



THE SWISS AND DUTCH HEALTH INSURANCE SYSTEMS: UNIVERSAL COVERAGE AND REGULATED COMPETITIVE INSURANCE MARKETS

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ABSTRACT: As the United States resumes debate over options for achieving universal health coverage, policymakers are once again examining insurance systems in other industrialized countries. More recent attention has focused on countries that combine universal coverage with private insurance and regulated market competition. Switzerland and the Netherlands, in particular, have drawn attention for their use of individual mandates combined with public oversight of insurance markets. This paper provides an overview of the Swiss and Dutch insurance systems, which embody some of the same concepts that have guided health reforms adopted in Massachusetts and considered by other states and by federal policymakers. The two systems have many features in common: an individual mandate, standardized basic benefits, a tightly regulated insurance market, and funding schemes that make coverage affordable for low- and middle-income families. Differences include degree of centralization, basis of competition among insurers, availability of managed care, and reliance on patient cost-sharing to influence care-seeking behavior.

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FOREWORD

As the United States resumes active debate over options for achieving universal health coverage, policymakers are once again examining insurance systems in other industrialized countries. In the past, discussion often focused on the merits or deficiencies of single-payer social insurance models, such as Canadian or French approaches, or public systems. More recently, attention has turned to countries that combine universal coverage with private insurance and regulated market competition. The systems in Switzerland and the Netherlands, in particular, have drawn attention for their use of individual mandates combined with public oversight of insurance markets. Prepared at the request of the Swiss and Dutch national governments, this paper provides an overview of the Swiss and Dutch health insurance systems with a focus on insurance markets. The health insurance systems in the Netherlands and Switzerland embody some of the same concepts that have guided the health reforms adopted in Massachusetts and that have been considered in other states and at the federal level. Differences as well as similarities in core policies thus provide potential insights for the United States and international opportunities to learn, as the countries pursue shared goals of universal access, improved quality, and improved cost performance.

- *Universal coverage attained through a mandate that every individual purchase a basic insurance plan.*

Building on a previous system of social and private insurance, the individual mandate in the Netherlands took effect in 2006. The Swiss have operated with a mandate since 1996. In both countries uninsured rates are low (estimated at about 1.5 percent of the population in the Netherlands and below 1 percent in Switzerland). An additional 1.5 percent is insured but behind on premium payments—a policy concern in both countries. Both countries subsidize premiums for low-income households, with about 40 percent receiving such premium assistance.

- *National standards for basic coverage for private insurance.*

In both countries, benefits are comprehensive in scope for acute care services (doctors, hospitals, prescription drugs, and lab/diagnostic tests). Insurance systems bring the working-age and elderly populations into a single pool.

Switzerland imposes much higher cost-sharing, including deductibles and coinsurance. The Netherlands has notably low cost-sharing, with additional protections for the chronically ill.

In both countries, the majority of the population buys supplemental policies, often purchased from the insurer providing basic coverage. Insurers providing supplemental coverage are subject to fewer (Netherlands) or no (Switzerland) risk-rating restrictions. This has had complex effects on competition and mobility of the insured in the supplemental insurance market.

- *Tight regulation of basic health insurance markets, with requirements for open enrollment and community rating.*

Both countries require that insurers accept all applicants and prohibit variations in premiums by health status—community rating, with guaranteed offer and renewal. The two countries differ markedly, however, regarding insurance market oversight, the way premiums are set, and the extent of risk equalization efforts across competing plans.

The Netherlands operates a national insurance market for its 16 million residents. Plans may operate on a for-profit or nonprofit basis. The insurance market is highly concentrated, with the top five plans accounting for 82 percent of enrollment. Plans typically offer coverage in all areas of the country and include all providers, although selective contracting is allowed. Children are covered in full through public funds. Premiums charged for adults represent 50 percent of the expected annual costs. In addition, plans receive allotments from a national risk equalization fund, financed by income-related contributions. The allocation uses a sophisticated range of risk factors. As a result of this process, the premiums facing Dutch adults when selecting a plan vary within a narrow range.

In contrast, the Swiss insurance system (7.5 million people) is highly decentralized, with plans operating and setting premiums at the canton level (26 divisions). In Switzerland, only nonprofit insurers may participate. The 10 largest of some 85 carriers insure 80 percent of the population. Swiss insurance risk equalization efforts adjust only for age and sex factors at the moment. Currently, Swiss premiums vary widely by health risks of insured pools across the country and within regions.

Since 2006, premium competition in the Netherlands has been vigorous, with carriers accepting initial losses under the new system to build market share. Both Dutch and Swiss insurance systems operate with relatively low overhead costs by U.S. standards: administrative and profit-margins account for about 5 percent of premiums.

- *Risk equalization systems are intended to reduce incentives for insurers to seek healthier enrollees.*

In both countries, funds are redistributed among insurers on the basis of measures of population need. The measures in the Netherlands have grown steadily more sophisticated and have proven better able to predict utilization than the simpler system adopted in Switzerland by the government. As a result, differences in insurer prices in Switzerland often reflect levels of enrollee risk, rather than relative efficiency. It is expected that the modification of the risk formula in 2012 will substantially reduce these differences.

- *Use of managed care plans and selective provider contracting.*

In Switzerland, 12 percent of the population is enrolled in HMOs or other managed care plans. However, savings have been limited because most of these enrollees are in the least integrated plans, and plans have no ability to negotiate prices with providers. Outside such plans, Swiss patients have open access to physicians and can self-refer to specialists. Swiss provider fees are generally set by negotiations between provider associations and insurance associations. Hospitals are mostly paid per diem rates, although a large fraction has already changed to prospective reimbursement. A nationwide diagnosis-related group (DRG) system (SwissDRG) will be introduced in 2012. Cantons finance more than 50 percent of hospital costs either directly or through DRGs.

The Netherlands has historically had a strong primary care system that required primary care referrals for specialized care. The 2006 insurance reform maintained this provision. It also enabled selective contracting and payment variations to improve cost and outcome performance. These arrangements are just beginning to emerge in the Netherlands. Hospital budgets and physician payments have historically been tightly regulated. To promote this development of payment innovation and more integrated systems, the scope of services for which plans may negotiate prices is gradually being expanded.

The Dutch health insurance system is a work in progress, with the 2006 universal coverage law just the latest in a series of gradual reforms overseeing regulated insurance markets. This process has required consensus and ongoing commitment by successive governments to a basic framework for health reform. The Swiss program has been in place since 1996. Some of its shortcomings, in areas such as risk adjustment and provider contracting, have proved difficult to address, in part because of split responsibilities for health care under Switzerland's federal system of government. This may have important

implications in considering the right balance of federal and state responsibilities in health reform in the United States.

Despite the challenges, both systems can boast many successes as well. Both have achieved universal health coverage among their citizenry, with patient choice, broad access, and low disparities. Residents in both countries enjoy among the longest life expectancies in the world (Switzerland is second only to Japan), and both systems have wide support of the citizenry. These achievements highlight the potential value of investigating the experiences of both countries.

The Swiss and Dutch health systems provide real-world prototypes for a regulated competitive model with multiple insurance plans, which many believe is the most likely route to universal coverage in the United States. Both countries' systems are in transition, with ongoing reforms focused on improving cost and quality performance. Tracking and understanding their experiences—both challenges and successes—offers potential insights for U.S. policymakers.

THE SWISS AND DUTCH HEALTH INSURANCE SYSTEMS: UNIVERSAL COVERAGE AND REGULATED COMPETITIVE INSURANCE MARKETS

INTRODUCTION

The health insurance systems in Switzerland and the Netherlands provide universal coverage through multiple private insurers in regulated competitive markets. The systems have many features in common: an individual mandate, standardized basic benefits, a tightly regulated insurance market, and funding schemes that make coverage affordable for low- and middle-income families. At the same time, there are important differences between the two systems, such as the degree of centralization, the basis of competition among insurers, the availability of managed care, and the extent to which they rely on patient cost-sharing to influence participants' care-seeking behavior.

In the hope that each country could learn from the other's experience, teams of health policy analysts were brought together at the request of the Dutch Ministry of Health, Welfare and Sports, the Swiss Federal Office of Public Health, and the Swiss Secretary of State for Economic Affairs. The result of this unique effort to provide a comparison of the two systems using a common analytic framework is the 2008 report, *The Swiss and the Dutch Health Care Systems Compared: A Tale of Two Systems*.¹

This summary report is an abridgment of that comprehensive volume. It begins with an overview of the two systems, followed by a more detailed account of specific aspects. An appendix provides data on how the systems compare to those in the United States and other countries in the Organisation for Economic Co-operation and Development (OECD) on dimensions of cost, access, and patient satisfaction. Note that the discussion in this report is limited to coverage of acute care services. The Netherlands has a separate universal national social insurance program for long-term care, the AWBZ. Switzerland's public funding for long-term care is more limited and financed at the level of cantons (equivalent to states), with responsibility split among health insurers, means-tested public assistance, and payments by individuals.

SYSTEM OVERVIEW

The Swiss System

Since 1996, the Swiss system has operated under a Health Insurance Law intended to improve access and affordability of care and to contain costs. All residents are required

¹ The full volume is available from Nomos Verlagsgesellschaft, Baden-Baden, Germany, www.nomos-shop.de.

to purchase basic health coverage from one of a number of competing private insurers operating under market rules set by the social insurance law. Insurers must be nonprofit organizations and must accept all applicants during specified open-enrollment periods with community-rated premiums. About 12 percent of enrollees are in some form of managed care, chiefly fee-for-service plans with a primary care gatekeeping feature (BAG 2007).

Within national guidelines and federal funding support, the Swiss insurance system operates at the canton level (26 divisions), with insurance policies for basic coverage covering care within the region. Most Swiss also obtain supplementary coverage for services excluded from the basic package. This supplemental coverage primarily enables access to services outside their canton, private rooms, choice of doctor in hospitals, and extra benefits such as dental.

Basic plans have minimum deductible and coinsurance requirements; enrollees may opt for a higher deductible and obtain a reduced premium. Swiss cost-sharing, particularly in the form of deductibles, is high by international standards.

Aside from premium variations based on choice of deductibles, insurers are allowed to vary basic premiums only by age group (0–18, 19–25, 26 and older) and geography. Cantons provide income-based assistance with premiums; the method varies by canton.

There is a risk equalization system that redistributes premium revenue among insurers according to the age and gender mix of their enrollees. As these factors do not adequately predict health spending, premiums can vary widely by the risk-mix of enrolled populations, and insurers have the opportunity to benefit from risk selection. As of January 2012 the risk formula will take account of hospital or nursing home stays of more than three days in the previous year.

Except for the managed care plans, insurers may not selectively contract with providers. Payment rates are negotiated by associations of providers and insurers at the canton level, with cantons participating for inpatient care. Cantons also play a significant role in inpatient financing and in planning and regulating health care supply. Among the consequences of such decentralization are inefficiency and duplication of services.

The Dutch System

Until 2006, the Netherlands had a health insurance system similar to the current German system. Most of the population was enrolled in nonprofit “sickness funds” financed through fixed-income-based contributions; higher-income people bought private insurance. The new Health Insurance Act has replaced this two-tier system with a single system in which all residents are required to obtain basic coverage from a private insurer,

which may be for-profit or nonprofit, including insurers that previously operated as sickness funds.

National benefit standards specify a comprehensive basic benefit package for acute care, with low cost-sharing. Insurance market rules and oversight, including risk equalization funds, seek to focus insurance competition on quality and cost performance (value) and limit opportunities to gain or lose by health risk selection.

Insurers must accept all applicants during an annual open-enrollment period. Insurance premiums are community-rated: variations by age, sex, or health status are prohibited. Insurers may offer one or both of two types of basic health coverage: “in kind,” under which the insurer provides care through contracting providers, and “reimbursement,” under which the enrollee purchases care from any qualified provider and is reimbursed by the insurer. Although selective contracting is permissible, in practice all Dutch enrollees in both in kind and reimbursement plans generally have access to all providers. Most of the Dutch (90 percent or more) purchase supplementary insurance that covers some services omitted from the basic package, such as adult dental care.

Insurance financing has two basic components. First, all residents pay income-based contributions into a national insurance pool to finance risk-based premium allocations. This is a fixed 6.5 percent of income, regardless of the insurance plan chosen. Employers must pay this amount on behalf of workers; the self-employed and nonworkers pay it on their own. Second, enrollees pay a flat premium for each adult directly to their insurer. Children are enrolled free of charge and paid for from public funds.

Each insurer sets its own premium, which may not vary by enrollee, health status, or other characteristics. Insurers may offer up to a 10 percent discount to people enrolled through collective contracts, such as employer groups. The income-based premium covers about 50 percent of total spending, and the flat premium another 45 percent; the remainder is paid into the insurance fund by the government using general revenues to cover children (VWS 2006). Lower-income residents receive a health care allowance to help pay the flat premium from a national premium credit system. An estimated 40 percent of households qualify for such assistance.

Although selective contracting by insurers is permitted, there are several limits. First, the rules stipulate that restrictions on the use of services of non-contracting providers may not be excessive; this means that PPO-like arrangements may be feasible, but not fully integrated systems. Second, insurers can so far negotiate prices only for a limited range of inpatient or specialized services. Selective contracting is expected to increase as more services become subject to negotiated prices.

ENFORCEMENT OF MANDATORY HEALTH INSURANCE

Both the Netherlands and Switzerland have an individual mandate: all residents are required to have basic insurance coverage. In Switzerland, the cantons enforce this policy. Available data suggest that the number of people without coverage in both countries is very low. In addition, a small percentage of the insured population is failing to make required premium payments—a policy concern in both countries.

Switzerland

The Swiss system insurance mandate and insurance markets operate through the 26 cantons. Cantons have adopted a variety of measures to enforce coverage.

Premium subsidies are provided through the income tax system. Tax data can be compared to enrollment information from insurers to identify individuals without coverage. An estimated 40 percent of all Swiss households and one-third of the population receive such premium assistance. In some cantons this share exceeds 50 percent (BAG 2007). Individuals who are in need of medical care and are without insurance coverage may be assigned to an insurer by the canton or the community of residence. Immigrants must prove health insurance coverage when they present themselves at the registry office of the community. Once an individual is enrolled with an insurance company, the insurer must continue enrollment until there is clear evidence that he or she has changed insurance or is no longer obliged to be insured.

There is no systematic matching of resident and insurance data; proposals to begin such matching in some cantons have raised privacy concerns. Still, the number of uninsured seems to be very low. In the Canton of Zurich, for example, with 1.2 million insured people, only about 1,200 people per year were found by the canton to lack coverage from 1998 to 2000. Of these, 30 percent to 40 percent could subsequently prove that they were already insured (BSV 2001), indicating that the share of uninsured is below 1 percent. Some cantons even question whether the control mechanisms in place make sense, given the low number of uninsured.

On the other hand, some people who are nominally covered are not paying their premiums. Since 2005, insurers have been permitted to suspend payments on behalf of such people, meaning that providers are left with unpaid bills or consumers are denied services. These suspensions can last 8 to 24 months, because of the time it can take to ascertain whether a consumer is unable to pay the premium (in which case cantons or communities will often assume financial responsibility) or is simply unwilling to pay. About 120,000 people, or 1.6 percent of the population, were affected by suspensions in 2006 (GDK 2007). These suspensions will be eliminated as of January 2009 with the cantons taking over 85 percent and the insurers 15 percent of these bills.

Netherlands

As noted earlier, financing of basic coverage has two components: the income-related contribution paid through the income tax system and the flat premium paid directly to the insurer. Some people have failed to enroll in an insurance plan, even though they are paying part of the cost through the tax system. Others are enrolled but are failing to make their flat premium payments.

Before the new Health Insurance Act, there was a fear that, despite the mandate, many individuals would opt not to obtain coverage. In fact, the number of uninsured at the end of 2006 was about the same as before the new mandate took effect—241,000 people, or 1.5 percent of the population. Of these, 131,000 are immigrants or their children. Some 40,000 children are uninsured, even though they can be covered for free; about half the uninsured are between 20 and 40 years old. The number of uninsured dropped to 231,000 at the end of 2007 (CBS 2006, 2007). Policies to identify the uninsured will be intensified and imposition of fines will be implemented.

Almost an equal number of people—240,000 as of the end of 2007—were enrolled with an insurer but were not paying their premiums. Beginning July 1, 2007, insurers were allowed to expel enrollees who have not paid premiums, but these enrollees simply switched to other insurers and failed to pay them as well. To prevent this, the government has forbidden people from switching plans when they are behind in paying their premiums. There is also a proposal to allow garnishing of wages or unemployment or disability benefits.

BASIC BENEFIT PACKAGE

Defining the scope of services under a basic benefit package is a key element in systems that rely on mandatory health insurance. Setting basic benefits requires balancing the two goals of assuring population health and budgetary control. In many European countries, this basic benefit package is defined in more or less detail at a national level, with changes made over time by an agency using health technology assessment procedures. In Switzerland and the Netherlands, systematic evaluation has so far been applied to only a few service categories.

Switzerland

The scope of covered health services under basic insurance is broad compared with other OECD countries, including nearly all treatment and diagnostic services for illness, accident, and maternity; a few services are explicitly excluded because they are not considered effective. Not included is dental care, while long-term care is only partly covered. These two items are mainly responsible for the high share of out-of-pocket financing. In theory, covered services must meet three criteria: (a) effectiveness, demonstrated through con-

trolled clinical studies; (b) appropriateness, meaning that the service produces better outcomes than alternatives; and (c) efficiency, a better cost-benefit ratio than available alternatives. Application of these principles, generally by the Commission on General Health Insurance Benefits, differs for curative services on the one hand and drugs or preventive services on the other.

The basic benefit package covers all physician services with the exception of those explicitly mentioned on a *negative* list. New technologies are often covered simply because they are prescribed by doctors or furnished by authorized providers and rarely receive a formal evaluation. In contrast, pharmaceuticals, alternative medicine, and some prevention and screening measures are covered only when registered on a *positive* list after a systematic evaluation. These evaluations are ordinarily commissioned by the pharmaceutical manufacturer, medical society, or other entity seeking coverage. In this respect, Switzerland differs from the Netherlands and some other countries, where studies are commonly commissioned by the agency responsible for coverage decisions.

Netherlands

The basic benefits in the Netherlands covered under the Health Insurance Act are also broad in scope. Basic benefits focus on curative services. Long-term care and selected preventive care and high-risk prenatal services are covered under the AWBZ (the separate program that also covers long-term care). As in Switzerland, basic insurance for physician and hospital care generally covers all services determined to be appropriate under usual professional practice; there is a small negative list of excluded services. Formal technological assessment has been confined to pharmaceutical services or to new public health measures, such as national screening programs. However, the Health Care Insurance Board, which has already used criteria of necessity, effectiveness, and efficiency to produce a positive list of pharmaceuticals that are reimbursed, has now been given the responsibility of performing a similar task for all specialist care.

COST-SHARING BY PATIENTS

Basic benefits in Switzerland and the Netherlands differ notably in the extent of patient cost-sharing. The Netherlands, in general, has low deductibles and minimal other patient cost-sharing. Switzerland has much higher deductibles and coinsurance. This is another reason why its share of out-of-pocket costs for medical care is high by international standards outside the United States.

Switzerland

In Switzerland, basic health insurance has a minimum annual deductible of 300 CHF (Swiss franc; \$255) per year. Consumers can obtain a lower premium by choosing a

higher deductible, up to a maximum of 2,500 CHF (\$2,125). Once the deductible is met, enrollees pay 10 percent coinsurance for services. Coinsurance can be 20 percent for a brand-name drug for which a generic substitute is available, unless the physician specifically prescribes the brand-name drug. There is a maximum out-of-pocket of 700 CHF (\$595) per year for such patient coinsurance. There is also a nominal daily copayment for inpatient care.

People choosing higher deductibles use fewer services than those opting for the minimum deductible (Manning and Zweifel, 2000). There are two possible explanations. One is the deterrent effect of cost-sharing. The other is self-selection: people expecting to use fewer services choose the higher deductible. This may be especially easy in Switzerland because people can change their deductible level from year to year. So an enrollee could, for example, defer elective surgery until after he or she switches to a lower-deductible plan. Studies have shown that both factors are at work in Switzerland, with self-selection accounting for between half and five-sixths of spending differences in the different deductible plans (Gerfin and Schellhorn, 2006; Gardiol et al. 2003).

Netherlands

The Netherlands has historically had minimal cost-sharing—with exemptions for primary care and essential medications. In its first two years, the basic health insurance program had two different mechanisms for making consumers cost-conscious in their use of services. The first was a voluntary deductible: enrollees could opt for a deductible of 100, 200, 300, 400, or 500 Euros in return for a reduced monthly premium. Only 4 percent of enrollees chose a plan with a deductible in 2006. The second was a “no claim rebate”: enrollees with annual claims less than €255 (\$327) received at the end of the year a bonus equal to the difference between that amount and their total claims. (To assure access to care, general practitioner (GP) and maternity care visits were not counted in calculating the rebate.) The rebate appears to have had little effect on consumer behavior (Goudriaan et al. 2006).

As of 2008, the “no claim rebate” has been eliminated and replaced by a mandatory minimum deductible of €150 (\$192). Adults continue to have the option to go higher but few have chosen to do so. Primary care is exempt from the deductible, and other cost-sharing is minimal. As mentioned above, the Netherlands also has a comprehensive social insurance program for long-term care. As a result, Dutch out-of-pocket spending as a share of national health spending is relatively low by international standards. (See Figure 5 in appendix.)

Although still in early stages, Dutch insurance law reforms seek to enable plans to use selective contracting or pricing differentials rather than across-the-board cost-sharing to slow cost growth and improve care outcomes.

THE MARKET FOR BASIC HEALTH INSURANCE

The market for health insurance and regulated oversight of this market play a prominent role in the health care systems of both countries. The recent Dutch health care reforms are explicitly based on Alain Enthoven's model of managed competition (Enthoven 1978). In the Enthoven model, competing insurers offer a standard benefit package, while annual open enrollment ensures consumer mobility. Consumers choose each year from among available insurers, on the basis of factors including customer service and health care quality as well as premiums.

To a varying extent, both countries look to vigorous competition among insurers as a mechanism and precondition for improving health system performance, including improving outcomes and slowing the rate of cost increases. This competition depends on readily available information about quality and premiums, benefit packages that are homogeneous or easy to compare, and low costs for switching from one plan to another.

This section assesses the performance and the intensity of competition in the Swiss and Dutch health insurance markets, focusing on five key aspects:

- Regulation of benefit packages and open enrollment, which is likely to affect consumer mobility as well as competition between insurers;
- Market structure and the vigor of competition in the insurance market;
- Ease of insurer entry or exit from the market;
- Switching costs for consumers, including information costs, administrative burdens, and the interrelationship between basic and supplementary insurance; and
- The objectives pursued by insurers in the context of each market.

Switzerland

Regulation. Mandatory basic health insurance is regulated by the Federal Office of Public Health (FOPH). (Supplementary insurance, which may be offered both by basic health insurers and by other insurance companies, is separately regulated by the Federal Office of Private Insurance.) All basic insurers must offer the same benefit package. Enrollees can change their insurer at least annually during an open-enrollment period. During this period, insurers must accept all applicants. Insurers quote premiums for regions established by the FOPH. There may be up to three regions per canton. In each region, an insurer's premiums may vary only by age category (0–18, 19–25, 26 and older) and the level of the deductible selected by the enrollee. Internet premium sites make it easy to compare the prices of all insurers.

Market structure. Each of the 7.5 million Swiss residents required to purchase basic health insurance is covered under an individual contract; policies do not cover dependents, and there is no group coverage. The demand side, then, is highly fragmented. On the supply side, the number of insurers offering basic insurance has declined continuously since the implementation of the Health Insurance Law, from 145 in 1996 to 85 in 2005 (BAG 2007). Because not all of these operate nationally, no canton has more than 65 operating insurers. Even this figure is somewhat deceptive, because it counts as separate units some subsidiaries within conglomerates operated by large insurance companies. The subsidiaries, set up mainly for the reason of risk selection, started with few members but are growing quickly. Taking into account all subsidiaries, the largest insurers have been gaining enrollment in recent years. Recent estimates suggest the top 10 insurer conglomerates account for 80 percent of enrollment. Furthermore, between 1996 and 2005 only three of the twelve biggest insurers have lost market share whereas nine have grown. Groupe Mutuel, with 13 subsidiaries in 2005, has more than doubled in size and is the third biggest insurer today (BAG 2007).

Market entry. All insurers offering basic health insurance must be nonprofit. This requirement means that a commercial insurer wishing to offer basic coverage would have to split its basic and supplementary health insurance business. Since the implementation of the Health Insurance Law, no company from another line of insurance business has applied to offer basic health insurance; new market entrants were exclusively subsidiaries of firms already operating in the market. In addition, Winterthur, the only supplier that has a lot of experience in other insurance markets, has left the basic health insurance market.

Switching costs. Switching costs in the market for basic health insurance consist mainly of information costs, administrative burdens, and costs resulting from the interrelationship between basic and supplementary insurance. For most consumers, information costs are low thanks to Internet comparison sites, media, and services of the federal administration. Administrative burdens in canceling old basic coverage and applying for new coverage are limited by standardized forms. More important barriers to switching plans are faced by people with supplementary health insurance.

Basic and supplementary insurance are legally separated and can be obtained from two or more insurers. However, many consumers prefer for practical reasons to buy both policies from one company. Unlike basic insurers, providers of supplementary insurance can offer varying benefit packages, obtain information about applicants' health conditions, and refuse enrollment or vary premiums on the basis of health information. Resulting difficulties in changing supplementary coverage may deter many enrollees from switching basic coverage as well.

Objectives of the insurers. Basic health insurers may not make a profit; any surplus must be used to build reserves. While most of the small insurance companies are

nonprofit, many of the large insurers are split into a for-profit company, offering supplementary health insurance, and a nonprofit basic health insurance company. There may be synergies between the two lines—for example, in provider relations—and some insurers may use health information from basic coverage when deciding to whom to offer supplementary insurance (this is illegal but difficult to control). Insurers may also wish to increase their basic health enrollment to achieve economies of scale or improved risk spreading. Finally, some expect that there will be market consolidation if, in the future, selective contracting with providers is permitted (see the section below on managed care).

Netherlands

Regulation. As in Switzerland, insurers providing basic health coverage must accept all applicants during an annual open-enrollment period. Each insurer must offer community-rated premiums. Unlike in Switzerland there is no variation by geographic region or enrollee age. However, an insurer may set separate premium levels for different enrollee-selected deductible levels and for different basic coverage models (in-kind vs. reimbursement). The Netherlands also allows for discounts for collective insurance contracts (or group contracts, often through employers) of up to 10 percent. The popularity of such collective contracts is increasing; about 57 percent of all insured were insured through some collective contract by 2007, double the share at the start of reforms (NZA 2007). The majority of these are through employer groups (77% of collective contracts).

Market structure. Insurers compete nationally, rather than regionally as in Switzerland. Competition is fierce; most insurers are offering premiums below actual costs, for an estimated aggregate loss of some €600 million (\$768 million) in the basic coverage market in 2007 (ATOS 2007). Insurers are also competing on non-price factors, such as specific services (e.g., high-quality diabetes care) or better comparative information about the quality of providers. The market is highly concentrated, with the five largest conglomerates (sometimes including more than one company and brand) covering about 82 percent of all insured (Vektis 2007). Concentration has increased since the 2006 reforms.

Market entry. Market entry is, in principle, easier than in Switzerland, because for-profit as well as nonprofit organizations may offer basic coverage. In practice, there were no new entrants in 2006, and entry appears to have been difficult before reforms. Only seven newcomers entered the market during the 1990s. Two of these have since been taken over by existing firms; two left the market before 2002; the remainder had a combined 2002 market share of 1.5 percent (Pomp et al. 2005). Insurance efficiency and returns to scale appear to have driven market consolidation.

Switching costs. The Netherlands seeks to facilitate comparison of plans through Web sites, as well as standardized benefits and removing barriers to switching coverage. As in Switzerland, switching plans entails some information and administrative costs

and is complicated by the split between basic and supplementary coverage. If an enrollee changes basic plans, the new carrier must accept the enrollee for basic coverage but is not required to offer supplementary coverage. To limit the barrier this presents to plan-switching, the Health Insurance Act requires that the enrollee's previous carrier continue to provide supplementary coverage at the same rate that would apply if the enrollee had continued basic coverage with that carrier.

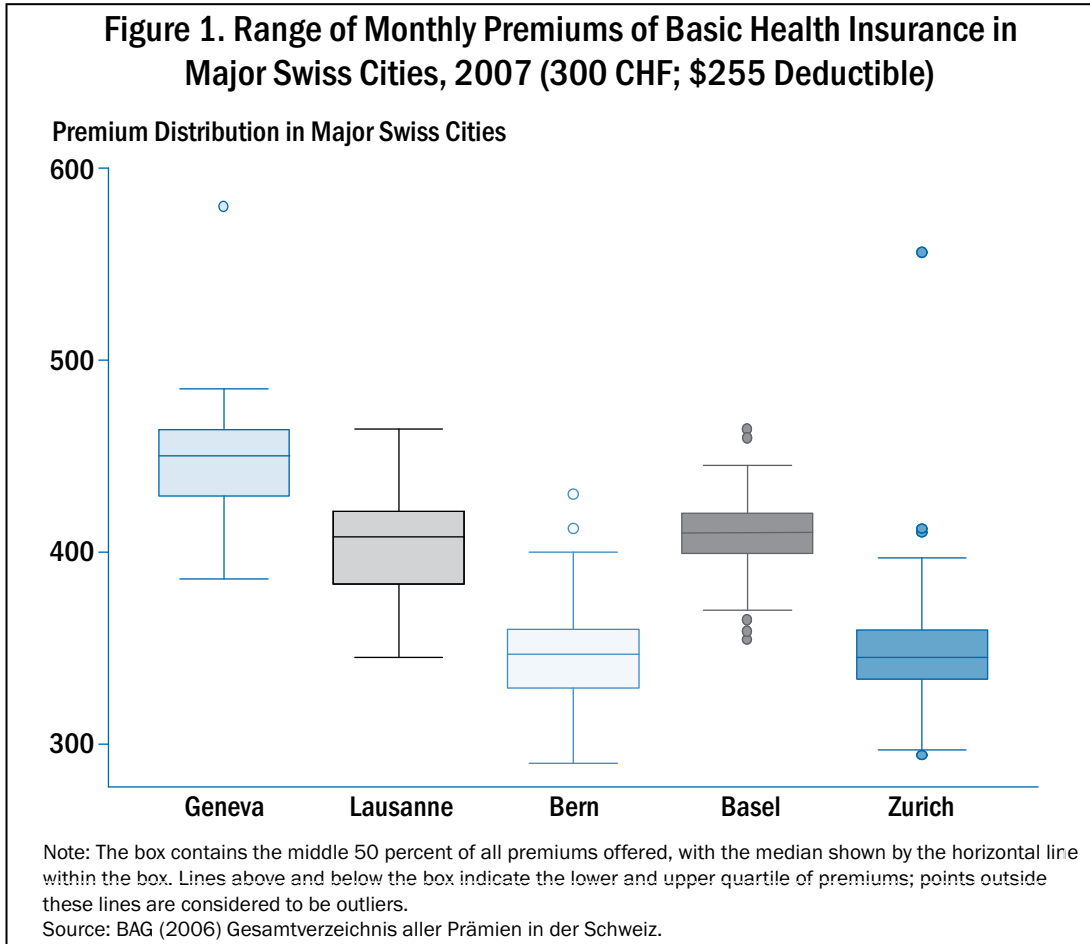
Objectives of the insurers. Both for-profit insurers and nonprofit organizations offer basic coverage. Currently, there is fierce price competition: most insurers are accepting losses, apparently in the hope of gaining market share and market power over the long term. As reforms enable insurers to negotiate prices and establish innovative payment arrangements, competition has focused on reputation, keeping premium variations in a low range, and building leverage with providers.

PREMIUM DIFFERENCES

In both countries, premium differences exist among insurers for the same basic benefit package and the same type of insurance contract. Large regional differences prevail in Switzerland. In the Netherlands, premiums vary within a narrower range but allow for differences between collective and individual contracts.

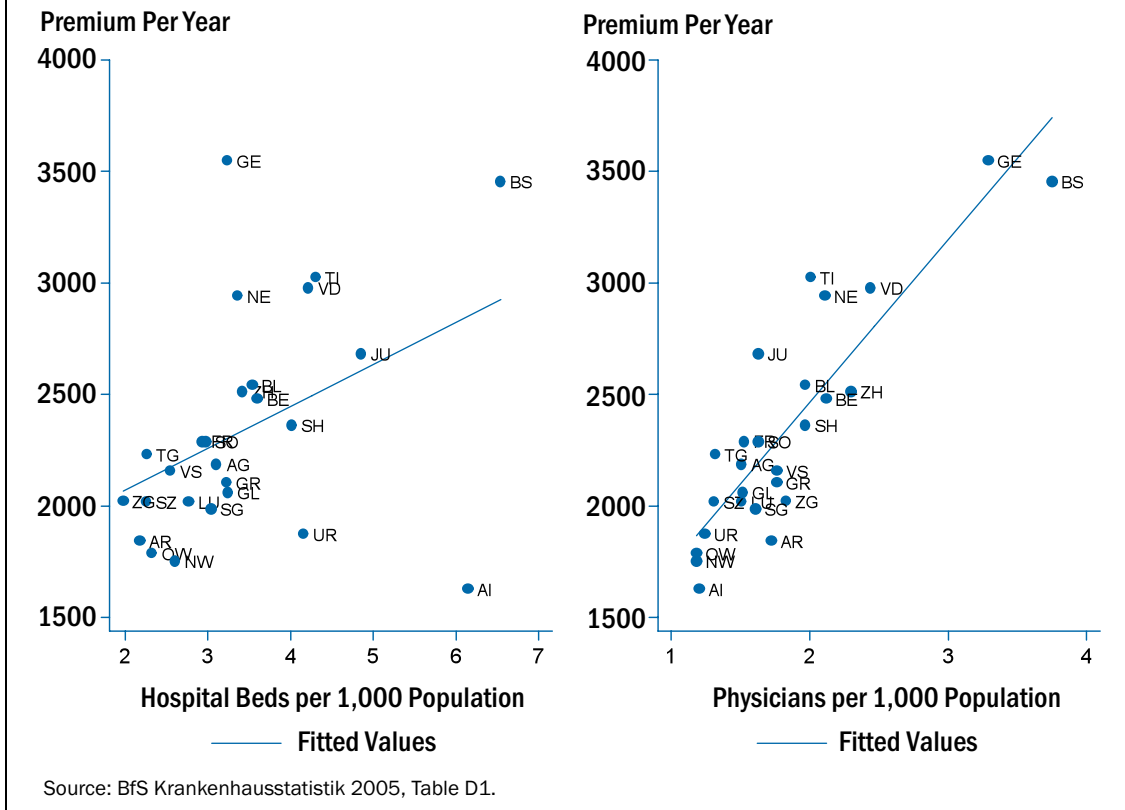
Switzerland

Premium differences among insurers. Figure 1 shows that, 10 years after implementation of the Health Insurance Law, there are huge differences in the premiums charged by insurers for the same coverage and region. For the year 2005, for example, the difference between the lowest and highest premium for coverage in Zurich with a 300 CHF (\$255) deductible is 89 percent (BAG 2007). This situation can only persist over time because, despite periodic open enrollment, relatively few individuals change insurer from year to year. Nearly all the difference in premiums appears to be attributable to risk selection not adequately compensated for in the risk equalization system. While there might be some differences in insurers' efficiency, organizations other than managed care plans pay uniform provider prices negotiated by associations of insurers and suppliers. Administrative costs are small, running about 5 percent of premiums (administrative and net earnings), leaving little potential for savings (BAG 2007).



Regional premium differences. Regional premium differences within Switzerland are permitted to prevent redistribution among regions. This is viewed as appropriate in part because cantons have the responsibility for hospital planning, and hospitals are a major cost factor. Premiums in the most costly canton, Geneva, are about twice as high as in the least costly canton. There have also been differences in rates of premium growth, from 36 percent in the Canton Vaud to 69 percent in the Canton Aargau during 1996 to 2005. As Figure 2 shows, there is a high positive correlation between physician density in cantons and the premium level; this may reflect physician-induced demand in some cantons or capacity constraints. The correlation between hospital bed density and premiums is also positive but lower.

Figure 2. Correlation Between Premium Level and Physician Density/Hospital Bed Density



Netherlands

Except for a few small carriers that operate primarily within only one region, insurers in the Netherlands charge national rates. Premiums vary chiefly by the coverage model—in-kind versus reimbursement—and between individual and collective coverage. (Insurers also charge different premiums for different deductible levels. Prior to 2008, however, the vast majority of enrollees selected a zero-deductible plan.) For individual contracts, premiums in 2007 ranged from €1,056 to €1,224 (\$1,352–\$1,568), with most in the narrow range of €1,125 to €1,180 (\$1,441–\$1,511) per year (Vektis 2007). In-kind policies tend to be less costly, and differences by coverage model are likely to increase as insurers gain greater flexibility to engage in selective contracting.

As noted earlier, insurers can offer a discount of up to 10 percent for collective contracts. The average premium for collective contracts was about 7 percent lower than the average for individual contracts in 2007. Insurers with lower premiums for collective contracts seem to be gaining market share more rapidly; no similar phenomenon appears in the case of individual coverage.

MOBILITY OF CONSUMERS

Consumer mobility—the opportunity to switch from one insurer to another—is central to the concept of competition in health insurance. Based on recent trends, markets have been quite stable in both countries, with only a small percent of the population changing insurers each year.

Switzerland

Despite the large differences in insurers' premiums, only a few individuals take advantage of the periodic opportunity to change insurers. One survey reported switching rates of between 2.1 percent and 4.8 percent for the period 1997 to 2000 (Colombo 2001). Similarly, other countries with free choice of insurer, including Belgium, Germany, Israel, and the Netherlands, also report low switching rates. Consumers stay with their current plans because of habit or comfort, while switchers mention a high premium or a large premium increase. Older and higher-cost consumers, as well as those receiving low-income premium subsidies, are less likely to switch, as are those with supplementary coverage (Beck 2004). Overall, healthier individuals have greater mobility, perhaps because they see premiums as an income reduction with little offsetting benefit.

Netherlands

Consumer mobility was low before the 2006 reforms, partly because differences in net amounts paid by consumers were only a small fraction of the actual difference in insurers' premiums. In the first months of 2006, 21 percent of consumers changed plans, influenced in part by government information campaigns and insurer marketing. Among switchers, 57 percent were attracted by a new insurer's low premium under a collective contract, while 37 percent were dissatisfied with their previous plan (de Jong et al. 2006). Switching rates then dropped sharply to 4.5 percent in 2007 and 3.5 percent in 2008 (NZA 2008). As in Switzerland, there is evidence that younger and healthier enrollees were more likely to change plans.

RISK EQUALIZATION

In both systems, insurers must accept all applicants for basic health insurance and cannot vary premiums according to individual health risk. If open enrollment is successfully enforced, and if mobility of the insured is sufficiently high and independent of health status, then the risk level of insurers' enrolled populations might tend to equal out over time. However, if insurers' reputation for high-quality care, including care for complex conditions, attracts a disproportionate share of higher-risk patients, plans could be at risk for losses without risk equalization adjustment of revenues. Moreover, if higher-risk patients are less mobile than good risks and good risks are more likely to move to lower-

premium plans with higher cost-sharing, then insurance companies can benefit from competition on risk selection rather than care performance. Risk equalization systems attempt to solve this problem by shifting revenues among insurers based on underlying health risks.

Switzerland

In Switzerland the risk equalization scheme was established to prevent the discrimination against bad risks that was expected to result from the introduction of community rating in 1996. The risk formula uses 15 age and two gender categories. Average net claim payments for enrollees in each of the 30 cells are compared with average claims for all enrollees. Insurers with more enrollees in the lower-risk groups (young adults) contribute to the pool, while those with more enrollees in the older adult groups (over age 55) draw from it. Equalization is performed separately in each canton and is budget neutral. Total amounts transferred reached 1.2 billion CHF in 2005 (\$1.0 billion; BAG 2007). There are several criticisms of the current scheme. First, age and sex are poor proxies for health status/morbidity; the resulting risk classes are heterogeneous, leaving risk selection as an attractive option. Second, transfer amounts are established retroactively on the basis of insurers' actual spending for enrollees, meaning that efforts to improve efficiency or contain costs can be penalized. To overcome the first problem, a history of hospital or nursing home stays of more than three days in the previous year will be added as a risk adjuster as of January 2012. Simulations indicate that this should significantly reduce insurers' incentives for risk discrimination.

Risk equalization was initially planned to last only 10 years because it was assumed that mobility of consumers would level off risk profiles of insurers over time. As mobility was lower than expected and good risks have proved to be more mobile than bad risks, risk equalization remains essential.

Netherlands

In the Netherlands, the risk equalization system is used to distribute the central pool of funds created by the income-related contributions for basic coverage paid by individuals and/or their employers. Insurance company revenues are adjusted prospectively based on enrollment and underlying risk factors. In addition to this prospective revenue adjustment system, there is a retrospective settlement that compensates insurers for enrollees with very high costs. Annual costs for the highest-cost patients above a threshold are shared, with the plan paying 10 percent and pooled funds across carriers paying 90 percent. Because these post facto settlements could reduce insurers' incentives to operate efficiently, reforms look to further refine the prospective system to reduce the need for

retrospective settlement. The government plans to reduce ex post settlements in the coming years.

The Dutch risk adjustment scheme is relatively sophisticated by international standards. It groups enrollees by age, gender, labor force status, and region, as well as by 20 pharmaceutical cost groups (based on past drug utilization) and 13 diagnostic cost groups (based on past hospital use). As Table 1 shows, use of the pharmacy and diagnostic cost groups significantly improves the system’s ability to predict costs for the most expensive enrollees. Further refinement is still needed to limit incentives for discrimination and support plans that attract a higher-risk group as a result of providing better quality and comparable or lower costs. The system has been shown to underpay for individuals with complex conditions or characteristics that could be readily identified by insurers—for example, a history of depression or stomach problems (Prinsze et al. 2005). It may also not adequately correct for health differences between enrollees with and without higher deductibles. Further refinement of the risk equalization formula in 2008 has led to the addition of socioeconomic status as a risk factor, measured as the annual incomes of those insured by each plan.

In the Netherlands, there is broad consensus regarding the necessity of an adequate risk equalization system to focus insurer competition on managing total costs and improving quality. The flat premiums paid directly by individuals to their insurer should, in theory, vary by performance rather than underlying health risks—with the central pool making adjustments behind the scenes. If these adjustments are adequate, flat premium differences would reflect differences in efficiency or patient service amenities.

Table 1. Predicted Cost as a Percent of Actual Cost for Highest-Cost 10 Percent of Individuals Under Different Prediction Models, 1999

Model	Average Predicted Cost in Euros	As Percent of Average Actual Cost (€3,433; \$4,397)
No adjustment	875	25%
With some demographic factors	1,350	39%
With additional demographic factors	1,443	42%
Pharmacy cost groups (PCG)	1,967	57%
Diagnostic cost groups (DCG)	2,046	60%
PCG and DCG	2,418	70%

Source: Van de Ven et al. 2004; costs do not include fixed hospital costs.

MANAGED CARE PLANS, GATEKEEPING, AND SELECTIVE CONTRACTING

The Netherlands and Switzerland differ on the role of primary care, insurer's efforts to differentiate payments to providers, and the extent to which insurance plans employ selective contracting.

Switzerland

In Switzerland, about 12 percent of the insured are in one of three types of managed care organization: health maintenance organizations (HMOs), independent practice associations (IPAs), and fee-for-service plans with gatekeeping provisions. Gatekeeping systems, which require enrollees to obtain a referral from their family doctor for specialty care, account for two-thirds of managed care enrollment. These plans use few other cost-containment measures. HMOs and IPAs are more likely to use prior authorization, utilization review, and other methods to influence care.

There are two types of HMOs: staff models, in which physicians are employees, and group models, in which a physician group owns the HMO and is paid on a per capita basis. An IPA consists of a network of general practitioners who contract with an insurer and function as gatekeepers; payment is usually on a fee-for-service basis, although a few IPAs are capitated. Patients who use an in-network general practitioner often pay lower cost-sharing. HMOs are more likely to achieve savings, with estimated cost reductions ranging from 20 percent to 37 percent (Beck et al. 2006; Lehmann and Zweifel, 2004). IPAs show much smaller savings, usually in those organizations that capitate physicians.

Managed care enrollment has grown from 1.7 percent of the insured in 1996 to 12.1 percent in 2005 (BAG 2007). Parliament is considering measures to promote further enrollment growth. One option is to allow insurers to lock in enrollees for three years, instead of allowing annual enrollment changes. This would prevent enrollees from returning to fee-for-service when they anticipate major expenditures and would give insurers more incentive to invest in care management.

Insurers other than managed care plans must pay for basic services provided by any licensed provider. Patients have wide choice of providers and may self-refer to specialists. Plans may not negotiate payment rates individually; instead, they rely on rates established by negotiation at the canton level between associations of insurers and providers. There has been some debate about allowing selective contracting; this may be more politically possible for the outpatient sector.

Netherlands

The Netherlands has historically operated with a strong primary care system, with an emphasis on primary care's central role in providing access to comprehensive care. This includes requiring primary care referral to specialist care. The 2006 insurance reforms

continued this practice. As a result, in the Netherlands, all insurers require that enrollees use specialists only on referral from a primary care practice. In addition, primary care physicians are paid capitation rates and consultation fees both to assure 24-hour coverage and to support a patient education and coordination role. It is expected that other mechanisms for managing care and integrating care systems may develop under the new rules permitting selective contracting. These reforms are still in transition as the Netherlands frees up pricing, hoping that doing so will lead to innovative payment schemes that promote high-quality, efficient care. There are a few emerging instances of insurers acquiring an interest in providers, such as pharmacies or orthopedic hospitals, and one insurer has opened a multidisciplinary health center. While selective contracting is now allowed, even “in kind” policies do not currently restrict choice of providers. Insurers may be concerned that the concept of provider restrictions is unfamiliar and that they would lose market share if they limited provider choice. In a country with a relatively limited supply of hospitals and specialized capacity, insurers are also limited by requirements that contracting or benefit designs not erect barriers to timely access to appropriate care.

Price negotiation with providers is being introduced gradually. Most recently, the Netherlands has developed a new system for hospital inpatient and outpatient specialized care services, with groupings priced by diagnosis treatment combinations. This classification system, with about 30,000 categories, is much more complex than the widely used DRG system and applies to specialist physician care as well as inpatient services. Price negotiation between insurers and hospitals was initially restricted to about 10 percent of elective spending and is now permitted for less complex, more elective treatments accounting for 20 percent of spending. There are plans to expand the list of categories subject to negotiation until they account for one-third of hospital spending in 2009. This would leave two-thirds of inpatient services, such as acute and intensive care, under a fixed price system. The opportunity for “free price” negotiation will be further extended in the coming years. For GP services, maximum service prices for consultations (visit, phone, and home visits) are fixed, as are capitation rates, but some insurers are beginning to negotiate discounts. In addition, some insurers are offering GPs financial incentives for cost-effective practices, such as increased prescribing of generic drugs.

CONCLUSION

Both the Netherlands and Switzerland have developed a health system featuring universal insurance coverage based on individual mandates, consumer choice of health plans, and regulated insurance market competition. The two systems employ many similar mechanisms to set insurance standards and provide public oversight. Yet, there are also notable differences in both the focus of policies and how insurance systems are structured and regulated. As the two countries seek to meet population needs and provide access to all with improved quality and cost performance, similarities as well as differences offer opportunities to learn from evolving experiences. Table 2, below, summarizes many of these similarities and differences.

Residents in both countries are required to enroll with a private insurance provider in a basic plan offering a regulated package of benefits. In the Netherlands, these plans typically operate at a national level while the Swiss insurance system is more decentralized, with plans operating and competing at a regional, canton level.

In each country, insurance companies compete on cost, and online resources offer easy comparison for consumers. Insurers are required to accept all applicants for the basic package. To discourage risk selection, a central fund distributes premiums based on a risk equalization scheme. In Switzerland, the risk equalization formula is relatively simple, accounting only for age and gender. There is widespread agreement that this approach fails to adjust adequately for health risk. The formula will be modified substantially as of January 2012.

In the Netherlands, the risk equalization scheme is sophisticated and complex, with the goal of compensating insurers fairly if plans attract higher health risk populations and fostering insurance competition based on care system performance. Despite this sophistication, Dutch policy leaders see room for improvement and view this feature of their system as essential to the long-term success of “managed” competition reforms.

Both health systems in many respects have been very successful, with positive health outcomes and very few uninsured. Such coverage enables broad access with financial protection for their populations, leading to low disparities. Both systems also enjoy wide support among their citizenry (Crivelli, Domenighetti, and Filippini, 2006).

In many respects, both the Swiss and the Netherlands’ insurance systems are still works in progress. Policies are evolving as each nation seeks to address the challenge of how to best meet current and future population health needs with high-value, efficient care systems. With both countries seeking to provide universal coverage based on regulated competition among private insurance plans, monitoring and comparing their experiences over time offer potential insights and opportunities to learn, as competitive theories and innovative policies are put into action.

Table 2. Summary Comparison of the Two Systems

	Netherlands	Switzerland
Individual mandate/enforcement	Everyone who resides or pays payroll tax in the Netherlands must take out insurance. Fines and collection of premiums due are important instruments to counter underinsurance.	Every resident must take out basic health insurance. The cantons are responsible for enforcing this duty.
Uninsured individuals	About 1.5% of the resident population (around 240,000 residents).	No national estimate available but regional studies indicate that the share is below 1%.
Insured individuals not paying their premiums	Estimated 240,000 residents, or 1.5%, by the end of 2006, roughly the same percentage as in Switzerland.	Estimated 120,000 residents in 2006, or 1.6% of residents.
Basic benefit package	The package covers primary care provided by GPs and specialist care by hospitals (both inpatient and outpatient care). Pharmaceuticals are covered on the basis of a positive list and are reimbursed without copayment. There is only limited coverage of dental care and paramedical care, such as physiotherapy and speech therapy. Most residents obtain supplementary policies for these services.	The package covers physician services (GP and specialist care) with the exception of those explicitly mentioned on a negative list. Pharmaceuticals, complementary medicine, and general medical services are covered on the basis of a positive list. Coverage of dental care and out-of-canton services is limited. Most residents obtain supplementary policies for out-of-canton and non-covered services.
Inclusion of new medical goods and services	No systematic evaluation except for pharmaceuticals and preventive services.	No systematic evaluation except for pharmaceuticals, some laboratory tests, and preventive care.
Open enrollment	All insured have the right to switch basic insurance providers during annual open enrollment; insurers must accept all applicants.	All insured may switch basic insurance providers semiannually (annually for higher-deductible or managed care plans); insurers must accept all applicants.
Market access of for-profit and foreign insurance providers	All Dutch and foreign health insurance companies can offer basic health insurance if they fulfill the legal requirements. For-profit insurers are permitted, though some insurers remain nonprofit organizations.	Insurance providers must fulfill the requirements of the Federal Office of Public Health, must be nonprofit, and are required to have a registered office in Switzerland.
Market concentration	Currently the five largest health insurance conglomerates cover about 82% of all insured.	Currently, the 10 largest health insurance conglomerates cover about 80% of all insured. The market share of the four largest providers was slightly below 50% in 2005.
Market entry	No new entrants in 2006, foreign or domestic. Entry, in general, is rare.	No new entrants since the implementation of the health insurance law in 1996.
Financial risks of insurance providers	Risk compensation adjustments protect insurers against a disproportionate share of high-risk patients. So far, the majority of insurers are reporting losses due to fierce price competition.	Insurance companies face full financial risk, aggravated by the fact that the risk equalization scheme is rather crude. Several insurance companies have decided or have been forced to leave the market.
Collective insurance contracts	Collective or group insurance contracts (often through employers) can receive discounts of up to 10%. About 57% of enrollees are now insured through some collective contract.	Not allowed.
Switching rates	In 2006, the year of the introduction of the new Health Insurance Act, around 20% of the insured switched plans. Switching rates have since dropped dramatically with 4.4% of the insured in 2007 and 3.6% in 2008.	There are no administrative data available. Reported rates from 1997 to 2000 are between 2.0% and 4.8% with no trend over time.

Table 2. Summary Comparison of the Two System (continued)

	Netherlands	Switzerland
Information on price and quality of insurers	Prices of all insurers can easily be compared during the open-enrollment period thanks to Internet premium comparison sites. Information on quality is inadequate so far and mainly pertains to superficial measures.	For the majority of consumers, information on premiums is readily available on Internet comparison sites, in the media, and through the services of the Federal Office of Public Health. There is very little publicly available information about the quality of insurance providers.
Risk equalization scheme	A central fund distributes the income-dependent premium among health insurers on the basis of the risk profile of the insurers' enrollees.	A risk equalization scheme for insurers was established in 1993. A central fund redistributes premiums on the basis of the risk profile of the insurers' enrollees.
Risk adjustment factors	Age, gender, pharmacy cost groups, diagnostic cost groups, labor force status, and region. Socioeconomic risk factor added in 2008.	Until end of 2011: age and gender only; thereafter, will include hospital and nursing home stays of more than three days in previous year. Risk adjustment calculated separately by canton.
Magnitude of risk selection	Small, but studies suggest that there is still potential for risk selection.	Large, mainly through insurance conglomerates operating separate plans with different risk profiles.
Deductible	A fixed deductible of €150 (\$192) per year for all medical consumption except for GP care, obstetrics, and maternity care.	Minimum deductible is 300 CHF (\$255) per year for adults. Enrollees may choose a higher deductible of 500, 1,000, 1,500, 2,000, or 2,500 CHF (\$425, \$850, \$1,275, \$1700, \$2,125).
Coinsurance and stop-loss amount	None.	10% up to a stop-loss amount of 700 CHF (\$595) per year. 20% for brand-name drugs when there is a generic available, unless a physician requests no substitution. 10 CHF (\$8.50) copayment per inpatient day.
Exemptions from cost-sharing	Chronically ill and handicapped are exempt from deductible.	Large families, women during maternity, social-assistance beneficiaries, enrollees of some managed care plans, and recipients of supplementary old-age and disability benefits are exempt from deductible.
Gate-keeping function of the general practitioner (GP)	Insurance policies require a referral by the GP for access to specialist care.	Only in managed care models (HMOs, IPAs, and fee-for-service gatekeeping plans).
Models with integration of medical and financial responsibility	Models with complete integration do not yet exist. First steps in this direction have been taken recently, e.g., with the acquisition of pharmacies and primary care centers and an interest in a specialist health center by an insurer.	Some managed care plans use capitation payments for physicians. A growing share of the insured chooses managed care models, which can sometimes restrict access to health care providers.
Estimated cost reduction of managed care models	Not applicable.	Between 20% and 37% for capitated HMOs. Much smaller amounts for IPAs without capitation (about 7%).
Obligation for insurers to contract with any willing provider	No, but an obligation to purchase sufficient care on behalf of the insured and avoid excessive barriers to use of non-contracting providers.	Yes, except for managed care plans.
Selective contracting	Yes, it is allowed if access is assured. As yet, plans do not frequently use selective contracting for important types of care. Opportunities for negotiation on prices of hospital products will be increased to one-third of hospital production in 2009.	Permitted in managed care plans only.

APPENDIX. SYSTEM PERFORMANCE

This appendix compares the performance of the Dutch and Swiss systems to that of the United States and of other OECD nations. Most of the comparisons are based on the 2008 OECD health survey. The data should be interpreted cautiously because definitions of variables and methods of data collection may differ across countries.

Health Expenditures

Figure 3 shows changes over time in health expenditures as a percentage of GDP for selected OECD countries. Over the last 25 years, spending as a share of GDP has grown much more rapidly in Switzerland than in the Netherlands. Among OECD countries, only the United States had higher growth over this period or spent more as a share of GDP in 2006.

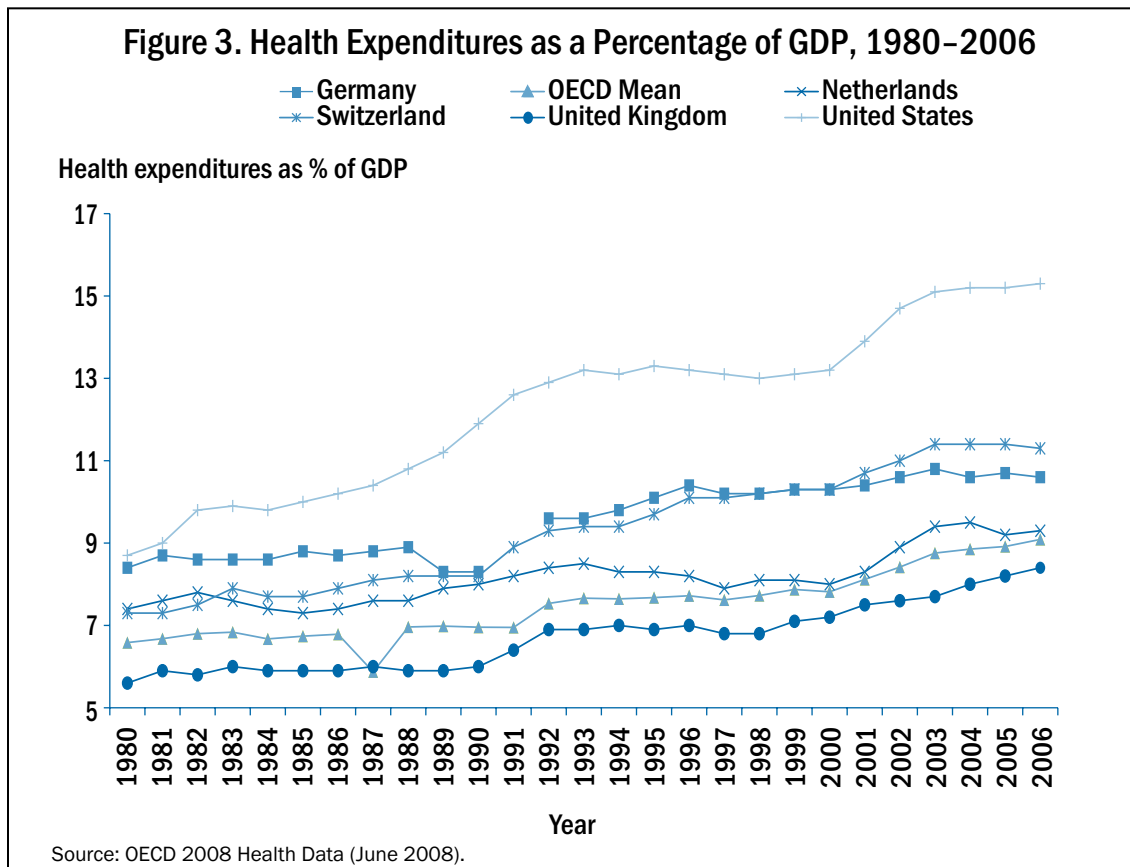


Figure 4 presents a somewhat different perspective. In 1980, Switzerland spent about 37 percent more per capita than the Netherlands (1,031 vs. 755 USD). The difference shrank to 27 percent in 2006, suggesting that Dutch costs rose faster. The increase in the Swiss health expenditure/GDP ratio, therefore, is partly due to the slow growth of the Swiss economy, especially in the 1990s.

Figure 5 shows how health expenditures were financed in the two countries in 2006. The share being paid by social and private health insurance was 78 percent for the Netherlands and 43 percent for Switzerland. (Note that in the Netherlands the share paid by social insurance would have risen in 2006, as higher-income residents shifted into the new basic coverage system.) The data for Switzerland show relatively high shares of out-of-pocket payments and government payments outside the social insurance system.

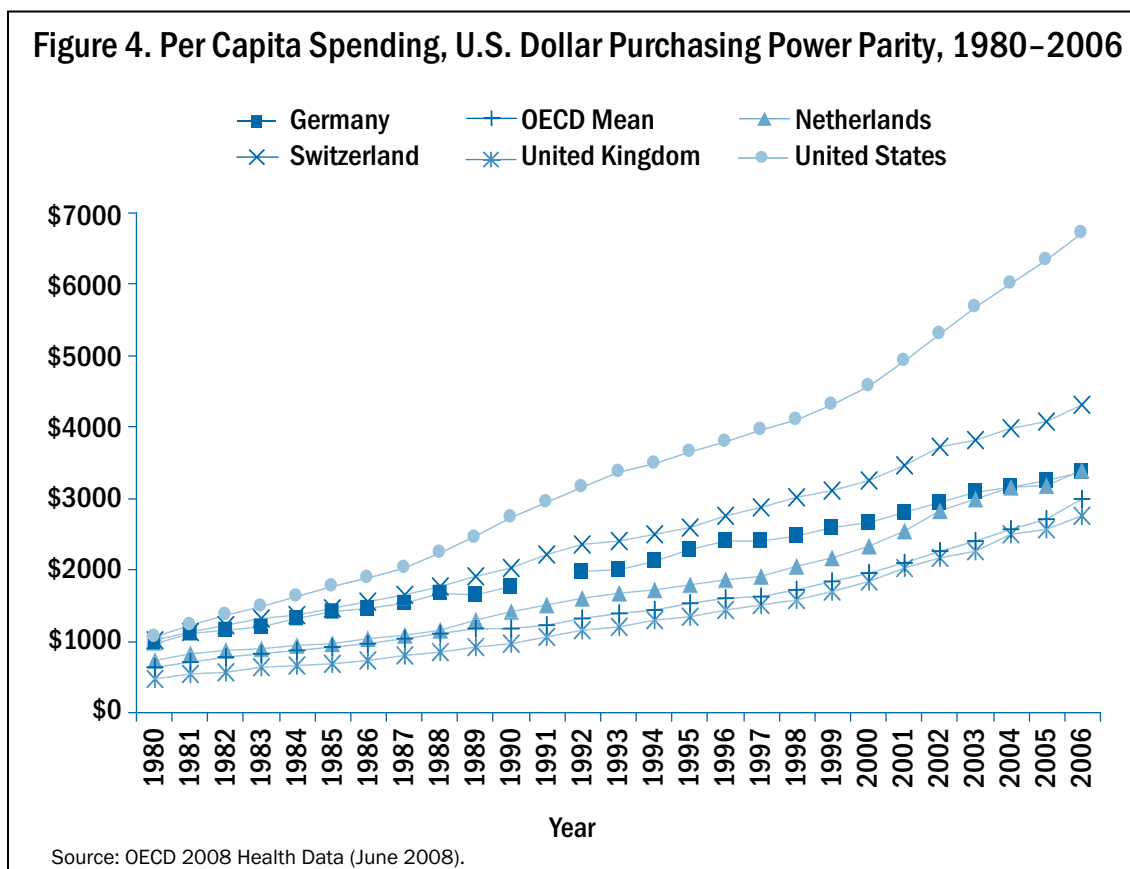
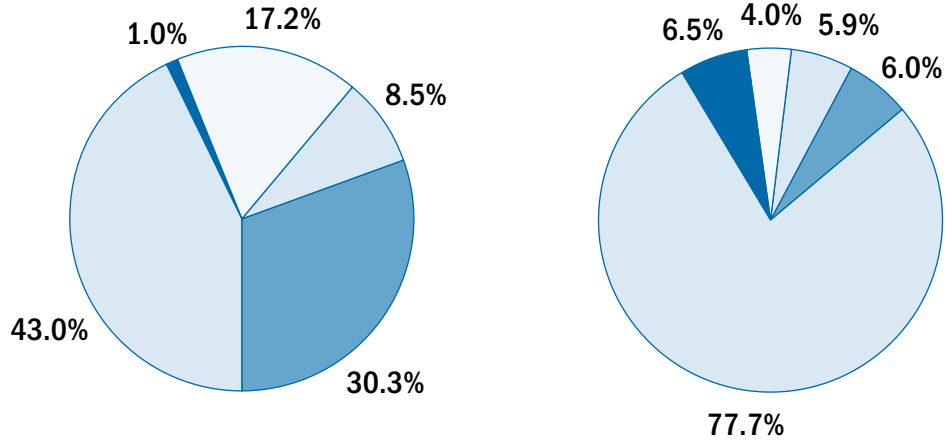


Figure 5. Funding of Health Expenditures in 2006, Percentage by Source

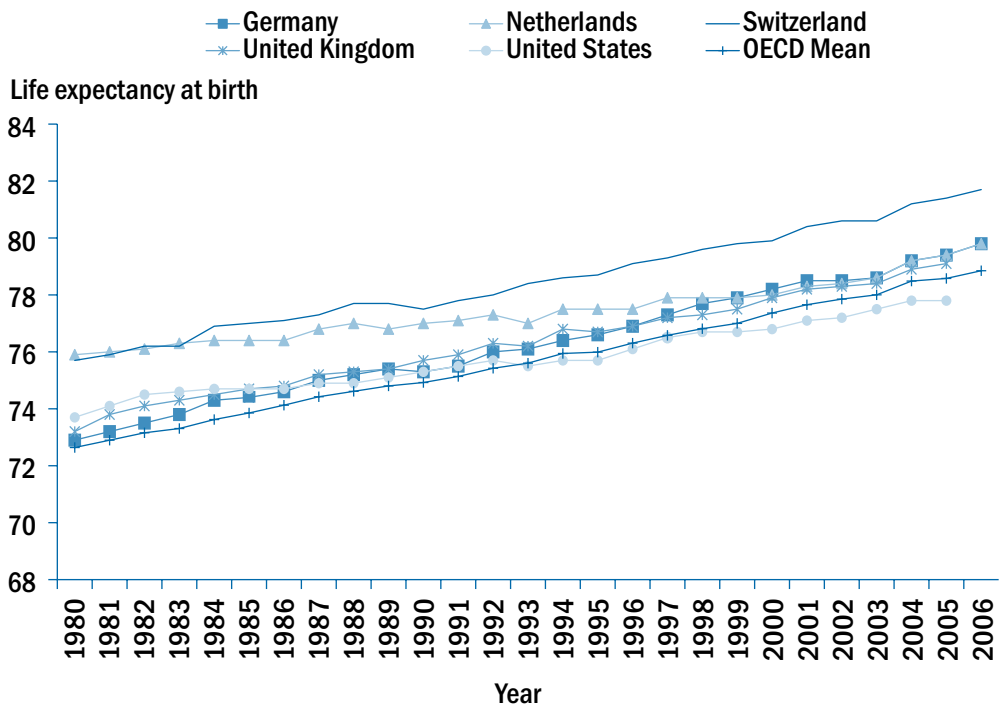


Source: OECD 2008 Health Data (June 2008).

Health Outcomes

In 1980, estimated life expectancy at birth in both countries was about 76 years. Since then, life expectancy has grown much faster in Switzerland, reaching 81.7 years in 2006, as compared to 79.8 years in the Netherlands (Figure 6).

Figure 6. Life Expectancy at Birth over Time, 1980–2006



Source: OECD 2008 Health Data (June 2008).

Figure 7 shows self-assessed health status in representative population surveys in three years. In all years, the Swiss were more likely than the Dutch to report that they were in good or very good health.

Table 3 shows that infant mortality in both countries is substantially below the OECD average. Since 1980, the numbers have decreased, though less sharply than in other OECD countries; differences between the two countries are negligible.

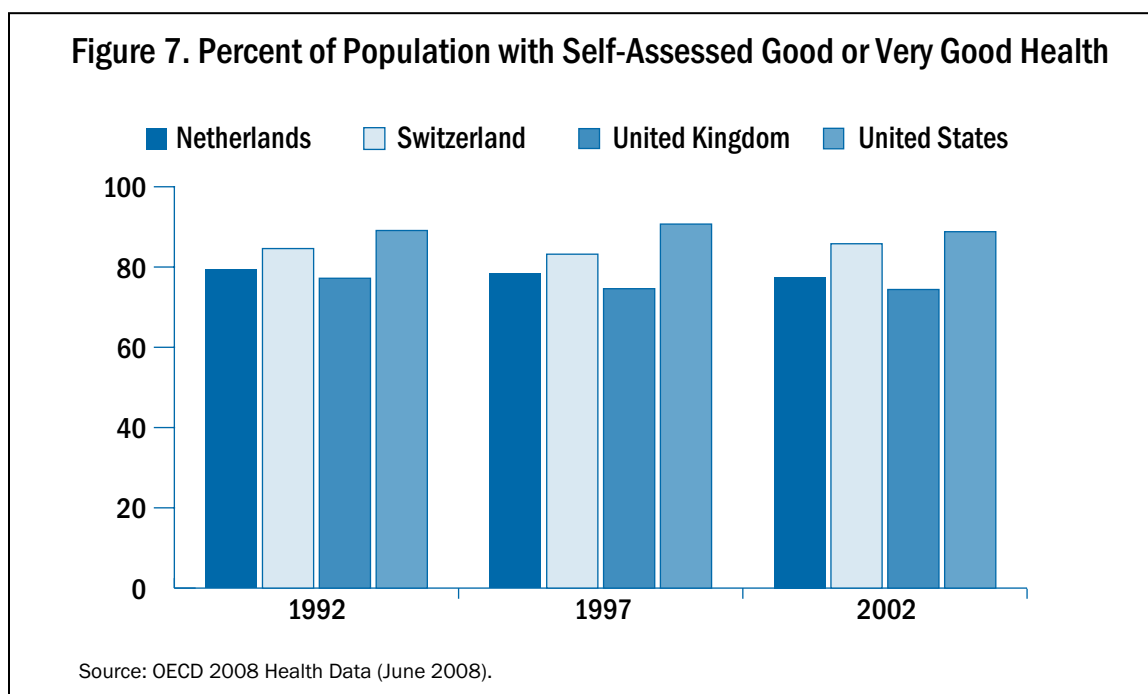


Table 3. Infant Mortality per 1,000 Live Births, 1980–2006

	Netherlands	Switzerland	United States	Germany	Mean
1980	8.6	9.1	12.6	12.4	17.9
1985	8	6.9	10.6	9.1	14.2
1990	7.1	6.8	9.2	7	11.0
1995	5.5	5	7.6	5.3	8.4
2000	5.1	4.9	6.9	4.4	6.7
2005	4.9	4.2	6.9	3.9	5.5
2006	4.4	4.4		3.8	5.2

Source OECD Health Data 2008, June 2008.

Equity in Health and Health Care

A number of recent studies have attempted to measure equity in health, health care delivery, and health care financing in different countries.

One approach is to analyze self-reported health status by income level. Though higher-income people tend to report better health, the disparities are smaller in Switzerland and the Netherlands than in any other European country (Leu and Schellhorn, 2006).

Equity in health care delivery can be measured by comparing the distribution of medical utilization (physician visits and inpatient stays) by income with the level of utilization that would be expected given population needs. Lower-income people in all countries studied use more health services. However, after standardizing for age, gender, and health status, one study found that the rich have higher than expected physician utilization in the Netherlands, while the poor have higher than expected utilization in Switzerland (van Doorslaer et al. 2000). A more recent study found the poor using more services than expected in both countries (van Doorslaer et al. 2006).

Finally, a 1999 study assessed equity in health financing across countries (Wagstaff et al. 1999). Financing was found to be regressive in both Switzerland and the Netherlands; Switzerland was second only to the United States among the countries studied. However, the data used date from the early 1990s and do not reflect significant later changes in the financing systems.

REFERENCES

1. ATOS Consulting (2007), *Collectief gevangen?* (white paper), Atos Consulting, Utrecht, Netherlands.
2. BAG, Bundesamt für Gesundheit (Federal Office of Public Health) (2007), 'Statistik der obligatorischen Krankenversicherung 2005', *Statistiken zur Krankenversicherung*, Bern.
3. BAG, Bundesamt für Gesundheit (Federal Office of Public Health) (2006), *Gesamtverzeichnis aller Prämien in der Schweiz*, Bundesamt für Gesundheit, Bern.
4. Beck, K. (2004), *Risiko Krankenversicherung: Risikomanagement in einem regulierten Krankenversicherungsmarkt*, Haupt, Bern.
5. Beck, K., Trottmann, M., Käser, U., Keller, B., von Rotz, S., and Zweifel, P. (2006), *Nachhaltige Gestaltung des Risikoausgleichs in der Schweizer Krankenkasse*, Ott.
6. BFS, Bundesamt für Statistik (Federal Statistical Office) (2007), 'Krankenhausstatistik und Statistik der sozialmedizinischen Institutionen 2005 – Tabellen zu den Gesundheitsstatistiken', *Statistik der Schweiz*, Neuchâtel.
7. BSV, Bundesamt für Sozialversicherungen (Federal Social Insurance Office) (2001), 'Wirkungsanalyse Krankenversicherungsgesetz-Synthesebericht', Bundesamt für Sozialversicherung, Bern.
8. CBS (2006), *Het aantal onverzekerden tegen ziektekosten 2004–2006*. (The number of uninsured in 2004–2006), CBS, The Hague.
9. CBS (2007), *Ongeveer 241 duizend mensen onverzekerd tegen ziektekosten* (About 241,000 people uninsured), CBS Press release (02-05-2007), The Hague.
10. Colombo, F. (2001), "Towards More Choice in Social Protection? Individual Choice of Insurer in Basic Mandatory Health Insurance in Switzerland," *OECD Labour Market and Social Policy Occasional Papers* (53).
11. Crivelli, L., Fillippini, M., and Mosca, I. (2006), "Federalism and Regional Health Care Expenditures: An Empirical Analysis for the Swiss Cantons," *Health Economics Letters*, 10(1).
12. de Jong, J., Delnoij, D., Groenewegen, P. (2006), *Verzekerdemobiliteit is hoog, Ook ouderen zijn overgestapt*, (Mobility of insured is high—elderly also switch), Utrecht: NIVEL.
13. Enthoven, A. C. (1978), "Consumer-Choice Health Plan: A National-Health-Insurance Proposal Based on Regulated Competition in the Private Sector," *New England Journal of Medicine*, 298(13):709–20.
14. Gardiol, L., Geoffard, P.-Y., and Grandchamp, C. (2003), "Separating Selection and Incentive Effects: An Econometric Study of Swiss Health Insurance Claims Data," *DELTA Working Papers* 2003–27.
15. GDK (2007), *Wenn Krankenversicherungen ihre Leistungen aufschieben: Wesen und Umfang der Problematik*, Konferenz der kantonalen Gesundheitsdirektoren, Bern.
16. Gerfin, M., and Schellhorn, M. (2006), "Nonparametric Bounds on the Effect of Deductibles in Health Care Insurance on Doctor Visits—Swiss Evidence," *Health Economics*, 15(9):1011–20.

17. Goudriaan, R., Bartelings, H., Thio, V., Snijders, R.W.D.J. (2006), Evaluatie van de no-claimteruggaveregeling (evaluation of the no claim rebate), Kernrapport van de eerste fase, Den Haag: APE, 2006.
18. Lehmann, H., and Zweifel, P. (2004), "Innovation and Risk Selection in Deregulated Social Health Insurance," *Journal of Health Economics*, 23(5):997–1012.
19. Leu, R. E., and Schellhorn, M. (2006), "The Evolution of Income-Related Health Inequalities in Switzerland over Time," *CESifo Economic Studies*, 52(4):666–90.
20. Manning, W. G., and Zweifel, P. (2000), "Moral Hazard and Consumer Incentives in Health Care," in A. Culyer and J. Newhouse, eds, *Handbook of Health Economics*, Vol. 1A, Elsevier Science BV, pp. 409–59.
21. NZA (Dutch Healthcare Authority) (2007), Op weg naar vrije prijzen. Maatstafconcurrentie voor medisch specialistische zorg. NZa, Utrecht.
22. Pomp, M., Shestalova, V., Rangel, L. (2005), "Switch on the Competition," CPB Report, The Hague.
23. Prinsze, F. J., van de Ven W.P.M.M., Bruijn, D. de, Schut F. T. (2005), Verbetering risicoverevening in de zorgverzekering, Van groot belang voor chronisch zieken (Improvement of risk-adjustment essential for chronically ill), Instituut Beleid en Management Gezondheidszorg Erasmus Universiteit Rotterdam.
24. Van de Ven W.P.M.M., Vliet, R. van, Lamers, L. (2004), "Health Adjusted Premium Subsidies in the Netherlands," *Health Affairs*, 23(3):45–55.
25. Van Doorslaer, E., Masseria, C., Koolman, X. (2006), "Inequalities in Access to Medical Care by Income in Developed Countries," *Canadian Medical Association Journal*, 174(2):177–83.
26. Van Doorslaer, E., Wagstaff, A., van der Burg, H. et al. (2000), "Equity in the Delivery of Health Care in Europe and the U.S.," *Journal of Health Economics*, 19(5):553–83.
27. Vektis (2007), Verzekerdenmobiliteit en keuzegedrag. Hoe staat het ervoor in 2007? (Mobility of insured and choice: the situation in 2007), Vektis (Mokveld en Smit), Zeist.
28. VWS (Ministry of Health, Welfare and Sport) (2006), Health Insurance in the Netherlands. The New Health Insurance System from 2006. VWS, The Hague.
29. Wagstaff, A., van Doorslaer, E., van der Burg, H. et al. (1999), "Equity in the Finance of Health Care: Some Further International Comparisons," *Journal of Health Economics* 18(3):263–90.

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