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Universal mandatory health insurance with Managed Competition in the Netherlands:
A model for the USA?

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ABSTRACT

Policy analysts consider the Netherlands health system a possible model for the USA. Since 2006 all Dutch citizens have to buy standardized individual health insurance coverage from a private insurer. Consumers have an annual choice among insurers, and insurers can selectively contract or integrate with health care providers. Subsidies make health insurance affordable for everyone. A Risk Equalization Fund compensates insurers for enrollees with predictably high medical expenses. The reform is a work-in-progress. So far the emphasis has been on the health insurance market. The challenge is now to successfully reform the market for the provision of health care.

Keywords: universal health insurance, managed competition, health reform, Netherlands

Introduction

Proposals for health care reform in the USA regularly refer to the recently reformed Netherlands health care system. Highlighted features are: the individual mandate to buy private health insurance; consumers having an annual choice of insurer; individual-based instead of employer-based insurance; community rated premiums and income-related subsidies to buy health insurance; insurers receiving risk-adjusted equalization payments for covering the elderly and chronically ill people; a multiple-payer instead of a single-payer system; and health care being delivered by private providers.

In this paper we focus on the Netherlands health care reforms. First we discuss the three major waves of reform in the Netherlands over the last century. Then we focus on the national Health Insurance Act that was implemented in 2006. Finally some challenging issues are discussed.

Three waves of health care reforms

Historically the Dutch health care system has been characterized by much private initiative both in funding and provision of care. Until 1941 there was no government regulation with respect to health insurance. Doctors were free to establish practices and to set prices. Around 1940 there were several hundred local community health insurance organizations. These local insurers paid GPs by capitation and often had their own health care facilities, so they could be considered as early Health Maintenance Organizations (HMOs). Since the first unsuccessful attempt to enact an universal health insurance scheme in 1904, it took more than a century to successfully implement mandatory comprehensive health insurance for all. In this process three major waves of health care reforms can be discerned.[1]

❖ First wave: Towards Universal Coverage (about 1940 – 1970)

Until the 1970s the primary focus of the Dutch government was to promote public health, to guarantee a minimum level of quality (e.g. by professional licensure) and to ensure universal access to basic health services. After decades of political debate a mandatory health insurance scheme for the low and middle income groups was introduced in 1941. In 2005 this mandatory scheme covered 68% of the Dutch population. Coverage included physicians' services, prescription drugs, hospitalization (365 days), maternity care, dental care for children, some paramedical care and some medical devices. People with an income above a certain

threshold were excluded. Most of them voluntarily bought health insurance from a private insurance company. In 2005 only about 1.5 percent of the population did not have any health insurance, except for "exceptional" medical expenses that were covered by the *Exceptional Medical Expenses Act.* This act was passed in 1968 and constituted a mandatory national health insurance scheme with an income-related premium, covering long-term care, care for the mentally and physically disabled and hospitalization for longer than one year.

❖ **Second wave: Cost Containment by Government (about 1970 - 2000)**

By the end of the 1960s the Dutch government became worried about the seemingly uncontrollable growth of health care expenditure. The reason for this was twofold. First, rising health care expenditure could jeopardize the goal of universal access to basic care. Second, the government feared that rising health care costs would result in higher labor costs, which would raise unemployment and would harm the Dutch open economy that heavily relies on exports. The growing pressure to contain medical spending led to increasing supply and price regulation since the mid-1970s.

In 1983 the government decided to replace the open-ended hospital reimbursement system by a budgeting system, which in 1984 was expanded to all other inpatient care institutions. The Health Care Prices Act (1982) enabled government to control the physicians' fees, and in a later stage also their total revenues. Traditionally the medical specialists received a fee for each item of service. Under threat of substantial fee cuts government forced them to give up their fee-for-service payment system. By the mid-90s the fee-for-service system was largely replaced by a 'lump-sum payment' per hospital for all specialists working in that hospital. Subsequently, further steps have been taken towards partnership and integration of hospitals and medical specialists.

Cost sharing has always been a very controversial issue in the Netherlands. As a consequence, demand-side constraints have played a restricted role in containing costs as compared to supply-side constraints.

❖ **Third wave: Efficiency through Managed Competition (from about 2000)**

From the early 1980s top-down rationing policies were subjected to growing criticism. The criticism focused particularly on the lack of incentives for efficiency and innovation within the prevailing system of health care finance and delivery. This led to broad support for incentive-based reforms and a reconsideration of the role of competition in health care. In 1987 the government-

appointed Dekker-Committee advised a market-oriented health care reform and a national health insurance system. The Health Insurance Act (2006) and the current regulatory regime are based on these proposals.

The Act was the culmination of a series of market-oriented reforms that were gradually implemented since the early 1990s. A number of complicated preconditions had to be fulfilled in order to combine competition with universal access and to create the appropriate incentives for consumers, providers and insurers. First, an adequate system of risk equalization had to be developed (see below). Next, an adequate system of product classification and medical pricing had to be developed to give providers appropriate incentives for efficiency and to prevent stinting on the delivery of services. Third, an adequate system of outcome and quality measurement was necessary to enable specified contracts between insurers and health care providers and to prevent competition focusing only on price. Fourth, an adequate system of consumer information about the price and quality of insurers and care providers had to be developed to enable effective consumer choice. Finally, an adequate governance structure including an effective competition policy had to be developed.

Since none of these preconditions were fulfilled in 1987, a 'radical' reform clearly was not feasible. Although during the 20 years following the Dekker plan health care politics can be described as an ongoing process of competing policy programs[2], successive governments have consistently worked on the realization of the preconditions for managed competition. After decades of central price- and capacity-control by government the Dutch health care system is now in transition from supply-side regulation towards managed competition. The centre-left coalition government that in February 2007 replaced the previous centre-right coalition, continues in this policy direction.

National Health Insurance based on Managed Competition in the private sector

Since 1 January 2006 the *Health Insurance Act* has obliged each person who legally lives or works in the Netherlands to buy individual private health insurance with a legally described benefits package from a private insurance company. Contrary to the previous private health insurance scheme, insurers are legally obliged to accept each applicant for a basic insurance contract at a community rated premium and without exclusion of coverage because of pre-existing conditions. In an international context the Netherlands' health system reform is unique: it is the first country in the world that is consistently implementing Enthoven's model of national health insurance based on managed competition in the private sector'[3].

❖ **Financing**

All individuals have to pay an income-related contribution (7.2% of the first €31,200 of annual income in 2008)[4] to the tax-collector, who transfers these contributions to a Risk Equalization Fund (REF). Employers are legally obliged to compensate their employees for these income-related contributions. These compensations are the same regardless of the chosen insurer and are taxable income for the employees. In addition all adults have to pay a premium directly to the chosen insurer. Each insurer sets its own community-rated premium. For high-risk insured the insurers receive a high risk-adjusted equalization payment from the REF. For low-risk insured they have to pay an equalization payment to the REF. According to the Health Insurance Act the sum of the income-related contributions equals 50% of the total insurers' revenues for the mandatory basic insurance. In 2008 the average premium equals about €1100 per adult (18+) per year.

About two thirds of Dutch households receive an income-related subsidy ('care allowance') from the government, which is at most €1464 (in 2008) per household per year.[5] Since the allowance is independent of the choice of insurer, consumers are fully price sensitive at the margin. Children (under 18) do not have to pay a premium. Government provides the REF with a compensation for their costs.

People are free to buy voluntary *supplementary health insurance* for benefits that are not included in the mandatory basic insurance, e.g. dental care for adults, physiotherapy, glasses, alternative medicine and cosmetic surgery. For supplementary health insurance insurers are free to risk-rate premiums and to refuse applicants. More than 90 percent of the population buys supplementary health insurance and almost always from the same insurer who provides their basic coverage.

Since 2006 health care is primarily financed through two mandatory universal schemes with different regulatory regimes: a scheme for curative health care services under a regime of managed competition (*Health Insurance Act*) and a scheme for long-term care services under a regime of price and supply regulation (*Exceptional Medical Expenses Act).* The rationale for this distinction is based on differences(1) between the types of risks and the feasibility of risk equalization; and (2) between types of care for which the managed competition model is considered to be (in)appropriate.[6] In this paper we focus on the Health Insurance Act.

❖ **Entitlements**

In the Health Insurance Act the basic benefits package is described in terms of functions of care and not, as previously, in terms of providers of care. For example, plans must provide "rehabilitation care" rather than "care delivered by rehabilitation institutions". This facilitates entry of other providers of rehabilitation services.

Insurers must specify the precise entitlements (i.e. the contractual rights) in the insurance contract, e.g. a list of contracted providers, a list of covered pharmaceuticals, and procedural conditions. Consumers can be entitled to receive 'care in kind', or to reimbursement of medical expenses. Insurers are free to selectively contract with providers and to use financial incentives to motivate consumers to use preferred providers. Alternatively, insurers may offer contracts with full reimbursement of all providers. In sum, although the standardized basic benefits package is described in the Health Insurance Act, there can be substantial variation in the insured's entitlements.

❖ **Consumer choice of health insurance**

For each type of insurance contract an insurer is obliged to accept each applicant at any time (`guaranteed issue') for the same premium ('community rating per product') per province. Insurers with less than 850,000 enrollees are allowed to restrict their activities to one or several of the twelve provinces. The contract period is at most one year. According to the Act consumers have at least one option per year (on 1 January) to switch to another insurer or basic insurance contract. Insurers are legally required to publish next year's basic insurance contracts by November 15. There are about 14 insurers and some of them have several subsidiaries operating under different labels. The largest four insurers (including subsidiaries) have about 90% of the market. In anticipation of the new national health insurance scheme in 2006 price competition on the insurance market strongly increased. As the result of a 'premium war' the health insurers incurred a total loss of €563 million (2% of revenues) in 2006.[7] The introduction of the new health insurance scheme prompted many people to reconsider their choice of insurer, resulting in an all-time high switching rate of 18% of the total population. In 2007 price competition resulted in similar losses.[8]

The Health Insurance Act provides the option of '*group discounts*'. Insurers are allowed to give a premium discount of at most 10% to insureds who belong to a 'group', which can be any legal entity. In 2007 about 57% of population obtained such a group discount, with an average discount of 7%.[9] Two thirds of them had a group discount via their employer. But there

are many other types of groups, e.g. patient organizations, sport associations, labor unions, co-operative banks (for their clients/members), and independent entrepreneurs who organize 'groups' (e.g. via internet). In principle the entitlements for the basic insurance, including the consumer choice of provider, are identical for those with a group discount and those without such a discount. The only difference is the premium. For supplementary insurance, however, the conditions may differ between group and individual contracts. In practice many groups also negotiate about the conditions of the supplementary insurance, which are often interrelated with the conditions of the basic insurance.

According to the Health Insurance Act every adult (18+) has a deductible of €150 per year (excluding GP-services and maternity care). Consumers can obtain a discount if they voluntarily choose a higher deductible (up to €650 per year).

❖ Enforcing the mandate to buy insurance

One of the issues that have not been settled yet is the enforcement of the individual mandate.[10] Although all Dutch citizens are legally obliged to buy basic health insurance coverage, in 2006 about 1.5% failed to do so.[11] Uninsured people are liable to a penalty of 130% of the premium over the period of not being insured, with a maximum of 5 years. However, the problem is that (1) government does not (yet) know who is uninsured, and (2) most uninsured probably have such a low income that they cannot pay the penalty. If uninsured persons need medical care, they can enroll with any insurer because insurers are legally obliged to accept them. Alternatively, providers of care can arrange the insurance enrollment of uninsured patients prior to treatment.

Government intends to actively enforce the mandate to buy health insurance. As a first step government is actively tracking down the identity of the uninsured by matching the files of all insurers with the files of the civil registrations.[12] After identification the uninsured will receive a warning notice. If they persist in being uninsured, a last resort option according to government is that some public authority will enroll them as insured with some insurer.

A related problem is the substantial number of insured who do not pay the premium to their insurer. About 1.5% of the insured have not paid any premium in the last 6 months.[13] In default of payment the insurers are legally allowed to cancel the contract and to refuse enrollment during the next 5 years. However, all other insurers are legally obliged to accept the expelled person. If the person again does not pay the premium, the second insurer may also cancel the contract. And the person might go to a third insurer, etc. So the insurers fear a

'merry-go-round' of defaulters. Canceling the contract of defaulters is therefore not in their *collective* interest.

To increase the enforcement of premium payment the Dutch government intends to create the legal option in case of default to directly withhold a payment from the defaulters' income or welfare payments, just as payroll taxes. This withheld payment will be higher than the highest premium in the market.[14] The Dutch government holds the view that each adult can afford the premium because in determining the level of the welfare payments and the legal minimum wage the payment of the health insurance premium has been taken into account. Therefore, according to government, nobody should withdraw from the responsibility to pay premium.

An alternative way to reduce the potential risk of default or not taking-up insurance would be to replace the current 50-50 ratio between income-related contributions and direct out-of-pocket-premium with e.g. an 85-15 ratio as it was in 2005. The average annual out-of-pocket-premium would then be about €350 per person (the 2005-level) rather than €1100 (the 2008-level) and the income-related contribution would increase. In addition the administratively complex and costly system of income-related care allowances that was introduced in 2006 could be abolished without influencing access.

❖ **Risk Equalization Fund**

To prevent insurers from seeking only young, healthy customers government has implemented a risk equalization system, similar to that in the former social health insurance market. Until 2002 the risk equalization payments were primarily based on age, gender, and indicators of disability and socio-economic status. Because the ex-ante risk-adjusted equalization payments insufficiently compensated the insurers for the (extreme) high expenditures of high-risk insured, insurers also received some ex-post compensations based on their actual expenses. As a result the insurer's average financial risk on medical expenses was limited to 36 percent of gains and losses in 2000.

Since 2002 the following risk factors have been added: Pharmacy-based Cost Group (PCGs) in 2002 and Diagnostic Cost Groups (DCGs) and being self-employed (yes/no) in 2004.[15] PCGs and DCGs are indicators of health status, derived from prior prescription drugs and the diagnosis of prior hospitalization. Based on these risk adjusters all individuals are classified into subgroups of insured who are more or less homogeneous in future predicted health expenses. Together with these improvements in the equalization formula the Dutch

government increased the insurers' financial risk from 36% (in 2000) to 59% (in 2008). This is partly the result of a gradual increase of the threshold above which insurers receive a 90%-compensation of all expenses per insured per year, from €4,545 (in 2000) to €20,000 (in 2008).

Despite the sophisticated risk equalization model there are still unprofitable subgroups (see Exhibit) that insurers can easily identify. Risk selection activities targeted at these groups can therefore be profitable.

(Exhibit about here)

❖ **Risk selection**

Although the risk equalization scheme appeared to be sophisticated enough to prevent risk selection in the former social health insurance scheme, this may change because in the current scheme insurers have more *incentives* and more *tools* for risk selection than prior to 2006.

The insurers' *incentives* for risk selection increase first because the chronically ill have more incentives to switch if some insurers' networks of providers are more attractive than others. Prior to 2006 selective contracting hardly occurred. Second, health insurance contracts are no longer only sold by Dutch 'social insurers' with a long history of social solidarity, but also by private insurers who have more experience with risk selection. Third, the government intends to further increase the insurers' financial risk by reducing the level of the ex-post cost-based compensations.

In addition, insurers have more *tools* for risk selection at their disposal than prior to 2006. First, insurers have more tools for managing care, which can also be used to select risks. Second, the insurers have more room in defining the precise entitlements of their insureds, which can employed to select favorable risks. Third, insurers are allowed to sell mandatory health insurance together with any other type of non-life insurance, e.g. supplementary health insurance, sick leave insurance and car insurance, which prior to 2006 was not allowed. In particular supplementary health insurance can be an effective tool for risk selection, because insurers are allowed to reject applicants based on their health status. Fourth, insurers are free to give premium rebates to groups for the mandatory basic insurance, which prior to 2006 was not allowed. A group can have any risk composition and the 'organizer' of the group can selectively enroll preferred members only. Although the rebate for the basic insurance is at most

10%, insurers can give these groups any rebate on supplementary health insurance or other insurance products.

In the transition period of implementing the new Health Insurance Act in 2006 'selection via the supplementary insurance' was not an issue because under pressure of parliament insurers collectively agreed not to refuse applicants for the standard supplementary insurance. Under public pressure the insurers prolonged this collective agreement for one year. Indeed, no evidence of 'risk selection via individual supplementary insurance' was found in late 2006 and early 2007.[16]

Given the increasing incentives and expanding tools for risk selection, further improvements of the risk equalization method are necessary to prevent insurers from engaging in risk selection, which occurs e.g. in Switzerland.[17] The Dutch government intends to further improve the risk equalization formula[18] by adding new risk adjusters such Diagnostic Cost Groups (DCGs) based on outpatient care, indicators of mental illness and indicators of disability and functional restrictions, by multiyear DCGs rather than one-year DCGs[19] and by more effective forms of ex-post risk sharing[20] that in particular compensate insurers for high-risks who have a rare chronic disease with high expenses.

The more government succeeds in improving the risk equalization formula, the more will chronically ill people be the preferred clients for efficient insurers, because the potential efficiency gains per person are higher for the chronically ill than for healthy persons.

Since 2006 several insurers have advertised special supplementary group insurance policies for diabetes patients. These special policies were developed in close cooperation with the national diabetes patient organization. In addition, several insurers are now actively involved in setting up disease management programs for diabetes patients. These activities appear to be the direct effect of the extension of the risk equalization system with a risk adjuster for type 2 diabetes since January 2006.[21] (Type 1 diabetes was already included as a risk-adjuster.) In 2007 almost 40 patient organizations representing people with various chronic conditions had concluded group contracts with insurers. On the other hand, at least 16 patient organizations were not able to conclude such a group contract because the risk equalization payments for these groups were insufficient according to the insurers.[22] Hence, in due course, the ability for patients with specific chronic conditions to negotiate favorable group contracts may provide a good indicator of the quality of the risk equalization method.

Ideally the risk equalization formula should be refined to such an extent that insurers expect the costs of selection (including the cost of a bad reputation) to exceed its profits. By

making the risk groups in the equalization more homogeneous, the costs of selection increase while on average the profits fall. In addition the government or patient advocacy groups could also raise the cost of a bad reputation by frequently monitoring insurers' behavior and publishing relevant consumer information.

❖ Managed care

The competing insurers are expected to become prudent buyers of care on behalf of their insured. Although the supply-side is still quite heavily regulated by the government, insurers and health care providers will gradually get more freedom to negotiate about prices, service and quality of care. Since 2005 prices for physiotherapy are no longer regulated. Insurers and hospitals are allowed to freely negotiate prices and selectively contract for a range of products (Diagnostic-Treatment-Combinations) accounting for about 20% (in 2008) of hospital revenues. In 2009 hospitals will be allowed to set prices for about 50% of hospital services under a government determined price cap.

Insurers are allowed to integrate with health care providers and to provide care in their own facilities using their own staff (e.g. primary care centers, pharmacies). Each insured has to register with a single general practitioner (GP) who is assumed to coordinate and pre-authorize specialist care. Recently insurers have started to set up primary health care centers and pharmacies. Insurers may provide their gate-keeping GPs with incentives to stimulate integrated and coordinated care, resulting in integrated care organizations that give a prime role to primary care. Currently most legal obstacles to that type of integrated care organization have been abolished, partly by the Health Insurance Act. Some large insurers are experimenting with some form of bonuses for, and risk sharing with, general practitioners. For instance, one major insurer offered general practitioners a bonus for prescribing generics (omeprazole and simvastatine) instead of equivalent brand name drugs. The bonus payment was unsuccessfully challenged in court by four major pharmaceutical companies.

So far it is an unanswered question to what extent an integration of financing and delivery of care will be acceptable for the Dutch population.

❖ Consumer information

A few years ago the Dutch government took the initiative to set up a website where consumers can get information about insurers and providers of care (www.kiesbeter.nl).

Consumers who visit this website can compare all insurers with respect to price, services, consumer satisfaction and supplementary insurance (premiums and benefits). In addition they can compare hospitals on different sets of performance indicators, which have been developed by the Health Care Inspectorate (IGZ) since 2004. The provision of adequate consumer information is also one the main priorities of the newly established Netherlands Health Care Authority (NZa).

Conclusions and policy implications

Knowledge of the Dutch health system may contribute to broaden the USA policy debates. Americans may be interested in the Dutch system because it combines mandatory universal health insurance with competition among private health insurers. It is not a single-payer system. Since the early 1990s the Dutch government has been gradually implementing this model. In 2006 a major step was taken with the implementation of the Health Insurance Act. It is important to emphasize that the Netherlands health care reform is a work-in-progress. So far the emphasis has been on the health insurance market. A major challenge now is to reform the still heavily regulated market for the provision of health care and to improve the quality of care and/or lower its cost. Major questions are whether the insurers in the Netherlands are really able to function as good purchasers of care, which forms of 'managed care' will be acceptable for the public, and whether government will be prepared to give up its traditional tools for cost containment by reducing supply-side regulation. So far the jury is still out.

- **Convergence?**

Looking at the health care systems of the Netherlands and the USA, complementary strengths and challenges can be observed. The Netherlands has implemented the institutional framework to combine universal access and consumer choice of insurer, while its challenge is to create integrated delivery systems that provide high quality care in response to consumers' preferences. In the USA there are several examples of excellent integrated delivery systems, while the reform debate is dominated by the issue of the lack of universal access to basic health insurance coverage. Whether the best elements of both systems can be combined in the coming decade is a major challenge for health policy makers in both countries.

Exhibit. Predictable losses for subgroups of consumers, given the Dutch risk equalization formula (2005) and community rating (without the ex-post compensations)

Subgroup	Estimated size of the group	Indication predictable losses per person per year
General Health Indicators (last year)		
Perceived health status: poor/moderate	20,1 %	€ 540
Limitations in physical functioning	8.5 %	€ 870
Limitations in daily activities	3.1 %	€ 1590
Three or more diseases	7.0 %	€ 890
Anxiety neurosis	3.5 %	€ 1100
Depression	2.3 %	€ 1080
Migraine	6.8 %	€ 320
High cholesterol	1.5 %	€ 1300
Use of at least five medicines in 14 days	3.3 %	€ 1650
Previous years		
25% highest expenses in each of the three preceding years	10.6 %	€ 1500
Highest expenses four years ago	5.5 %	€ 1300
Hospital admission four years ago	6.8 %	€ 960
Perceived health status five year ago: poor/moderate	17.9 %	€ 490
At least three diseases in last five years	17.7 %	€ 770
4-8 years ago: hospital admission in at least 2 years	8.9 %	€ 2100
Highest expenses eight years ago	4.9 %	€ 1000

Source: Van de Ven WPMM, FJ Prinsze, D de Bruijn, FT Schut, 2005, Nieuwe zorgstelsel verdient betere risicoverevening, *Economisch Statische Berichten,* 20 May 2005, p. 223-225.

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[4] Self-employed and retirees pay 5.1%.

[5] For a one-person household the annual care allowance is at most €552 (in 2008). In 2006 4.9 million households received a care allowance (CBS Webmagazine 12 March 2007). In total there are 7.2 million households in the Netherlands (CBS Webmagazine 18 April 2007). See: http://www.cbs.nl

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[14] Tweede Kamer, 2007-2008, 29689, nr. 166, 12 November 2007.

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[21] Without adequate risk equalization a health plan that has the best reputation for treating diabetes patients attracts many unprofitable patients and will be the victim of its own success. For such an example in practice see: N. Beaulieu, D.M. Cutler, K. Ho, G. Isham, T. Lindquist, A. Nelson, and P. O'Connor, "The Business Case for Diabetes Disease Management for Managed Care Organizations", *Forum for Health Economics & Policy* 9, no. 1 (2006): 1–36.

[22] F.T. Schut, and D. de Bruijn, "Collectieve zorgverzekeringen en risicoselectie", Rotterdam: Erasmus University, 2007.