



TRAVEL INK/GALLO/GETTY IMAGES

LOOKING TO EUROPE

The Netherlands: regulated competition behind the dykes?

Countries across Europe have common health challenges but many different ways of tackling them. This article is part of an occasional series that looks at what we can learn from each other. The Dutch have opted for mandatory private insurance rather than a public system to cope with the challenges facing health care. **Gert Westert, Jako Burgers, and Harry Verkleij** assess how it is working

In 2006 the Netherlands introduced a set of healthcare reforms aimed at improving the efficiency of the country's health system and getting better value for money. Dutch society, in common with that of many other European countries, is ageing and healthcare costs are expected to peak in 2040. The Dutch ministry of health thought that change was essential if the system was to contain costs and continue to provide equitable access to good quality care. The reforms have attracted much interest, not least in the US, because the Dutch are trying to make private insurance work for public benefit. We describe the reforms, explain why they were introduced, and discuss early evidence of their effect.

Spur for health reforms

The seeds for the 2006 reforms were sown in the late 1980s. In 1987 a committee, headed by the chief executive of Philips, Wisse Dekker, reported that the system lacked efficiency.¹ The Dekker report pointed to a lack of cost awareness among consumers and providers and a fragmented funding system, with lack of alignment between the publicly and privately funded parts of the system. It also concluded that rigid governmental regulation inhibited flexible organisation and thwarted innovation.

Before the reforms, around two thirds of the Dutch population was covered by social health insurance, which was financed through fixed income based contributions; enrolment was mandatory for everyone under a certain

income level. Most of the rest of the population (those on higher incomes) had to take out private insurance to get access to the same healthcare services. In the Netherlands most services are delivered by private providers and access is open for all, irrespective of type of insurance.

Quality of care

Health expenditure in the Netherlands as percentage of gross domestic product has been running close to the average in the first 15 European Union countries.¹ It was 9.8% in 2007. Overall the quality of care provided has generally been regarded as good, although other countries perform better on some clinical outcomes (box 1).

The first *Dutch Health Care Performance Report*, which was published in 2006,

concluded that the Netherlands has an accessible healthcare system and that utilisation of services is equitable, with little variation between different ethnic or educational groups.⁴ It also showed that healthcare services are within easy reach: 95% of the population live within 3.5 km of the nearest general practitioner and reported no problems in receiving timely care from primary care or hospital. Furthermore, less than 1% of people were deterred from visiting the doctor because of costs—a figure which contrasts with almost 12% in Germany and 25% in the United States.² Dutch general practitioners function well as gatekeepers to secondary care, with low prescription and referral rates. About 96% of all contacts are handled within general practice; only 4% are referred to secondary care or other primary health care

Box 1 | Dutch health indicators before 2006 reforms

- Doctor consultations per capita (5.4/year) and hospital discharges (10.4/1000 population) are below Organisation for Economic Cooperation and Development (OECD) average (6.8 consultations and 16.3 discharges)²
- Drug consumption (eg, antibiotics, antidepressants) is low compared with other countries²
- Number of caesarean sections per 100 live births is below 1 in 5; the use of coronary revascularisation procedures is also low²
- 5.7% of patients admitted to a hospital in 2004 experienced an adverse event during their stay; 40% were potentially preventable¹
- 30 day hospital mortality for acute conditions has been decreasing since 2001 and is similar in Dutch, Western, and non-Western migrants^{1,3}
- Five year survival rate for cancer in the Netherlands is above average internationally; countries such as Finland, Norway, and Switzerland have better rates^{1,3}
- In 2005, the mortality for asthma was 0.11/100 000 people; the OECD average is 0.18/100 000¹

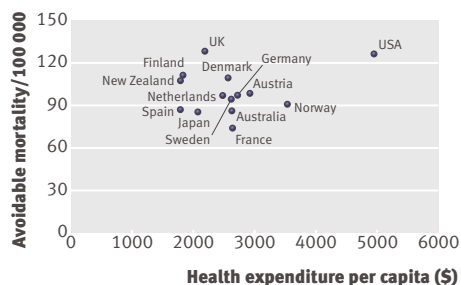
providers.⁵ Compared with countries like the US and Canada, the number of avoidable admissions is very low.⁶

Nevertheless, national hospital registry and surveillance data show that the performance of providers varies substantially (eg, hospital standardised mortality rate, surgical site infections). Avoidable mortality (the number of people dying from diseases such as appendicitis that could be avoided in an effective healthcare system³) is average and similar to that in Sweden, Germany, and Austria. Data from 2003 suggested that the Netherlands did not achieve the best return on its investment (figure). France had lower avoidable mortality at the same level of expenditure, and Japan and Spain had even lower rates with lower spending. Plots of more specific output indicators (such as 30 day hospital mortality for myocardial infarction and stroke) against hospital expenditure per capita in various countries also show that the Netherlands' performance is not optimal.⁶

2006 reforms

After lengthy debates in parliament for almost two decades a new Health Insurance Act was approved and came into force in January 2006. Box 2 summarises the key elements of the reforms and a video is also available (www.minvws.nl/en/themes/health-insurance-system/the-new-health-care-system-in-the-Netherlands-video/).

The aim of the reforms is to encourage health insurers to increase the efficiency of health care through prudent purchase of health services on behalf of their enrollees.⁹ Enrollees are given the right to change insurer every year, if they are dissatisfied with their insurer. The view is that critical consumers who have the right to exercise



International comparison of avoidable mortality in people under 75 and health expenditure (\$ adjusted for cross country price differences) in 2003^{7,8}

Box 2 | Key elements of the Health Insurance Act (2006)

- All adults are obliged to buy health insurance and can choose any insurer
- Children (under 18 years) are insured for free
- Low income groups receive financial compensation by tax reduction
- All insurers must offer a (government defined) policy to anyone who applies
- Basic benefit package is almost comprehensive
- Insurers get compensation for taking on higher risk patients from the risk equalisation fund
- Insurers can offer complementary health insurance packages under free market conditions
- Enrollees have the right to change insurer at the end of every calendar year if not satisfied
- Insurers have the role of prudent purchasers of health care (value for money)
- Providers are encouraged by insurers to deliver high quality care at low costs

choice spur competition among insurers and insurers push healthcare providers to increase the quality and efficiency of their services.¹⁰

Under the act all insurers must offer a policy that provides the basic healthcare package benefits to anyone who applies, irrespective of the applicant's age or health. The basic package of care is composed and updated annually by the government. It is almost comprehensive and includes primary care, inpatient and outpatient hospital care, and selected drugs. Reimbursement of dental and allied health care (such as physiotherapy) is limited but can be obtained through supplementary insurance policies. The package provides essential curative care tested against the criteria of demonstrable efficacy, cost effectiveness, and the need for collective financing. Those who cannot afford to pay the monthly premiums get financial compensation through the tax system.

A fundamental element of the 2006 reforms is the risk equalisation fund (REF).⁶ Because insurers are not allowed to refuse unhealthy clients or people with pre-existing medical conditions, the government uses a risk adjustment tool to prevent preferred risk selection by insurers. The Health Care Insurance Board (CVZ) is in charge of implemen-

tation. Half the money comes from income related employee contributions and half from individual premiums. The fund provides financial compensation to insurers for accepting higher risk patients. Predictive modelling is used to determine each insured person's expected expense. The model includes the following factors: age, sex, pharmacy costs, diagnostic cost groups, employment status, region, and socioeconomic status. More detailed information on how risk adjustment works is available in English on the website of the Ministry of Health.¹¹ Switzerland has a similar equalisation scheme, but it adjusts risks for only age and sex.¹² This universal mandatory insurance scheme has succeeded in making private insurance function for public benefit.¹³

So far so good

In the year the reforms were introduced about 18% of people switched to a different insurance company; this was appreciably higher than in previous years. Premiums for health insurance also dropped below the expected level of €1166 (£1000; \$1700) to an average of €1142. Information about insurers became readily available with websites comparing their price and services (such as, www.kiesbeter.nl and www.independer.nl). In the past three years mobility between insurance companies has decreased; it was below 5% in 2007, 2008, and 2009.

One recent encouraging statistic shows that 99% of Dutch people have taken out private health insurance (Statistics Netherlands, 2009). This figure proves that the principles of solidarity and equality are highly valued within Dutch society. The Dutch live below sea level behind dykes, and history has taught them that solidarity pays off. This solidarity has built a healthcare system that treats all alike. There is little difference in the use of care between people with different educational levels or ethnic backgrounds after differences in need have been taken into account.

The reforms have led to increasing market concentration of insurers and providers.¹⁴ Some insurers have merged, and, currently, five companies control 75% of the health insurance market. Providers (general practices, hospitals) are also collaborating within larger groups and regional networks. Organisational integration, with insurer and hospital under one roof (along the lines of US



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health maintenance organisations), has been explored, but so far parliament has strongly opposed such vertical integration, mainly because it would jeopardise the crucial principle of a competitive market with insurers driving providers towards better performance. It might also complicate and limit choice for consumers, especially for hospital care.

The reforms also seem to be catalysing innovation. One of the five large insurers (Menzis) has recently opened primary care centres for its enrollees, and independent specialised treatment clinics (such as eye clinics) are increasing.

Insurers purchase on price

Have insurers picked up their new role of prudent buyers of healthcare services? The answer is equivocal. A joint action of large health insurers in June 2008 succeeded in negotiating huge price discounts (40–90%) for outpatient generic drugs. Nevertheless, the opportunity for insurers to purchase care efficiently is limited because the prices and supply of health services are still heavily regulated by government.

In the hospital sector most prices are still fixed by the government through the diagnosis-treatment combination system, which is similar to the diagnosis related groups used by Medicare in the US. The government is gradually allowing free negotiation on the prices set for diagnosis-treatment combinations such as knee or cataract operations. In 2008, diagnostic-treatment combinations accounting for 20% of hospital expenditure were made freely negotiable, and the government intends to increase this percentage.

So far, insurers have made little use of quality criteria for selective contracting of providers.⁶ This is because there is limited valid and reliable information about where to go for the best care, selective contracting is difficult in markets without an oversupply of providers, and insurers are afraid they will lose enrollees if they restrict consumers' choice of providers.

Impact on health professionals

The introduction and reinforcing of market principles has led to health care becom-

ing increasingly seen as a business. Before 2006, general practitioners were partly paid by capitation fees covered by social health insurance and partly by fees for services from patients who took out private insurance. After 2006, the administrative burden increased dramatically—for example, sending (electronic) bills to the insurers. Billing is facilitated by a national web based portal, which after many teething problems is now up and running. As a result of the new contractual arrangements general practitioners' income has risen since 2006.

Clinical specialists have also changed the way in which they work, with payment linked to diagnosis-treatment combinations. Their administrative burden has also increased but so has their income. Since the reforms doctors have been pushed to accept transparency as a tool for quality improvement. Hospitals are obliged to provide information on a set of quality and safety indicators, and recent evidence shows significant improvements on some quality measures, such as a fall in pressure ulcers.⁶ Measurement of individual provider's performance is still in its infancy.

Public opinion

Few data are available on the effect of the reforms on the public. National survey data show that summary scores on consumer satisfaction hardly changed between 2005 and 2008.¹⁵ In 2005, 90.5% of the population scored 7 or higher on the question "How do you judge Dutch health care in general?" (scale 1-10). In the three successive years this was 89.8%, 91.6%, and 90.9%. In 2005, 10.7% of the population stated that they "never/ sometimes" did not receive necessary care compared with 9.8% in 2008.¹⁵

Bumpy road ahead

Insurers made a rational choice initially to focus only on price and market survival, but the system needs robust managed care by insurers on the basis of quality as well as price. Information about quality of health care counteracts market forces that are purely price driven. Therefore, consumers need more and better information about where to get the best care they need (such as, provider specific clinical indicators or patient experience measures) to make informed choices. The extent to which they will raise their voice or switch provider if this information becomes available is not known.

When the reforms were first introduced, the aim of the government was to take a back seat and allow market forces to operate, but rising healthcare costs, not least as a result of a rise in doctors income and volume of services delivered, combined with the economic crisis may force the government to intervene. Recent figures from Statistics Netherlands

indicate that health expenditure rose by 6.2% in 2008 compared with 5% in both 2006 and 2007.¹⁶ "This could undermine the still immature negotiation process between insurers and providers and thwart insurers' growing inclination to invest in managing care."⁹ Finally, if the trend of market concentration continues, it could result in higher prices and more limited access to health care.¹⁴ Continued close monitoring of the system's quality, cost, accessibility, and outcomes is essential, as is ongoing comparison with other countries. The Netherlands has set a new path with its reform. Time will tell whether it will succeed.

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We welcome contributions to this series, which looks at how different European countries are tackling their common healthcare challenges. Please send your suggestions to Tessa Richards (trichards@bmj.com).

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ANSWERS TO ENDGAMES, p 869. For long answers use advanced search at bmj.com and enter question details

STATISTICAL QUESTION

Screening tests II

a,d

PICTURE QUIZ

A breathless woman with asthma

- The chest radiograph shows a triangular shadow of soft tissue density behind the heart in the left lower zone. It also shows a loss of clarity in the adjacent descending thoracic aorta and the left hemidiaphragm in its medial portion, with depression of the left hilum. These features are consistent with left lower lobe collapse.
- In a patient of this age with known asthma, the most likely cause is mucous plugging and bronchiole obstruction. In older patients or smokers, the most common cause of lobar collapse is a stenosing lesion secondary to bronchogenic carcinoma.
- The patient should be admitted acutely and treated empirically with supplemental oxygen, bronchodilators, and steroids in accordance with national asthma guidelines. Physiotherapy should be used to dislodge the mucous plug. After treatment, repeat the radiograph to confirm reinflation. If the lung does not re-expand, the patient must be referred for urgent bronchoscopy.