided by physicians and hospitals. The use of performance indicators to objectively measure outcome and quality of care is necessary to enable specified contracts between insurers and health care providers. Without this information, competition will focus only on price, which will disincentivize providers and insurers to focus on quality as well. Additionally, consumers need information on the quality of health care providers contracted by their health insurer to decide which insurer or insurance product is best suited for them.

Consumer information

The pivot on which the Dutch health care system hinges is the willingness of insurees to switch health insurers when they are dissatisfied with their current health insurer. The extent to which insurees can assess the appropriateness of their insurance contract depends on the presence of consumer information and transparency about the price and quality of contracted health care providers by their insurer. Consumers need to be able to compare insurers with respect to price, service, contracted health care providers, and customer satisfaction.

Effective competition policy

For competition among insurers and health care providers to work, there should be sufficient insurers and providers. Effective competition policy is necessary to avoid anti-competitive actions by insurers and health care providers and a national competition authority should critically monitor and assess consolidations. Also, insurers and health care providers need to have balanced negotiation positions. Either party can abuse its market position to acquire favourable results in the negotiation process at the expense of the other party. Market shares, information on prices and quality, contestability of the market and the extent to which insurers are able to channel their customers to contracted providers all determine the outcome of this negotiation process. Possible abuse of dominant market positions by insurers or health care providers must be monitored and dealt with.

2.2 Shortcomings and successes

Following the Dekker proposal, successive governments have continuously worked on fulfilling the preconditions necessary for regulated competition to work. Even today, none of the preconditions are completely fulfilled, leaving ample room for flaws and problems in the current health care system.²⁵ Nevertheless, important steps have been taken to enable a proper functioning of the regulated competition model in Dutch health care.

2.2.1 Health insurance market

Particularly in the first years following the enactment of the HIA, price competition among health insurers was fierce.²⁶ Premiums were lower than expected and health insurers made significant losses on the mandatory basic insurance contracts.²⁷ Furthermore, in the initial years a high percentage (18% in 2006, followed by 3-4% in subsequent years) of individuals switched health insurer.²⁸ Consumer information about insurers and providers has increasingly become available and transparency in the health insurance market is strongly promoted and monitored by the Dutch Health Care Authority.²⁶

Despite significant improvements in the risk equalization model, it is still possible for health insurers to identify unprofitable groups of patients.²⁹ Nonetheless, these improvements have made it possible for the government to increase the health insurers' financial risk to 92% of all expenses (excluding mental health care), by gradually reducing *ex post* cost-based compensations and increasing *ex ante* payments.³⁰ This incentivizes health insurers to purchase health care efficiently, while simultaneously it stimulates risk selection. A trade-off between risk selection and efficiency is inevitable, but the better the equalization payments are adjusted for relevant risk factors, the less severe is this trade-off.³¹

2.2.2 Health care purchasing market

A system of product classification, known as *diagnosis-treatment combinations (DTCs)* has been developed for hospital care. A DTC is a bundled 'product' that encompasses all hospital care for a given diagnosis, including the diagnosis, treatment and specialist's fee. Services provided by hospitals are paid on basis of these DTCs, for which prices are determined prospectively. About one third of a hospital's revenue is regulated by the Dutch Health Care Authority, whereas the remaining two thirds is freely negotiable.³² Insurers and health care providers have gradually received more freedom to negotiate about prices, service and quality of care of these DTCs and the government intends to further increase the number of freely negotiable DTCs in the future.

With regard to primary care, a bundled payment system for diabetes care, chronic obstructive pulmonary disease care, and vascular risk management was introduced in 2010. Health insurers purchase these bundles from so called *care groups*, which are large organizations often owned by general practitioners and who act as intermediates between insurers and primary care providers.²³ These care groups are responsible for organizing care and ensuring its delivery by either providing the care itself or by subcontracting with other health care providers, such as GPs, laboratories, dietitians

and physiotherapists. Whereas the insurer and care group negotiate about the price of the bundle, the fees for subcontractors are negotiated by the care group. Hence, two health care purchasing markets have been created.³³ The largest insurer in the Netherlands, Achmea, has expressed concern about the current bundled payment system.³⁴ It considers the bundled payment as a 'black box', because it is unclear to them which services they are exactly paying for. Also, there is the worry about double-funding, because insurers can not check whether the treatment of a diabetes patient with other chronic conditions is paid for twice (i.e. via the bundled payment system and via the traditional fee-for-service payment). On top of that, insurers and providers are confronted with increased administrative costs resulting from contracts between insurers and care groups, care groups and subcontractors, and the regular contracts between insurers and individual providers for diseases not included in the bundled payment.

Insurer-provider bargaining is a complex, time consuming and costly matter for both parties. Information asymmetry between health insurers and providers, and the absence of adequate performance indicators, makes it difficult for insurers to properly assess the performance of providers.²⁶ As a result, negotiations have focused mainly on prices only.^{35,36} Also, providers are confronted with numerous health insurers who each set their own quality standards and criteria with regard to health care delivery. Transaction costs are high and the negotiation process is regarded as a zero-sum game, where the gains of one party come at the expense of the other party. Whereas providers have an incentive to deliver more DTCs or bundled products to increase revenues, insurers have the exact opposite incentive. Misaligned incentives between insurers and providers does not result in value creation for patients.¹¹ Instead, it results in cost-shifting and accumulation of bargaining power, which can be illustrated in the Netherlands by the increase in consolidations of insurers and hospitals.^{37,38} Additionally, it is hard to tell if negotiation positions are balanced, since there is a grey area between competitive negotiations and abusing dominant positions. Finally, a free-rider effect among health insurers hampers the insurers' involvement in the sponsoring of quality-improving programs in physician practices and hospitals, because customers of competitors could benefit from these investments as well.^{26,39}

Although health insurers are allowed to selectively contract health care providers, this may damage the insurer's reputation when these decisions are not based on objective performance indicators. Although much progress has been made in the development of these indicators, the quality of many health care services can still not be measured adequately.³⁹⁻⁴¹ Without this information, insurers can not negotiate on quality of care with providers, whereas consumers can not assess the quality of providers contracted by their health insurer. Fear of reputation damage and consumer distrust in the insurer's role as third-party purchasers of care complicates the insurer's newly assigned role.^{40,42} Nevertheless, insurers are increasingly using information about quality to contract health care providers and assign these as preferred providers for their members.^{26,40} Using financial incentives (e.g. exemption of paying the mandatory deductible) they try to channel their members to these preferred providers.⁴² In 2013, a national health care quality institute will be established to help insurers set standards and develop performance indicators on which they can base their contracting strategies.

2.2.3 Health care delivery market

The U.S. Institute of Medicine has reported that there is a chasm between the overall quality delivered by the U.S. health care system and what it should be, given the resources spent.^{43,44} Many of the reports' insights are also applicable to most Western countries, and the demand for greater safety, patient centeredness and effectiveness of health care delivery will only increase. Quality of care has also become a major issue on the Dutch health care agenda, but concerns remain about the way health care is delivered and financed.²⁶ Widespread practice variations and provision of unnecessary and inappropriate health care services may not always be in patients' best interests, both financially and clinically. Financial incentives,⁴⁵ a lack of scientific evidence, disagreement on best practices,⁴⁶ local schools of belief on which treatment works best,⁴⁷ different use of the newest technology⁴⁸ and differences in patient and physician preferences have all been reported to contribute to practice variation.⁴⁹ Also in Dutch health care it has been demonstrated that practice variation exists, indicating that some patients do not receive appropriate care.⁵⁰ On top of that, conflicting and misaligned financial incentives, and an organizational and financial separation between primary and secondary health care providers, impedes collaboration between health care providers, blocks innovation, and discourages coordinated health care delivery and quality-improving initiatives.

Currently, all costs of hospital care for a given diagnosis, including the medical specialist's fee, are bundled in the price of a DTC. Since a large share of DTCs are determined prospectively during the hospital-insurer bargaining process, physicians have an incentive to minimize costs within the provision of each DTC. However, providing more DTCs is rewarded with higher sales volumes. Thus, the incentive for physicians and hospitals to provide more health care (at the level of DTCs instead of separate services) remains present. Additionally, hospitals have been reported to engage in up-coding, which is a subtle way of increasing revenues by placing patients unjustly in more costly DTCs.⁵¹

With regard to primary care, care groups have reorganized health care delivery by shifting health care provision normally provided by more costly secondary health care providers to less costly primary care providers.²³ However, total health care costs for these patients did not decrease, largely due to secondary health care providers trying to recoup their lost revenues. Nevertheless, these prospectively reimbursed bundles made care groups financially and clinically responsible for the delivery of some health care services, and this has increased the formation of multi-disciplinary networks of primary care providers.³⁴ But, these bundles do not stimulate preventive health care provision as it only covers the delivery of health care services to those who are already ill. In addition, this initiative is unsuitable for patients with co-morbidity and diseases other than the three mentioned above. Finally, care groups could easily shift costs of patient services outside the care bundle and, since these bundles do not include secondary care, the effect on overall costs of care may not drastically improve. For those reasons, a recent evaluation pointed out that this initiative should be regarded as a step to population-based capitation payment.²³

Whereas many patients, in particular the chronically ill, are in need of coordinated health care delivery across primary and secondary providers, they are often treated by multiple caregivers who not always belong to the same team. In contrast, physicians involved on the same case could have

conflicting economic interests. Because the health care delivery system is financially and organizationally fragmented, investments made in one place may pay off in a different one, which creates perverse incentives.¹⁴ It blocks innovation and collaboration between caregivers, and increases the likelihood of providing unnecessary duplication of health care services. Overall, the concerns about the quality of health care delivery can be traced to misaligned (financial) incentives between insurers and providers, as well as between providers themselves.

2.3 Conclusion

As of 2006, the Dutch health care system has transformed significantly with the introduction of market forces and competition among health insurers and health care providers. The term regulated competition was used in the Netherlands to indicate that all actors involved in this competitive system are operating under a regulatory framework set out by the government to protect the public goals of affordability, accessibility and quality of care. Despite significant improvements in the preconditions necessary for this model to work, the full potential of regulated competition to increase efficiency and improve health care delivery has yet to be achieved. Conflicting and misaligned incentives between insurers and providers, and an organizational and financial separation between primary and secondary health care providers have resulted in an inefficient allocation of resources and hindered the emergence of coordinated health care delivery. Alterations in the way health care is organized and financed is inevitable to cope with the increase in health care costs and to increase value for money by improving the quality of care delivered.

3 Managed competition and integrated delivery systems

The Dutch model of regulated competition is based on Enthoven's model of managed competition in health care. As will be discussed in this chapter, managed competition creates ideal conditions for integrated health care delivery systems to emerge.⁵² Since the goal of this thesis is to propose ways of moving towards integrated delivery systems (IDS) in the Netherlands, insights from Enthoven's theory of managed competition may prove to be highly useful. Therefore, this chapter will deal with the following two questions:

- What are the principles and key elements of managed competition in health care?
- What are the advantages and disadvantages of integrated delivery systems?

3.1 Principles and key elements of managed competition

In the late 1970s, Enthoven proposed to reform the U.S. health care system by designing a system of national health insurance based on regulated competition in the private sector.¹⁶ His proposal, named *Consumer Choice Health Plan*, comprises of periodic cost-conscious consumer choice of competing health plans in a setting of managed competition.

The idea is to give consumers an incentive to choose an efficient health plan by having them make a periodic cost-conscious choice of competing health plans.⁵³ Since an unregulated market in health care will not produce desirable results in terms of efficiency and equity,¹⁵ Enthoven proposed that competition and market forces need to be carefully designed and managed by a sponsor.¹³ Sponsors can be for example large employers, unions, or a governmental entity. Sponsors are active collective purchasing agents contracting with health plans on behalf of a large group of subscribers, and they have to structure and adjust the market continuously to avoid market failure.²⁰ Tools they have at their disposal to manage the market include, inter alia, offering fixed dollar subsidies to subscribers to buy health insurance, standardized benefit packages, quality assurance, open enrollment requirements, risk-adjusted premium subsidies to avoid risk selection, monitoring enrollment patterns, providing quality-related information, and offering cost-conscious choice of competing health plans at the individual level.⁵³ The essence of managed competition is thus the application of available tools by sponsors to structure cost-conscious consumer choice among competing health plans, in the pursuit of efficiency and equity in health care financing and delivery.^{13,54} Like the Dutch model of regulated competition, an adequate system of risk-equalization, outcome and quality measurement, product classification, consumer information, and effective competition policy are of great importance for a proper functioning of the market.

The Dutch model of regulated competition is a living model of Enthoven's managed competition.⁵⁵⁻⁵⁷ Both models are characterized by the use of market forces within a framework of carefully drawn rules, set by a sponsor. In the Dutch model, the government acts as a sponsor by managing competition and using tools (e.g. risk equalization, open enrollment, and mandate to buy individual health insurance) to counteract market failure. For the past twenty years in the Netherlands, successive governments have worked on the regulatory framework necessary to structure and adjust

the health care market to avoid its tendency to inefficiency and inequity. Moreover, the Dutch model combines mandatory universal health insurance with periodic cost-conscious consumer choice of competing health insurers.³

3.2 Integrated delivery systems

As consumers are offered periodic cost-conscious choice of competing health plans in a setting of managed competition, health plans will strive to provide value for money in response to consumers' preferences. When confronted with a cost-conscious choice, consumers will gradually shift to health plans that offer a better combination of quality and costs.¹³ Enthoven's claim for the success of his proposal stems from the demonstrated ability of integrated delivery systems (IDS), organizations that integrate financing and delivery of care, to cut costs substantially while providing high quality care when compared to traditional fee-for-service indemnity plans.^{13,20} As Shortell and Schmittiel explain eloquently: "the current system might best be described as a collection of autonomous professionals providing largely self-defined expert care within organizational, payment, and regulatory environments involving conflicting incentives, goals, and objectives".⁵⁸ IDSs have at least the potential to increase efficiency and quality of health care delivery, while it is clear that the traditional fee-for-service system cannot.^{20,58} Because Enthoven's model of managed competition enables fair competition among IDSs and traditional fee-for-service indemnity plans, it is argued that IDSs will flourish in such a system because of their superior ability to meet consumers' demands.^{17,52,54}

3.2.1 Characteristics

Kaiser Permanente in the U.S. is often considered as the prototypical IDS, as this organization has fully integrated financing and delivery of care.⁵³ Such an IDS, also known as a prepaid group practice (PGP),¹³ has been defined as a "network of organizations that provides or arranges to provide a coordinated continuum of services to a defined population and is willing to be held clinically and financially accountable for the outcomes and health status of the population served".¹⁹ PGPs provide their subscribers with a comprehensive list of health care services for a fixed periodic payment, independent of the subscriber's actual use of services.¹³ As such, a PGP assumes the financial risk for the provision of services to a defined population on a prospective basis.⁵³ It thus integrates the functions of insurance and provision of health care by housing both a delivery system (physicians, hospitals, other clinicians) and an insurance function (benefit plans, financing arrangements) 'under one roof'.⁵⁸ Components of a PGP include a multispecialty group practice, hospitals or other facilities affiliated with the multispecialty group practice, coverage of comprehensive health care services for a defined population, per capita prepayment, accountability for the costs and quality of care delivered, aligned financing arrangements, and a mutually exclusive relationship between the delivery system and the insurance entity. The result is an organization with a closed panel of providers to which subscribers can turn for all their health care needs. In so far the PGP is not able to directly provide all health care services, or in case of highly specialized procedures, PGPs can arrange to provide care

outside their network. Physicians in a PGP are often reimbursed a combination of per capita payment, fee-for-service, salary, and financial bonuses.⁵³

Numerous variations of IDSs exist, depending on the exact structure and characteristics of the organization and the conditions under which they operate.⁵⁴ As such, a continuum of organizations exists that each differ in the way they have integrated financing and delivery of care. PGPs are the prototypical IDS and belong to one end of the spectrum since they have completely integrated financing and delivery of care under one roof. This makes PGPs particularly interesting to study, as to understand how integration of financing and delivery of care could increase value for money in Dutch health care. For the remainder of this thesis, PGPs will be referred to as IDSs.

3.2.2 Advantages

Assuming that the preconditions for managed competition to work are sufficiently fulfilled, the above mentioned components of an IDS combine to produce three characteristics that are key to the potential success of IDSs: i) effective partnership between medicine and management, ii) enhanced information management capability, and iii) accountability (both financially and clinically).⁵⁸ These three characteristics are noticeable in the elements described below that make up an ideal health care organization.

Aligned interests

An IDS receives its income from premiums paid directly by cost-conscious individuals. The premium is set in advance and since the IDS is also the organization responsible for providing the covered services, the premiums serve as a fixed prospective budget.¹³ Exceeding this budget will force the IDS to raise its premiums the following year, thereby risking to lose customers. Thus, its physicians and managers have a strong incentive to monitor and manage the quality, cost and availability of their services so they can deliver health care efficiently and adequately.²⁰ This stimulates physicians to make prudent use of resources, provide care only where evidence indicates it is beneficial, and eliminate wasteful practices and unnecessary health care provision.⁵⁸ Providing more, or more costly, services does not increase the physician's income, as opposed to the traditional fee-for-service indemnity system.¹³ Thus, per capita prepayment is a powerful tool for aligning providers' incentives with patients' interests. To avoid quality-skipping and risk selection by IDSs, outcome and quality information and an adequate system of risk equalization are crucial.

These incentives are further reinforced by the fact that an IDS is not merely a collection of doctors who are loosely connected to each other, but they are all part of the same organization with a shared culture, vision and accountability.⁵⁸ As physicians are also responsible for the organization's financial results, it could serve as a general incentive for economical behaviour.⁵³ An IDS provides an incentive structure for effective partnership between management and medicine, as everyone is focused on the same goals and shares in the rewards of the organization's success. Both the insurance function and delivery system need each other to retain members, revenues and attract top quality staff.⁵⁹

Additionally, information-asymmetry between the insurer and provider is no longer an issue. Integrating the insurance entity with the delivery system eliminates the administrative burden of billing for each service, thereby lowering transaction costs. Moreover, the closed panel of physicians will only have to deal with one organization when it comes to utilization controls, fee schedules and quality criteria. In a disintegrated system, individual autonomous physicians have to deal with numerous health plans whose interests differ from their own. Moreover, health plans may find it unattractive to invest in a doctor's practice to adopt a more efficient way of delivering care, since the benefits will also be reaped by other health plans. An IDS with a closed panel of providers circumvents this risk of free-riding. Overall, vertically integrating the provider function with the insurance entity, in combination with per capita prepayment, aligns the interests of providers, insurers and patients.

Financial and clinical accountability

An IDS is clinically and financially responsible for providing comprehensive health care services. Physicians are by far best qualified to make decisions on which services to provide to a patient and when. It would thus make sense for physicians to take up the main responsibility to allocate resources efficiently. IDSs can gather data on outcomes and treatments in an integrated fashion and be used to evaluate medical practice patterns. It helps physicians to make economical choices about the use of resources and motivates them to choose treatments that are cost-worthy. In a fragmented fee-for-service system, physicians hold little responsibility to contain total health care costs. By integrating financing and delivery of care, IDSs achieve greater accountability for the costs and quality of care. Because quality and economy usually go together, IDSs have a strong interest in keeping members satisfied and thus contract with well-qualified physicians.⁵³ Quality of their contracted health care providers and the associated reputation that comes with it, is of utmost importance for an IDS's market position. Given that the preconditions of sufficient consumer information and objective quality information are fulfilled, competition among health plans will serve as a springboard for quality assurance. Moreover, because IDSs are financially responsible for the continuing care of their members, they must pay the cost of poor-quality care. Hence, IDSs have a strong incentive to provide high quality care.

Coordinated health care delivery

Organized systems like IDSs can allocate resources across the entire spectrum of health care delivery, enabling the system to care for the patient in the least costly, most appropriate setting.¹³ By offering comprehensive health care services, IDSs are able to organize health care more efficiently by, for example, substituting outpatient care for inpatient care. Since an IDS constitutes a closed panel of providers with aligned interests, the benefits of a cost-reducing innovation will be reaped by all doctors. This stimulates better internal planning and coordination of health care delivery. In a fee-for-service system, coordinated health care delivery is difficult to accomplish because physicians are only responsible for a part of the patient's health care needs, and investments made in one place may pay off in a different one.¹³ An integrated organization offering a comprehensive set of health care services

will be able to develop the expertise and information necessary to achieve coordinated health care delivery.

Moreover, IDSs are characterized by a culture of physician peer review, mutual physician support, and effective planning, which are all more difficult to accomplish in a fragmented system.^{13,53} As such, physicians in an integrated multispecialty group practice can learn from each other, coordinate referrals and achieve economies of scale and scope.

Information technology

An IDS will generally be large enough to have the necessary capital to invest in information technology (IT) systems that can monitor the organization's performance.⁵⁸ All data on resource use, treatments, outcomes and practice patterns can be used for total quality management and continuous quality improvement.⁵³ Physicians can share access to clinical data across care sites and providers, thereby improving health care delivery. This cannot be accomplished as effectively in a fragmented fee-for-service system, where physicians are only responsible for a partial result of the care cycle and lack the capital to invest in complex IT systems. Additionally, IDSs keep a single, unified medical record for each patient, which allows each doctor to see what any other physicians are doing.¹³ This prevents failure by physicians to communicate with other physicians about medication prescriptions or diagnostic test results, the result being a reduction in duplication of unnecessary and costly services and sheer waste.

Matching resources with the needs of the population

IDSs are responsible for the health care needs of their enrolled populations. This allows an IDS to match the resources and service capacity to the population's needs. This is in strong contrast with the current fragmented system, where each health care provider operates on its own, with no incentive to plan the availability of doctors and resources to the actual needs of the population.¹³

Whereas the fee-for-service system focuses on individual sick patients, IDSs focus on meeting the population's health needs.⁵⁸ For an IDS, preventing medical conditions or treating them in less costly sites will be rewarded.⁵³ Investments made in primary or preventive care may pay off as reduced costly hospital care in the future, which is in stark contrast with the current fee-for-service system. Physicians in an IDS aim to maximize and maintain the health of their enrolled population within the resources their members are able and willing to provide. A strong focus on prevention, early diagnosis and treatment, and effective management of chronic conditions enables IDSs to do so.⁵⁸

3.2.3 Disadvantages

Despite their theoretical potential to outperform fee-for-service indemnity plans, IDSs also have their limitations and are subjected to practical realities that may reduce the IDS's ability for success. These disadvantages, however, can be differentiated according to whether they are the result of an IDS's intrinsic characteristics, or whether they are the result of insufficiently fulfilled preconditions for managed competition to work. Intrinsic characteristics that put IDSs at a disadvantage are the start-up

costs and a limited choice of providers. Drawbacks that are the result of insufficiently fulfilled preconditions include substandard care, elimination of competition and underserving members.

Start-up costly

It takes much time and costs to get an IDS started. Comprehensive health care delivery requires the employment and contracting of many physicians, as well as the purchasing of facilities and equipment. Several years and millions of dollars are required for a new IDS to reach the financial break-even point.¹³ Also, the scale of IDSs may be so large that it creates managerial diseconomies of scale. Conversely, the IDS's scale may still be insufficient to pursue expensive investments.

In addition, IDSs have to attract good doctors and must thus be able to offer physicians an income comparable to what they can earn in the fee-for-service sector, where the economic constraints of an IDS do not apply. Physicians in a fee-for-service practice can generate extra income by working more hours and by treating more patients, whereas physicians in an IDS are bound by economic restrictions. On a similar note, some physicians may find the organizational structure and culture of peer review and mutual professional support unattractive to work.¹³ They may perceive the IDS's utilization control measures, peer-reviewing and quality controls as a restriction to their individual independence as a professional.

Limited choice of providers

In an IDS the subscriber voluntarily accepts a limited choice of providers, including only those participating in the IDS, in exchange for what the subscriber considers to be better benefits or lower costs.¹³ Whereas IDSs can have a large number of participating doctors, it may occur that a certain specialist the patient wishes to see is not part of the IDS's panel. Consequently, it can be difficult for IDSs to attract new members since individuals value their relationships with their physicians.⁵² Many patients will be reluctant to leave their current physician and usually not for a small difference in price.¹³ Nevertheless, in Enthoven's model of managed competition, consumers have a periodic choice of health plans, so they can choose a health plan that includes their favourite doctor. When consumers are cost-conscious, they will sign up for a health plan that best suits their demands and are worth their money. For example, patients may sign up for a health plan with their favourite doctor, albeit at higher premium costs.

A cultural transformation in which customers come to see that free choice of provider does not equal high quality care is essential for IDSs to be able to grow.⁶⁰ The managed care backlash in the U.S. during the 1980s has contributed to a public sentiment that a limited choice of providers is equal to poor quality care.¹³ Moreover, consumers may not be willing to accept the fact that they have to choose a health plan when they are healthy, and then stay with that health plan when they get sick.⁵² A limited choice of providers is an intrinsic characteristic of IDSs and this attribute may prove to be dissatisfactory to many customers. Therefore, even if IDSs are able to deliver equal (or better) quality care at lower costs than fee-for-service indemnity plans with free choice of providers, some customers may simply prefer the more expensive health plan.¹³

Substandard care

In 2006, Porter and Teisberg published their analysis of the U.S. health care system and their propositions have not gone unnoticed.¹¹ In short, they criticize the present structure of U.S. health care because participants in the system do not create value for customers. Instead, they compete on shifting costs, increasing bargaining power, and restricting services and choice, none of these increasing value for patients. Their answer to the soaring costs in health care is that each participant in the system should compete on value for patients, measured by patient health outcomes per dollar spent. The goal for every participant should be to create value for patients.

According to Porter and Teisberg, the best market structure for competition would be freestanding medically integrated practice units (IPU), which are organizations centred around a specific medical condition (e.g. diabetes, arthritis, congestive heart failure).¹¹ A medical condition is defined as “a set of interrelated patient medical circumstances that are best addressed in an integrated way”.¹² IPUs encompass all the skills and services required over the full cycle of care of a particular medical condition, from screening and prevention all the way through treatment, recovery and active disease management. Instead of organizing care around specialities and discrete procedures, physicians will have to reorganize care around a medical condition, including the prevalent co-occurring conditions and complications.⁶¹ It is the patient's medical condition that is the unit of value creation in health care delivery.⁶² To stimulate value-enhancing innovations and provider excellence, IPUs should be rewarded based on achieved results over the full care cycle. As such, proper risk-adjusted outcome and result measures have to be developed and used in order to achieve value-based competition on results.¹¹

In their publications, Porter and Teisberg explicitly advocate against the formation of IDSs.^{11,12} Although they agree that IDSs can eliminate some of the consequences of the current dysfunctional competition in health care, they are wary of the IDS as the sole model for health care delivery. According to them, IDSs compete at the wrong level, that is by offering a broad array of health care services for numerous medical conditions. It creates competition only at the overall level of the health plan, while eliminating competition at the level where value is actually created; the patient's particular medical condition.¹² An IDS has a closed panel of providers which guarantees each physician with in-house referrals and a constant flow of patients, regardless of the physician's demonstrated excellence for the patient's particular condition. It creates a captive referral system which inhibits competition and insulates providers in the IDS from competition. In contrast, they say, IPUs face competition from all other IPUs treating the same medical condition and are therefore motivated to excel. Since IDSs provide a broad array of health care services, it allows them to support substandard care in some areas of health care delivery. Porter and Teisberg say it is unlikely that an IDS will contain the highest value providers in every single service area.⁶³ In other words, each service line (e.g. addressing a patient's particular medical condition) within an organization should be subjected to competitive pressure on its own account, rather than have strong service lines support their weaker 'brethren'.⁶⁴ Nevertheless, Porter and Teisberg do see a role for IDSs in their system of value-based competition, but only if these organizations meet a high standard of results transparency at the medical condition level.⁶³

Critics of Porter and Teisberg respond that in practice a significant share of the patient population suffers from numerous chronic conditions.^{65,66} If IPUs were the sole model of health care delivery, a large share of patients would have to navigate their way through a system of autonomous, independent IPUs. Although Porter and Teisberg promote integration of care within each medical condition, they ignore the fact that for many patients there is a need for care coordination across conditions. Moreover, Enthoven raises practical questions as to what would happen if physicians in one IPU disagree what physicians in an other IPU are doing.⁶⁶ Or what if the treatment for one condition is in conflict with the treatment for a different condition? Although each IPU would be accountable for the full care cycle of their respective medical condition, a shared responsibility for the overall health of the patient remains absent. Furthermore, IPUs lack the incentive to communicate with other IPUs about the patient and share medical records. It does not stimulate integration of data on patient treatments and outcomes across medical conditions, which could contribute to a better understanding of how multiple conditions interact with one another. As such, IDSs are better able to coordinate health care delivery across conditions, take into account interdependencies at the patient level, and excel in maintaining and improving total health of the patient.⁶⁶ Being excellent in treating a particular medical condition is laudable, but an increasing number of chronically ill patients with numerous co-morbidities calls for a more holistic approach to health care delivery. Therefore, one could argue that IDSs strive for excellence in treating a particular patient, whereas IPUs strive for excellence in treating a particular condition.

Both Porter and Enthoven advocate for a more integrated approach to health care delivery compared to today's structure in which health care is organized by facility, speciality, or discrete intervention. Whereas Porter prefers integration of care up till the point of a defined medical condition, Enthoven advocates patients are best served by a comprehensive health care organization. Interestingly, Porter and Teisberg define a medical condition as an interrelated set of medical circumstances, including co-occurrences and complications. The more comprehensive the services offered by an IPU, the closer it comes to an IDS. Therefore, one can wonder where an IPU ends and an IDS begins.¹⁸ Competition on results at the medical condition, as proposed by Porter and Teisberg, will leave ample room for many types of practice models to prove their value.⁶³ Most importantly, Porter and Enthoven both seem to agree that the health care system should consist of a level playing field in which each consumer should be able to choose from a wide range of possible delivery systems, and let the best mix emerge in a competitive market.^{63,67}

Elimination of competition

In line with Porter's arguments against IDSs, the Dutch Minister of Health, Edith Schippers, has expressed the notion to legally prohibit vertical integration of insurers and providers in the Netherlands.⁶⁸ According to her, vertical integration would not be in line with the current insurer's role as critical third-party purchasers of care, because insurers would no longer objectively look after their member's interests. As purchasers of care, insurers should contract the most efficient providers. When insurers are also co-owner of less efficient providers, they will not contract these more efficient providers because it would mean their own providers will lose customers.⁶⁸ Thus, Schippers claims

that vertical integration will lead to a reduction in consumer choice of providers since health insurers will channel their members to their own providers, regardless of the quality provided. In the long run, she says, this will negatively affect quality and efficiency of health care delivery because absence of free choice of providers eliminates competition among providers to delivery high quality care.

Additionally, in the Dutch context, she argues that vertical integrations will frustrate competition by creating insurmountable barriers for new insurers and providers to enter the market. More than 90% of the Dutch population is insured with four insurance companies, each operating in non-overlapping regions. A new hospital trying to enter the market will find it impossible to attract patients when a health insurer with a regional dominance in the insurance market can abuse its power by sending its subscribers to its own hospital. On a similar note, when providers exclusively serve subscribers of their own insurance entity, it may prove difficult for competing insurers to enter the market. According to Schippers, entrance of new participants in the region will *de facto* be impossible.

In response to Schipper's notion for a general prohibition on vertical integration, it has been argued that current Dutch competition laws are adequately designed to deal with these issues.^{69,70} Here, it is argued that the Dutch competition authority (NMa) and the health care-specific authority (NZa) have sufficient tools at their disposal to block anticompetitive integrations (both horizontal and vertical integrations) and to penalize abuse of dominant market positions. Vertical integration will only limit competition if the insurer and/or provider are already dominant in the region.⁷¹ If lack of competition is the result of insufficient providers or insurers in the market on a horizontal level, it would make more sense for competition authorities to monitor horizontal mergers, rather than generally prohibiting vertical integrations. Moreover, prohibiting the formation of integrated organizations reduces potential competition and consumer choice of providers.⁷² Firstly, it reduces potential competition in the health insurance market because providers are not allowed to set up insurance entities. Secondly, it reduces competition in the health care delivery market because insurers are not allowed to establish health care providers.

Schippers claims IDSs will send their subscribers to their affiliated providers, even if they will receive poor quality care there. Since IDSs are financially and clinically responsible for the health of their members, providing poor quality care will only drive up costs because of complications and re-admissions. Moreover, when sufficient information is available about the organization's performance, the threat of subscribers leaving at the next enrollment period can sufficiently discipline organizations to not engage in such behaviour.⁷¹

Under some circumstances, vertical integration can result in competition problems, as described by Schippers. But, a general prohibition of vertical integration will not solve the underlying problems, which are a lack of horizontal competition, and a lack of transparency about the performance of insurers and providers. Therefore, a general prohibition is both unnecessary and disproportional to protect the public goals of affordability, accessibility and quality of care.⁶⁹ Instead, it eliminates the potential advantages IDSs have to offer.⁷² A case-by-case approach and effective competition policy is preferred to determine whether vertical integration will yield a net positive result for customers or not.

Underserving members

A point of particular concern is the fact that IDSs may achieve their success by underserving their members.¹³ Capitation payment creates economic incentives for organizations to discriminate against the sick by underserving them and persuading them to disenroll.⁵³ In contrast to fee-for-service payment, capitation payment rewards physicians for reducing costs by inappropriate as well as by appropriate methods.⁵² This may reduce quality of health care delivery in ways not easily observed. Moreover, capitation payment rewards physicians who obtain a population in good health, incentivizing them to select healthier patients. This worry is particularly relevant in a system where consumers have no choice of health plans, when consumer information about health plans is unavailable, and when an adequate system of risk equalization is absent. Without appropriate risk-adjustment of premiums, IDSs have no incentive to improve health care delivery if this will only attract sicker subscribers.⁷³ The managed care backlash contributed vigorously to the worry of underserving members and continues to plague IDSs. Any attempt by IDSs to manage health care utilization by reducing unnecessary health care services, standardizing health care delivery based on evidence, and keeping people from unnecessary hospital days, is interpreted as withholding, controlling, or underserving their subscribers.⁶⁰ Transparent information on outcomes and quality of health care delivery is on the one hand a necessity for IDSs to show they deliver appropriate health care, and on the other hand a requirement to protect subscribers from being underserved. If outcome and quality measurements are available and transparent to consumers, IDSs will not engage in underserving their members as it will make them lose market share quickly at the next enrollment period. Moreover, in the presence of an adequate system of risk-equalization, IDSs have no reason to select healthy patients only. Better yet, efficiently organizing health care for the chronically ill will even pay off in such a case.

3.3 Conclusion

Managed competition is a framework aimed at achieving an equitable and efficient health care system. In this framework, cost-conscious consumer choice among competing health plans is managed and regulated by sponsors. These sponsors serve as purchasing agents on behalf of consumers and have numerous tools at their disposal to overcome the market's tendency to inefficiency and inequity. In order to achieve an equitable and efficient health care system, the preconditions of an adequate risk-equalization system, outcome and quality measurement, product classification, consumer information, and effective competition policy need to be sufficiently fulfilled. The Dutch model of regulated competition is a living model of Enthoven's work on managed competition.

When the preconditions are fulfilled, health plans that integrate financing and delivery of care, such as IDSs, have the potential to outperform traditional fee-for-service indemnity plans. An IDS is "a network of organizations that provides or arranges to provide a coordinated continuum of services to a defined population and is willing to be held clinically and financially accountable for the outcomes and health of the population served".¹⁹ Advantages of such an organization include aligned interests between providers, payers and patients, financial and clinical accountability, ability to coordinate

health care delivery, use of information technology, and matching resources with the needs of the population served. The result is an organization that holds the potential to provide coordinated, efficient, evidence-based care, supported by state-of-the-art IT.¹⁸

However, IDSs do have their limitations. Start-up costs are very high and the intrinsic characteristic of an IDS that subscribers have only a limited choice of providers may reduce the IDS's ability for success. In addition, opponents of IDSs argue that competition among integrated health plans eliminates competition at the level where value for patients is actually created; the patient's particular medical condition. Instead, competition will then take place at the overall level of the health plan, thereby lacking the stimulus for IDSs to strive for excellence in all health care delivery areas. In addition, it is argued that with regard to the Dutch situation, vertical integration of insurers and providers would eliminate competition by creating insurmountable barriers for new insurers and providers to enter the market. Finally, opponents worry about the economic incentives derived from prospective capitation payment, because capitation creates an incentive for organizations to underserve their members and withhold both necessary and unnecessary health care services. As explained, those last three arguments against IDSs only hold if the preconditions for managed competition to work are not sufficiently fulfilled. Assuming that these preconditions are fulfilled, IDSs make up the ideal way of organizing and financing health care delivery without endangering the public goals of affordability, accessibility and quality of care.

4 Strategic alliances

Chapter two addressed recent reforms in Dutch health care and discussed the problems of misaligned incentives and uncoordinated health care delivery. In chapter three, Enthoven's model of managed competition was reviewed and advantages and disadvantages of IDSs were examined. This chapter will contain a synthesis of all the information gathered in the previous chapters, in order to answer the main research question: "*Are integrated delivery systems a solution for the problems of misaligned incentives and uncoordinated health care delivery in the Dutch health care system and if so, how to get there?*" The final two sub-questions that will be addressed in this chapter are:

- Can integrated delivery systems solve the problems of misaligned incentives and uncoordinated health care delivery in the Dutch health care system?
- How to move towards integrated delivery systems in the Netherlands?

4.1 Curing the system by aligning interests

Much of the literature about IDSs is aimed at the U.S. health care system. In chapter 3, it was explained how IDSs have the potential to outperform fee-for-service cost-based insurance arrangements, operating within the context of isolated, autonomous health care providers with misaligned incentives. Although fee-for-service arrangements have largely been replaced by bundled payment schemes in the Netherlands, the problems of misaligned incentives and uncoordinated health care delivery remain an issue in Dutch health care. Disintegration and incentives misalignment are major defects in both U.S. and Dutch medicine.

The Dutch health system reform of 2006 is unique in the sense that it has implemented Enthoven's model of managed competition. However, unlike Enthoven's proposal, competition in the Dutch system does not take place at the level of IDSs, but at the level of individual health care providers and insurers. Given the present framework of regulated competition in the Netherlands, one would expect an increase in the role of organizations that integrate financing and delivery of care, such as IDSs, because of their ability to deliver high-quality care in response to consumers' preferences.¹⁷ So far, Dutch health care reforms have focused mainly on the health insurance market, and creating conditions for insurers to act as third-party purchasers of care.³ The challenge now is to successfully reform the health care delivery market by introducing elements of IDSs into current organizational and financial structures.

4.1.1 How integrated delivery systems can solve the problems

Dutch health insurers are having difficulties to pick up their role as third-party purchasers of care, because of information-asymmetry and a lack of proper risk-adjusted outcome and quality measures. Moreover, providers have to deal with numerous insurance companies, each with its own agenda and quality criteria. At the other side of the table, insurers are reluctant to sponsor quality-improving

innovations, as patients of their competitors will reap the benefits as well. This all makes the insurer-provider bargaining process a complex and costly matter for both parties.

Integrating financing and delivery of care under one roof will eliminate these problems. Firstly, it removes the administrative burden of billing for each service or bundle provided, thereby lowering transaction costs. Secondly, it reduces information-asymmetry and allows the insurer to gain better insight into the actual costs and quality of health care provided. Thirdly, providers will only have to deal with one insurance entity when it comes to utilization controls and quality criteria. Fourthly, insurers will be stimulated to sponsor quality-improving innovations because free-riding of competitors is no longer an issue (i.e. patients of other competitors will have no access to the 'improved' provider).

More importantly, vertically integrating the provider function with the insurance entity aligns both parties' interests. Although services of primary- and secondary care providers have been bundled up to a certain point, providers still get remunerated per bundle delivered. This encourages providers to maximize production levels and even rewards them in doing so. Providing more health care services is rewarded, regardless of the quality, appropriateness and necessity of these services. For example, a hospital providing poor quality care can simply readmit patients or treat complications under a newly started DTC. Insurers, on the other hand, have an incentive to lower the amount of health care services delivered. Although this creates a checks-and-balances system, it also results in a zero-sum game where the gains of one party come at the expense of the other party. As described by Porter and Teisberg, this generates a dysfunctional form of competition, as neither party is focused on creating value for patients.¹¹ Instead, providers and insurers will try to shift costs and increase their bargaining power. In an IDS, providers and payers have aligned interests in providing efficient and adequate health care, since everyone is focused on the same goals and shares in the organization's success. Additionally, per capita prepayment is a powerful tool to enforce effective partnership between medicine and management. The premiums of their subscribers serve as a fixed prospective budget and its physicians and managers must seek to deliver the most effective medical care obtainable within that budget. In contrast to the current system, providers are not rewarded for maximizing production. Instead, they are rewarded for prudent use of resources, preventing illness, maintaining a healthy population, and delivering efficient care.

Currently, providers across the care continuum are financially and organizationally separated from one another. Health care delivery is mostly organized and financed around discrete conditions (i.e. what is included in a certain bundle), specialties, and facilities. For example, primary and secondary care providers are remunerated separately, and coordination of care across these providers poses a major challenge as physicians who are treating the same patient could have conflicting economic interests. Investments made in one place, may pay off in a different one. Or, investments made in one place (e.g. primary care) may result in reduced revenues in a different place (e.g. secondary care). Patients with multiple conditions are often treated at multiple sites by numerous physicians, where the provision of care for each condition (i.e. bundle) is financed and assessed on its own account. Thus, no organization is responsible and accountable for the total costs and quality of the overall health of the patient and the coordination across sites and physicians.

Opposed to current organizational structures, IDSs are willing to be held clinically and financially accountable for the outcomes and health of their enrolled population. In doing so, they allocate resources along the continuum of health care delivery to provide care in the most appropriate, least costly, setting. Benefits of cost-reducing innovations will be reaped by all physicians. As such, an IDS stimulates collaboration and coordination across physicians, and it has the resources, information technology, and incentives to do so. Overall, an IDS aligns the interests of payers, providers and patients and, given that the preconditions for regulated competition are fulfilled, has the potential to improve efficiency and increase value for money in Dutch health care.

4.1.2 Where integrated delivery systems fall short

Although IDSs have in theory much potential to solve the problems of misaligned incentives and uncoordinated health care delivery in the Netherlands, practical issues may complicate their ability to do so. Taking into account the small size of the Netherlands, an IDS may have a hard time reaching the break-even point. Offering comprehensive coverage by a closed panel of physicians would require the attraction of many physicians and facilities. Many areas in the Netherlands may not be suitable to support several mutually exclusive and comprehensive networks. Also, it would need many subscribers to raise enough revenues to stimulate quality-improving innovations. Successful IDSs, like Kaiser Permanente, have invested billions of dollars in the development of information technology and a unified electronic medical record.⁵⁸ Similar organizations arising in the Netherlands may simply not have the resources to pursue similar investments, which are crucial to an IDS's success.

Another major concern is the fact that, without adequate risk-equalization and transparent results on providers' performance, IDSs may engage in risk-selecting and underserving their members. Fulfilment of the aforementioned preconditions is of vital importance for a proper functioning of the market. Since this is still a work in progress, many customers may be reluctant to subscribe for an organization that manages health care utilization as intensely as IDSs. Free choice of provider is still regarded as a key element in Dutch health care, even though the current health care purchasing market allows insurers to selectively contract with health care providers. The question is which forms of managed care will be acceptable to the public. An IDS restricts provider-choice to in-house physicians only. Without clear consumer information and transparent outcome and quality information, the benefits of such an organization may simply be not obvious enough to patients to push the market to a critical mass. And even if IDSs would clearly provide better value for money, some customers may simply prefer health plans with complete free choice of provider.

Overall, IDSs have the potential to improve health care delivery and increase efficiency of the health system, but will do so only when the preconditions of regulated competition are sufficiently fulfilled. Only then, organizations will be pushed to reorganize health care financing and delivery, which will allow IDSs to emerge and prove their superiority in the market.

4.2 Moving towards integrated delivery systems

Chapter 3 described how the characteristics of IDSs make them the ideal way of organizing and financing health care delivery. When the preconditions are fulfilled, they are able to deliver high-quality care in response to consumers' preferences while preserving the public goals of affordability, accessibility and quality of care. For that reason, competition among fully integrated delivery systems is the desired state.¹⁸ However, from a practical point of view, moving from current organizational and financial structures to fully integrated delivery systems at once may be a step too far. Instead, incremental steps taken by providers and insurers towards IDSs and their characteristics seem both more appropriate and feasible. In fact, recent developments in Dutch health care already point to such progress.

Insurers have only recently started to make use of quality information to contract health care providers.⁷⁴ Some insurers have even engaged in selective contracting, thereby restricting their members' choice of providers for certain treatments. Insurers are increasingly trying to channel their members to preferred providers, selected for their quality or cost, or both.⁴² For example, subscribers can be relieved from paying the mandatory deductible when they seek health care at a preferred provider. The other way around, insurers can impose co-payments when members choose out-of-network care. As such, subscribers are channelled to preferred providers by rewarding them to make use of the loose network of selected, high-performance providers, or by penalizing them when they choose out-of-network care. Enthoven describes such loose networks as transitional vehicles on the road to full integration, but without integration of finance, management and delivery, they are unlikely to achieve the performance of fully integrated delivery systems.^{18,53} Importantly though, preferred provider arrangements may prove to be a publicly acceptable way of how patient choice can be restricted to a network of high-performing providers only, which is a crucial characteristic of IDSs. Moreover, such an arrangement does not require the many years of organization building and enrollment growth like IDSs do.

On a similar note, the largest Dutch health insurer, Achmea, has come to a multi-year agreement with the Zaanse Medical Centre. Since the 2006 reform, such an agreement is a first in Dutch health care. Both parties mentioned that during the negotiations they first had to create mutual trust and look for common interests.⁷⁵ With the multi-year agreement, both parties can focus on shared goals, such as improving the quality of care, and coordination of care with providers outside the hospital (e.g. primary care providers). In addition, the contract contains bonus-malus provisions to reward improved health care delivery. As such, Achmea has gained significant insight into the hospital's (clinical) performance. The multi-year agreement creates financial continuity for the hospital and makes it thus possible for the hospital to give greater attention to long-term plans and quality-enhancing innovations, instead of short-term plans focused on maximizing production. In essence, this agreement indicates that both parties feel the need to establish long-term relationships, and resembles many of the characteristics that are intrinsic to an IDS: aligned interests, reduction in information-asymmetry, increased transparency about results, focus on quality and coordination of health care delivery, long-term planning, and shared goals between payers and providers.

Another initiative that resembles characteristics of IDSs is observed in primary care where insurers can purchase disease management products as bundled goods from care groups. This has stimulated the formation and coordination of multi-disciplinary primary care networks. Moreover, it transfers both financial and clinical accountability for some of the patients' health care needs to care groups, which is another feature of IDSs.

These recent developments indicate that steps are taken towards integration of financing and delivery of care. Aspects that determine the success of an IDS (e.g. restricted patient choice, aligned interests, financial and clinical accountability) are gradually emerging in current organizational and financial structures. In the next part of this chapter, two approaches towards more integration of financing and delivery of care will be discussed. The first approach is secondary care-oriented and puts the hospital at the centre of the delivery system, whereas the other approach is primary care-oriented, thereby putting the care group in the middle. Both approaches aim at aligning interests, increasing financial and clinical accountability, as well as stimulating prevention, collaboration and coordination between primary- and secondary care providers. These approaches are built on recent developments, and take into account the practical feasibility of realizing such steps towards IDSs.

4.2.1 Hospital-insurer alliance

Dutch health insurers have a contractual obligation towards their policyholders. This obligation can be completed in two ways; either insurees are entitled to receive care in kind from contracted providers, or they are entitled to receive reimbursement of medical expenses. One way to integrate financing and delivery of care is to let a hospital take over this contractual obligation of a health insurer. In such an approach, the hospital receives a per capita prepayment from the health insurer for each subscriber in the hospital's catchment area.²¹ In return, the hospital provides, or arranges to provide, all health care services included in the mandatory basic benefit package (e.g. primary care, hospital care, pharmaceutical care). In practice, the hospital and insurer would agree on a sum of money the hospital receives to treat, or arranges to treat, all subscribers of that insurer in the region (Figure 3). They can share savings and risk-sharing arrangements can be implemented to safeguard the hospital from exceptionally high medical expenses or the insurer could function as a reinsurer. The hospital and insurer do not have to negotiate about thousands of DTCs, but about patient satisfaction, safety, and quality of care. As a result, the hospital will have an incentive to prevent insurees from being admitted to the hospital by collaborating with primary care providers. A strong strategic alliance is formed between the health insurer and the hospital, without actually becoming one integrated organization.

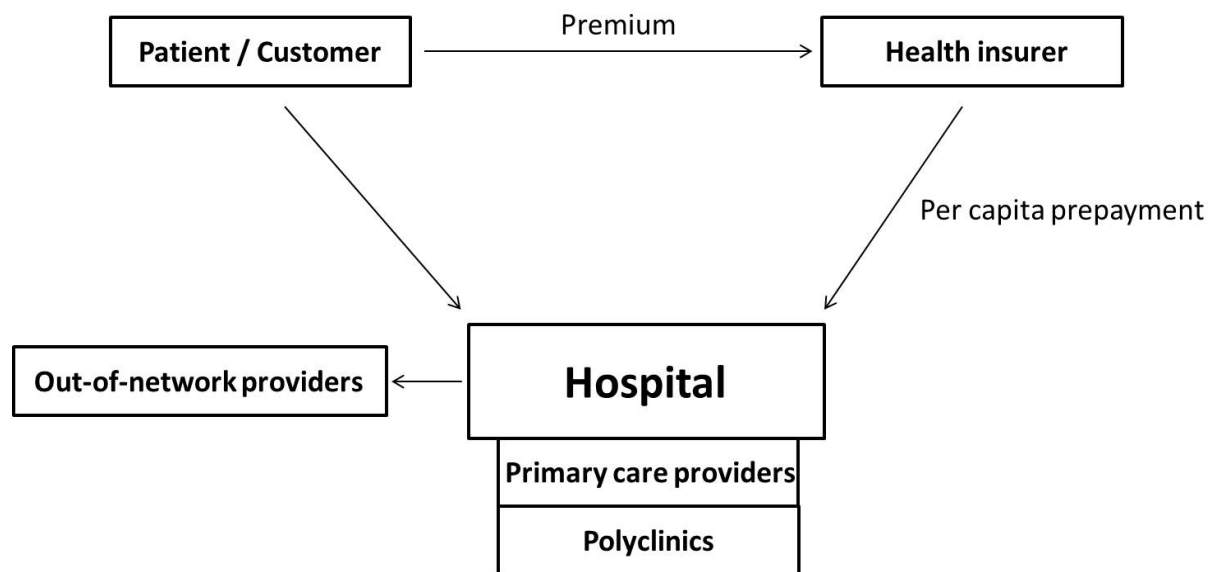


Figure 3. Overview of the hospital-insurer alliance model. The allied hospital is remunerated through a per capita prepayment for all subscribers of the insurer in the region. In return, the hospital provides, or arranges to provide, all health care services included in the basic benefit package to these subscribers. In order to provide comprehensive health care services, the hospital can create its own primary care centres and polyclinics, or contract with other providers. As such, the hospital creates its own network of providers to which subscribers can turn for their health care needs. Out-of-network providers can be accessed in case of highly specialized procedures or treatments not provided by the hospital's own network.

Advantages

This approach radically changes the incentives for hospitals. Hospitals are no longer reimbursed based on “fee-for-DTC”, but receive a fixed amount of money per year for each subscriber. Instead of earning more money by increasing health care provision, hospitals now earn more by reducing health care provision. Although capitation payment stimulates efficient use of resources, it can also result in i) risk selection, ii) reduction in quality of care, and iii) cost-shifting to other health care providers.⁵² In the hospital-insurer alliance model, neither of these negative consequences are likely to arise. Firstly, risk-selection can be circumvented by agreeing that the hospital should take over the contractual obligation for all subscribers of the insurer in the area (i.e. both the healthy and the sick). However, the hospital and insurer could together decide to attract new low risk enrollees to their alliance, as both parties will benefit from this. The extent to which risk-selection can occur all depends on the adequateness of the risk equalization model. Secondly, reducing the quality of care provided is not a likely option for the hospital, since the hospital will only incur more costs in the long run. Complications, readmitted patients, medical errors, and unnecessary services will only lead to additional costs. Moreover, transparent information about outcomes and quality, and the ability of enrollees to annually change insurer will make it unlikely for the hospital-insurer alliance to engage in such behaviour. Therefore, delivering appropriate, efficient, high-quality care is strongly promoted and even rewarded. Thirdly, cost-shifting to other providers can be circumvented by including all health care services of the basic benefit package in the contractual obligation to deliver health care to their subscribers in the area.

Then, the hospital will be responsible for all costs incurred, even if they occur at other providers. This puts an even stronger pressure on the hospital to simply provide high-quality care, and only refer patients to other hospitals when it is beneficial for the patient. In case of highly specialized procedures or complex medical conditions, the hospital can arrange to have the patient treated at a specialized hospital.

Also, this way of financing aligns both parties' interests and offers the hospital more freedom to decide how care should be delivered. It allows the hospital to develop innovative, cost-reducing, ways of delivering health care without losing revenues. On top of that, the insurer and hospital will no longer have to negotiate on thousands of DTCs, thereby significantly reducing administrative and transaction costs. Since the success of the insurer now heavily depends on the hospital's performance, the insurer will have a strong incentive to discuss things such as quality of care, waiting lists, and customer satisfaction. The change in payment method will considerably change the hospital's behaviour and alter the nature of the insurer-hospital bargaining process. By taking over the insurer's contractual obligation, the hospital becomes financially and clinically accountable for the outcomes and health of the population served.

This approach to integrate financing and delivery of care strongly encourages the use of primary care and preventive health care services. Prevention is very lucrative because it saves treatments for people who have already paid their premium, and for whom the hospital has already received a per capita prepayment. By ensuring that their pool of customers remains healthy and does not need expensive hospital care, the hospital-insurer model will be able to contain health care costs. Thus, hospitals will be likely to intensify cooperation with primary care physicians and open polyclinics as substitutes for expensive in-patient treatments. In these polyclinics, specialists can be deployed to support primary care physicians in the management of chronically ill patients. Additionally, hospitals could contract primary care physicians, or even set up their own primary care centres, in an effort to keep the population healthy. As such, a collaborative network across the entire continuum of care is formed to make sure the patient is treated in the most appropriate setting. This network is highly dependent on primary care physicians, because they act as gatekeepers to hospitals and specialist referrals. These physicians are in a position to determine which health care services the patient should seek next, and they can direct the patient to the most appropriate setting. The emphasis of health care provision will shift to primary care and prevention, thereby stimulating the hospital to bridge the organizational and financial gap between primary and secondary providers in the Netherlands.

Now, hospitals have to deal with numerous insurers who each set their own criteria and standards with regard to health care delivery, adherence to protocols, and reimbursement of quality-improving innovations. By taking the initiative to join forces with an insurer, hospitals would be freed from these remote third-party purchasers of care who have their own, different, agendas. In case the hospital receives patients from numerous insurers, it would be most practical for the hospital to team up with the market leader in its catchment area and persuade the remaining individuals in the region to sign up with the allied insurer. The hospital and insurer could work together on developing a marketing-strategy to promote their newly established relationship by advertising at their hospital and primary care centres to join the allied insurer. Being able to provide coordinated high-quality health

care, and having a constructive, long-term, relationship with a health insurer, the hospital-insurer alliance can attract new patients to their affiliated insurer, thus increasing the financial success of both organizations.

Insurers would profit from this relationship because it aligns their financial incentives with the hospital's and allows for a more controlled cost growth. As such, insurers will be better able to predict premiums and link premium payments to the needs of the population served. Both parties will benefit from a reduction in the provision of unnecessary and costly services. They both gain when health care provision is prevented, or treated in the most appropriate, least costly, setting. In essence, the hospital and insurer become allies, as opposed to the current 'us-versus-them' mindset. By aligning the insurer's and hospital's interests, a zero-sum game can be prevented and both parties can focus on creating value for their customers. Moreover, the financial success of both organizations depends on increasing the number of subscribers and managing the costs of care, which is in sharp contrast with the current system, in which success depends on the number of patients treated or amount of care provided. As such, the hospital and health insurer form a strong strategic alliance while retaining their independent positions. This form of cooperation contains many of the elements that make up an IDS: per capita payment, financial and clinical accountability, aligned interests among payers and providers, focus on prevention and disease management, and coordinated health care delivery across the continuum of care.

Shortcomings and challenges

An important difference compared to IDSs is the fact that the hospital-insurer model is not a closed network of organizations with exclusive contracts. The allied hospital may receive patients from different insurers as well. One option would be for the hospital to set prices based on total costs (i.e. including quality-improving investments) or to engage in a similar alliance-model with these other insurers. Another option is that the hospital teams up with the most dominant insurer in the region, as described before. In practice, the option will depend on the hospital's and insurers' market shares and possible dominant positions in the region. Nonetheless, the efficiency gains that arise from the hospital-insurer alliance are mainly dependent on the way the hospital manages to collaborate with primary care providers. Preventing hospitalization and reducing the need for in-patient services is most rewarding. To do so, the hospital may come to similar contracts with multiple insurers in the region.

Similarly, the allied insurer may have subscribers who wish to be treated in a different hospital, even though the insurer already paid for these subscribers' health expenses to the allied hospital. In this proposed model, the insurer automatically engages in selective contracting because maintaining capitation contracts with multiple hospitals in the same region is financially undoable. Since the hospital takes over the contractual obligation of the health insurer, this same hospital is responsible for any costs made by subscribers outside the hospital's network. Therefore, policy conditions could entail that non-contracted care is only partially reimbursed, or a referral from a contracted physician is required to be eligible for complete reimbursement of costs made outside the hospital's network. In this way, patient choice of provider is not completely eliminated, but it still allows the hospital to manage health care utilization. However, health insurers are legally obliged to accept all applicants for

each basic insurance contract for the same premium in each province (community rating per product). In the hospital-insurer alliance model, any cost savings achieved via the partnership can not be converted into a premium discount specifically for those policyholders in the catchment area of the allied hospital, because the insurer is legally obliged to set a community rating per product in the entire province. This means that subscribers outside the catchment area of the hospital, but within the same province, are eligible to sign up for the same insurance contract for the same premium. Because of the insurer's contractual obligation to provide, or to reimburse, care, hospitals other than the allied one will also need to be contracted by the insurer in order to fulfill their contractual obligations. The fact that insurers have to set a community rating per product per province complicates the insurer's ability to engage in this proposed hospital-insurer alliance model. One way to deal with this problem is for the insurer to simultaneously set up multiple, geographically non-overlapping, hospital-insurer alliances across the entire province. A more practical solution involves an amendment of the law in which the insurer's obligation to set a community rating per product is geographically narrowed down to the catchment area of the hospital, instead of the entire province. This will enable insurers to provide differentiated insurance policy contracts suitable for regional needs and circumstances, and where cost savings can be directly translated into premium discounts for those policyholders in the catchment area of the allied hospital.

Providing no, or little, coverage for non-contracted providers eliminates patient choice *de facto*. To what extent these choice-restrictions are acceptable by the public remains to be seen. In contrast to the current system where insurance companies decide on the boundaries of the provider-network, in this model the hospital is assigned by the insurer to make such decisions. However, subscribers have an insurance contract with their health insurer, and not with the insurer's allied hospital. Thus, insurance policy conditions must clearly state that the provider-network is to be decided by the hospital, or alternatively that subscribers who wish to visit out-of-network providers first need approval from in-house physicians. With regard to public acceptance, this form of restricting patient-choice may be perceived as more legitimate. Insurers in the Netherlands have been reported to suffer from a credible-commitment problem, meaning that consumers do not trust that insurers with restrictive networks are committed to provide high-quality care.⁴² Since the hospital-insurer alliance hands over the task to form a restrictive network to the hospital and its physicians, the credible-commitment problem may be of less concern.

In order to be able to deliver comprehensive health care services, the hospital will either have to provide the services itself or contract with other providers. In a way, the insurer's role as purchasers of care is transferred to the allied hospital, who now needs to develop the expertise necessary to assess care provided by others. Difficulties to contract with the most appropriate providers may arise due to similar problems currently faced by health insurers: information-asymmetry and a lack of transparent outcome and quality measures. These same issues may complicate the hospital's ability to contract care, but to a lesser extent compared to the current situation because hospitals and physicians are more knowledgeable in that field than insurers.

Managed care aims to shift the locus from more costly secondary care to less costly primary care by substituting outpatient services for more expensive inpatient services. Therefore, organizing a

delivery system around the hospital would make no sense, as the majority of health care will be provided by primary care centres. On the other hand, since most savings in an IDS are achieved by reducing hospitalization, involving the hospital and specialists may be necessary to avoid supplier-induced demand and other efforts by secondary care providers to recoup lost revenues. The specialists' loss of income associated with the shift to primary care can be compensated by attracting more new members and by having the specialists share in the rewards achieved through a reduction in the amount of secondary care delivered.

The success of this model also depends on the hospital's ability to attract the commitment of local general practitioners (GP), since GPs have a strong advisory role in provider choice. Only when the hospital-insurer alliance is able to channel enrollees to preferred GPs or attract the loyalty and commitment of local GPs, they may be able to exert influence over consumer choice of other providers as well (i.e. restricting patient choice to contracted providers only).

Another challenge to this model is to implement appropriate risk-sharing arrangements between the insurer and hospital. Total hospital costs can vary enormously and a hospital generally lacks the financial reserves to deal with such issues. Ways of sharing risks and forms of reinsurance need to be developed to safeguard the hospital from financial catastrophic expenses. Additionally, hospitals will carry a greater financial risk and may as such be viewed as insurance entities themselves. This could place hospitals under a financial regime supervised by The Dutch Bank (DNB) and could result in the requirement for hospitals to have larger solvency reserves. Finally, fulfilment of the preconditions mentioned in chapter 2 is necessary to avoid hospital-insurer alliances engaging in risk-selection and quality-skimping. Also, competitive impediments that may arise from such a modality need to be assessed and monitored by competition authorities.

Feasibility

This newly proposed model does constitute a radically different approach to health care contracting. Yet, from a practical point of view, this approach is feasible because it is in line with recent developments in Dutch health care. Firstly, the multi-year agreement between Achmea and the Zaans Medical Centre indicates the need for a long-term relationship between insurers and hospitals to deal with their joint responsibility to deliver affordable, accessible, and high-quality care. Maintaining a system in which the financial incentives of insurers are fundamentally opposed to providers' financial incentives is simply unsustainable. Establishing contracts based on common interests and aligned financial incentives by integrating financing and delivery of care is an effective way to break with the current flawed system. Creating interdependencies between insurers and hospitals aligns their interests, makes them partners, and allows both of them to focus on creating value for patients.

Secondly, this model is in line with insurers' initiatives to manage health care utilization and to restrict patient choice of provider to high-performing providers only. What is different in this modality is that hospitals, instead of insurers, are given the responsibility to create a network across the continuum of care to make sure patients are treated in the most suitable setting. From a public point of view, this form of channelling may be more acceptable and feasible.

4.2.2 Care group fundholders

Care groups in Dutch health care are financially and clinically responsible for the provision of primary care to patients with diabetes, COPD, or at risk for vascular complications. One way to further integrate financing and delivery of care is to transform care groups into fundholders, making them responsible for all health care needs of their patients. In this primary care-oriented approach, a care group receives a risk-adjusted per capita prepayment from the health insurer for each subscriber in the care group's catchment area. In return, the care group provides, or arranges to provide, all health care services included in the mandatory basic benefit package. This stimulates care groups to form multidisciplinary provider groups offering primary and secondary care in an integrated way to a defined group of individuals (Figure 4). It incentivizes the care group to collaborate with providers across the entire spectrum of health care delivery. Similarly to the hospital-insurer alliance model, care groups and insurers can negotiate about patient satisfaction, safety, and quality of care. Risk-sharing arrangements are of great importance because care groups lack even more capital strength compared to hospitals. Without becoming one integrated organization, care groups and insurers can strategically form alliances that are aimed at providing coordinated and efficient health care delivery.

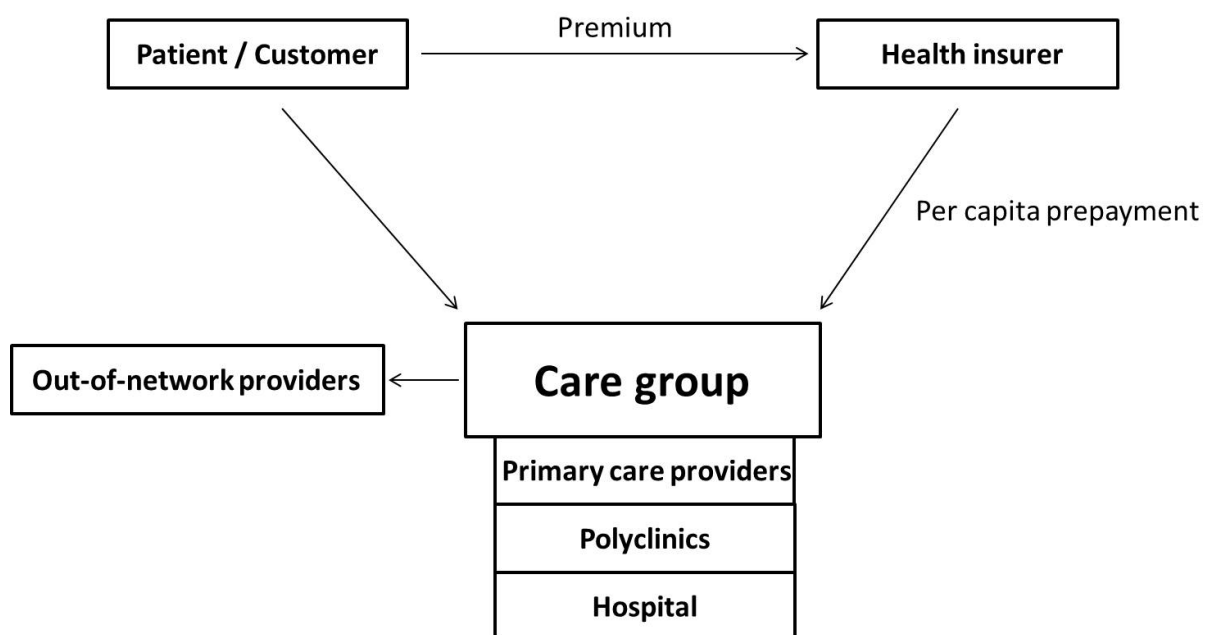


Figure 4. Overview of the care group fundholder approach. The care group is remunerated through a per capita prepayment for all subscribers of the insurer in the region. In return, the care group provides, or arranges to provide, all health care services included in the basic benefit package to these subscribers. In order to provide comprehensive health care services, a care group can form its own hospital, polyclinics, or multi-specialty primary care centres. Alternatively, other providers can be contracted or arrangements can be made to have subscribers treated at out-of-network providers. As such, the care group creates its own network of providers to which subscribers can turn for their health care needs.

Advantages

The current bundled products have made care groups financially and clinically accountable for some of the patient's health care needs. However, these bundles do not stimulate preventive health care provision to their subscribers, as it only covers the delivery of health care services to those who are already ill. Moreover, these bundles are unsuitable for patients with co-morbidity and diseases other than those mentioned above. On top of that, insurers have raised concerns about the bundled payment system, saying they worry about double-funding and that the system is a 'black box'.³⁴ The care group fundholder approach eliminates all these problems since care groups will be financially and clinically responsible for providing all health care services. So whatever comes out of that 'black box' is no longer of concern to the insurer in financial terms. Moreover, double-funding will be avoided because the payment method for insurers is simplified to one single bill. Administrative costs can be reduced as well because insurers will only have to deal with care groups acting on behalf of all primary and secondary care providers. By expanding the accountability of care groups to the overall health of their subscribers (i.e. both the healthy and the sick), care groups are stimulated to provide coordinated health care across the entire spectrum, including preventive services and specialty care.

A recent evaluation pointed out that much of the health care normally provided to these patient-groups by secondary care providers shifted to (less costly) primary care providers.²³ Yet, total costs for these patients did not decrease, largely due to secondary health care providers trying to recoup their lost revenues. In the care group fundholder approach, care groups will be held responsible for total costs, including costs incurred at secondary care providers. This will stimulate care groups to form a network of providers across the entire spectrum, in order to provide comprehensive health care services in an integrated fashion. To do so, they can set up their own hospitals, polyclinics, and diagnostic centers, or alternatively, contract with other health care providers.

In the current bundled system, care groups subcontract primary care providers. Dependent on the policy conditions, this limits patient choice of provider. With the care group fundholder approach, care groups will also need to contract secondary providers, thus restricting patient choice of provider at every level in the health care delivery system. However, GPs have always served as gatekeepers in the Dutch health care system, and many patients have a long-lasting trusting relationship with their GP.⁷⁶ Most patients fully rely on their GP's advice on which hospital or specialist to visit. This puts care groups in a unique position to channel patients to preferred providers, an issue that health insurers are struggling with because of the credible-commitment problem.⁴² The GP has always been regarded as a reliable source of information for follow-up care and patients are more willing to accept restricted choice of provider when their GP informs them about it. The credible-commitment problem that plagues insurers in the current system may be of little relevance in this model. As a care group, investing in the commitment and loyalty of GPs may prove to be the most effective and acceptable way in restricting patient choice of providers. Moreover, investing in the commitment and loyalty of specialists and hospitals may further enhance their ability to contain costs and simultaneously improve the quality of health care delivery.

Many of the advantages already described at the hospital-insurer alliance model can be applied to this model as well. Care groups will be rewarded for maintaining their subscribers healthy

and reducing unnecessary, costly services. Capitation payment does not encourage more production, as opposed to the current “fee-for-bundle” system. Preventing illness, disease management, and providing high-quality care are strongly encouraged in this model, since the care group is responsible for providing all health care services in the basic benefit package to all subscribers. Forming networks with other providers, or setting up their own hospitals and diagnostic centers allows care groups to do so. Investing in coordinated health care delivery across the entire spectrum will pay off.

Essential is the fact that the insurers’ and providers’ interests are aligned, so that both parties can jointly focus on creating value for their customers and thus increase market share. Administrative costs and transaction costs can be reduced significantly and the care group can receive more freedom to decide how health care should be best delivered. The financial success of both organizations is determined by the number of subscribers they manage to attract, and not the amount of care delivered. To increase their number of subscribers, the insurer and care group will have to work together in convincing customers that they provide best value for money. Most importantly, the financial and organizational gap between primary and secondary providers is closed, allowing providers to jointly work on improving their subscribers’ overall health, without losing revenues or shifting costs. As such, the care group fundholder approach contains many of the elements that characterize an IDS: per capita prepayment, financial and clinical accountability for the overall health of their population, aligned interests among payers, providers and patients, focus on prevention and disease management, ability to coordinate health care delivery across the continuum of care.

Shortcomings and challenges

Care groups are currently involved in providing primary care to chronically ill patients; patients that are often treated by multiple physicians with different specialties. However, these primary care providers are autonomous individual providers who have only joined forces at the level of the care group to treat certain patient groups. The care group mainly serves as an intermediate between the insurers and primary care providers. As such, providers are only loosely connected to each other, and not part of the same organization with a shared culture and vision. Care groups may have difficulties attracting the loyalty, commitment and participation from enough primary care providers in the region to engage in such an organizational structure. Moreover, care groups will need to be able to attract the participation from secondary care providers in their region. Setting up their own hospitals, polyclinics or diagnostic centres is possible, but costly.

In addition, care groups have substantial market power³³ and questions have been raised about the potential conflict of interest of GPs, since GPs are simultaneously commissioning and providing care.³⁴ This creates a distorted relationship between the care group and other subcontracted primary care providers. Insurers need to be able to establish long-term relationships with care groups, but the care groups’ substantial market power combined with their ability to commission care to themselves may push better performing providers out of the market. The ability of these non-contracted providers to establish their own care group and effectively compete with the other care group in favour of the insurer will determine if this model is viable.

Similarly to the hospital-insurer alliance, this approach does not contain a closed network of providers exclusively treating patients from the affiliated insurer. Instead, care groups could treat patients from numerous insurers, and patients may express their wish to visit providers not included in the care group's network, despite the care group's unique position to channel patients via their contracted GPs. Finally, to prevent risk-selection and quality-skimping by care groups, the preconditions of regulated competition need to be sufficiently fulfilled.

Feasibility

The publicly accepted role of the GP as a gatekeeper puts care groups, who are often owned by GPs, in an exceptional position to use that role to improve health care delivery while simultaneously reducing costs. Compared to the hospital-insurer alliance model, care groups are better situated to channel their patients to preferred primary and secondary providers. However, to incentivize care groups to take up that role they need to become financially and clinically responsible for all health care services, including prevention and secondary care. Currently, they are already responsible for some of the patient's health care needs and by gradually expanding the current bundled payment program by including more medical conditions, full responsibility for overall health can be achieved. As such, the care group fundholder approach builds on already existing initiatives and involves previously established organizations (i.e. care groups).

4.3 Conclusion

In this thesis, it was initially hypothesized that more integration in health care financing and delivery would increase efficiency of the Dutch health care system. Due to aligned interests, stronger clinical and financial accountability mechanisms, and a strong incentive to coordinate health care delivery across the entire continuum, IDSs are able to outperform current organizational structures. However, start-up costs of such systems are high and their intrinsic characteristic to limit subscribers' choice of provider may be unappealing to many Dutch citizens. As such, incremental steps towards these systems may prove to be more feasible in practice. Two approaches to realize integration in financing and delivery of care were introduced and discussed extensively. One approach, the hospital-insurer alliance model, puts the hospital at the centre of the health care delivery system. The other approach, the care group fundholder model, is primary care-oriented. In both settings, the financial and organizational structure resemble many of the characteristics that define an IDS's success: per capita payment, financial and clinical accountability, aligned interests, focus on prevention and disease management, and coordinated health care delivery. Both models proposed in this paper are built on recent initiatives and developments in Dutch health care. They can be considered as steps that can be taken towards IDSs, and thus towards a better, and more efficient, health care system.

5 Discussion & Conclusion

In this thesis, it was hypothesized that integration of health care financing and delivery will improve efficiency in Dutch health care. An integrated delivery system, such as Kaiser Permanente, is the prototypical example of a fully integrated organization that puts the delivery system and the insurance function under one roof. Based on theoretical insights and empirical literature, IDSs have shown to be able to outperform traditional fee-for-service arrangements which are dominant in the U.S.'s current fragmented uncoordinated health care system.¹⁸

Given recent reforms in Dutch health care by the introduction of Enthoven's model of managed competition, an increase in the formation of IDSs can be expected. Nevertheless, the start-up costs of these organizations are very costly and experiences in the U.S. have shown that IDSs do not easily expand to all regions. Therefore, it was argued that incremental steps towards IDSs in the Netherlands are a more feasible and realistic alternative. Better yet, many initiatives and developments in the Netherlands already point to such progress. Numerous elements that define an IDS's success are noticeable in these initiatives. In this thesis, two approaches to achieve more integration in health care financing and delivery are discussed. One approach entails the formation of a hospital-insurer alliance, whereas the other approach is centred around care groups. Either way, both models encourage providers and insurers to form strategic alliances with one another, in order to jointly provide affordable, high quality care. More importantly, both approaches align interests among providers and payers, increase financial and clinical accountability, encourage coordinated health care delivery, stimulate prevention and disease management, promote collaboration across the continuum of care, and reduces the incentive to provide unnecessary (costly) services. As such, many of the characteristics that are intrinsic to an IDS are present in these newly proposed alliances.

Further improving the fulfilment of the preconditions necessary for regulated competition to work will stimulate the formation of such arrangements, since these strategic alliances have the potential to provide high-quality care at lower costs, compared to current arrangements. However, a lack of proper outcome measures and the reluctance of consumers to base their insurance choice on this limited quality-information available, frustrates competition among insurers and providers.⁴¹ Thus, priority should be given to increase transparency, encourage the development of quality outcomes, and inform the public about quality of care. When the benefits of these strategic alliances can be demonstrated and when information about differences in quality of care are available, regulated competition will push consumers to change insurer. In addition to increased transparency about insurers' and providers' performances, safeguarding and promoting horizontal competition will further force organizations to reorganize health care financing and delivery into more efficient arrangements. The fulfilment of these preconditions is a requirement to protect the public goals of affordability, accessibility and quality of care. Within the current Dutch framework, strategic alliances between providers and insurers, as described in this paper, have great potential to improve efficiency of the Dutch health care system while preserving the public goals.

The absence of fully integrated delivery systems in the Netherlands could also be ascribed to a lack of urgency. Although evaluations show ample room for improvements in Dutch health care

delivery, the necessity to radically change the way health care is delivered may not be present. A certain threshold, or tipping point, needs to be reached in order to push the market to reorganize health care financing and delivery and to form IDSs. Until then, alternative arrangements such as the hospital-insurer alliance model and the care group fundholder model may suffice and serve as intermediate organizations on the road to fully integrated delivery systems. These two models are also in line with recent developments in Dutch health care and do not mark a significant break with the current system of competition among insurers and providers within a regulatory framework set by the government. Better yet, vast improvements have been made in identifying the preconditions for competition and the need for risk-adjustment. The next step is to find ways for competing insurers to get traction with the delivery of health care, and this paper has proposed several options on how to do so.

The credible-commitment problem has so far plagued insurers to adequately fulfil their role as third-party purchasers. Boonen reports that over the past years, the willingness of patients to follow their insurer's advice has diminished, thus increasing the credible-commitment problem.⁴² The ability to channel subscribers to preferred providers is essential for the Dutch system to function properly. Future research should focus on the ability and public acceptance of care groups and hospitals to channel patients to preferred providers. Although research has pointed out that the insurers' fear of reputation damage holds them back in forming restrictive networks, little is known about the public acceptance of restrictive networks formed by health professionals themselves. Implicitly, channelling has always occurred in Dutch health care via the GPs' role as gatekeeper. In the newly proposed models, GPs will receive an even greater role in guiding the patient through the health care system by referring the patient to in-house physicians or contracted providers only.

Interestingly though, Dutch health insurers have revealed that their long-term strategy plans do not include the formation of vertically integrated organizations.⁴² In contrast, they see vertical integration as an emergency option in case the insurer is unable to contract sufficient care for its enrollees, whereas none of the insurers indicate that vertical integration could also be used as a competitive advantage. The reason for the reluctance to form vertically integrated organizations could have to do with their fear of reputation damage and the credible commitment problem. Vertical integration is based on unified ownership and subscribers may fear the insurers' power within that organization to overrule the professionals' autonomy when it comes to health care provision. This was recently illustrated by the negative publicity when the Dutch insurer Menzis participated in several primary care centres. Also, the announcement of a vertical integration between a hospital and insurer even led to a proposal by Parliament to prohibit vertical mergers. Since the interference of health insurers in medical practice remains a sensitive issue, insurers may prefer to limit their activities to 'virtual integration' only, which is based on contractual networks rather than unified ownership.⁷⁷ Many of the advantages accomplished via vertical integration can also be achieved via contractual means, as the two models described in this paper are basically a form of virtual integration. However, many opponents of fully integrated systems argue that the advantage of unified ownership is required to achieve the full savings IDSs can accomplish.¹⁸ Better coordinated action to achieve efficiency can be reached when all professionals and managers are focussed on the same goals and strategies.

The Health Insurance Act (HIA) is mainly concerned with curative health care, whereas long-term care and hospitalization beyond 1 year are covered by a separate scheme, the Exceptional Medical Expenses Act (AWBZ). The AWBZ is subjected to a completely different financial and organizational regime. With regard to the entitlements included in the AWBZ, insurers do not compete with one another and hold little financial responsibility for the purchasing of these provisions. Ultimately, integrating the HIA and the AWBZ by making Dutch insurers fully responsible for all 'cure and care' needs would allow better coordination across these two domains. As such, an IDS could be held responsible for all health care provisions, including primary care, secondary care, long-term care, disability care, and home care. This would make an IDS the ultimate guarantor of the wellbeing (cure and care) of its subscribers. However, the current Dutch risk-equalization scheme is not yet sufficiently equipped to deal with such financial responsibilities for health insurers. An inadequate risk-equalization system could incentivize insurers to engage in risk selection and quality-skipping on provisions that are predominantly used by those who are considered to be a predictable loss for the insurer.

The reason health care still functions this good is the physicians' intrinsic motivation to do best for the patient, but it is a lot to ask from physicians to work against their own economic interests. The current system in which providers are financially and organizationally separated from one another impedes collaboration and hinders improvements in health care delivery. Aligning financial incentives, rewarding prevention, and stimulating coordinated health care delivery can greatly improve the quality of care, while simultaneously reducing costs. IDSs contain all these elements and are thus best equipped to deal with the challenges faced by many health care systems. Moving towards these integrated systems will ultimately contribute to a more efficient health care system. Strategic alliances formed between providers and insurers are a first step in that direction and can serve as transitional vehicles on the road to full integration of health care financing and delivery.

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