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Getting Better Value for Money from Sweden's Healthcare System

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GETTING BETTER VALUE FOR MONEY FROM SWEDEN'S HEALTHCARE SYSTEM ECONOMICS DEPARTMENT WORKING PAPERS No. 443

By David Rae

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ABSTRACT/RÉSUMÉ

Getting better value for money from Sweden's healthcare system

This paper reviews the strengths and weaknesses of the Swedish healthcare system and the challenges that it will face in the future. It discusses ways to improve access to primary care, including different methods for paying GPs, whether access is less equitable than in other countries and the role of patient fees. The maximum waiting time guarantee for elective surgery is reviewed, along with ways of reducing regional variations in quality. The extent of decentralisation is questioned, as that may be affecting the quality of care and value for money in some areas, including elderly and psychiatric care. Mechanisms for improving the hospital sector are also examined including fee-for-service (DRG) payment mechanisms and whether for-profit hospitals would help. Finally, it considers ways to make financing more stable and sustainable.

JEL classification: I11; H51; H73

Key words: Healthcare; public sector efficiency

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Soins de santé en Suède : comment en avoir plus pour son argent ?

Cette communication étudie les forces et les faiblesses du système de santé suédois et les défis qui le guettent. Elle examine plusieurs pistes pour améliorer l'accès aux soins de premier recours, notamment différentes manières de rémunérer les médecins généralistes; elle s'efforce également de déterminer si l'accès aux soins est plus ou moins équitable qu'à l'étranger et traite du rôle des honoraires payés par les patients. L'étude s'attache ensuite au temps maximum d'attente pour les actes de chirurgie non vitale et à la manière de réduire les disparités de qualité entre régions. L'étendue de la décentralisation est mise en question dans la mesure où elle pourrait avoir une incidence sur la qualité des soins et sur l'efficacité de la dépense tout particulièrement en gériatrie et en psychiatrie. L'étude examine des mécanismes pour améliorer le fonctionnement du secteur hospitalier y compris l'introduction du paiement à l'acte et la création d'hopitaux à but lucratif. Enfin, l'étude réfléchit à la manière d'assurer la stabilité et la pérennité des ressources financières du secteur.

JEL classification : I11; H51; H73 Mots-clés : Santé; gestion publique

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Getting better value for money from Sweden's healthcare system

by

David Rae¹

Sweden's healthcare system has had some bad press in the past few years. The same is true in many other OECD countries, but from an international point of view Swedes can be pleased with the system they have. Their healthcare is of high quality, the system is relatively well funded, and the various players have been innovative when it comes to delivering and paying for services. But the demands placed on healthcare systems are changing. More procedures can be performed non-invasively, as day surgery or outside of a hospital altogether. The greying of the population will increase the number of elderly people requiring care, while developments such as gentler anaesthetics have expanded enormously the range of treatments that can be offered to them. For older people in particular, there is a need for a more seamless model in which primary care, social care and in-hospital treatments are connected in a more coherent way. At the same time, there is a trend towards greater specialisation in which a smaller number of medical "centres of excellence" will provide highly technical procedures. A key question is whether the current decentralised structure is the right one for dealing with these challenges. The system faces several other challenges as well - to continue to shift away from hospital care, which means access to primary care has to improve; to reduce the variations in medical quality and practice across the country; to improve the boundary between medical and social care; to continue to boost value for money, especially in the hospital sector; and to put financing on a more stable, certain and sustainable base.

Context and overview of the system

The social and health background – an old but healthy population

Sweden has a relatively old population, with the largest proportion of very old people (aged 80 and over) in the OECD (Figure 1). As a result, the strains caused by population ageing are weighing on its healthcare system earlier than elsewhere. On the other hand, the population is relatively healthy. Most indicators of health status have been well above average for several decades (Annex A1). Life expectancies are long, while medically avoidable deaths are relatively low for almost all disease groups. Equally impressive, it has in some cases managed to keep improving the health status at least as quickly as in other countries. Infant mortality, for instance, has halved since 1990 even though Sweden had the OECD's second-best rate to begin with. Healthy lifestyles contribute to this good overall performance. Relatively few Swedes are overweight, their daily calorie intake is moderate, and they take plenty of exercise, drink less alcohol than elsewhere and are not heavy smokers (see Annex A2).

^{1.} This paper was originally prepared for the *OECD Economic Survey of Sweden* published in June 2005 on the responsibility of the Economic and Development Review Committee. The author is grateful to colleagues in the OECD, especially Martin Jørgensen, Peter Jarrett, Mike Feiner and Howard Oxley for their helpful comments. Special thanks go to Raoul Doquin St. Preux and Mee-Lan Frank for technical assistance. The author can be contacted at david.rae@oecd.org

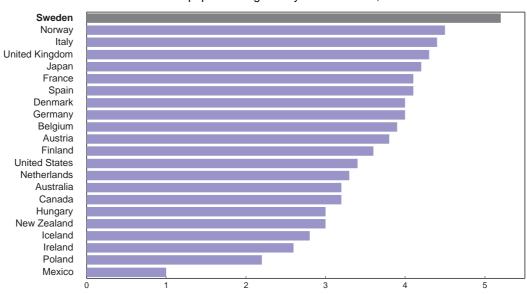


Figure 1. **The population is relatively old**Per cent of total population aged 80 years and older, 2002

Source: OECD Health Data 2004.

The main problems are related to circulatory diseases, as is the case in the whole of northern Europe. These cause half of all deaths in Sweden. There are large variations between the north and the south of the country, as well as between the big cities and smaller municipalities. Heart problems and diabetes are much more common in the rural north, while cancers are more frequent in the south and in the cities. As in many countries, young women stand out as a group whose health has failed to improve over recent years. This is mainly due to psycho-social problems rather than physical illnesses.

The healthcare system is highly decentralised

Sweden has an integrated public healthcare system in which the majority of financing and almost all the delivery is provided by the public sector. The main responsibility lies with the 20 county councils and one local authority (for convenience, they will be referred to as the 21 county councils in the rest of this paper). These county councils own and run most hospitals and are responsible for the delivery of primary and hospital care, including public health and preventative care. They are relatively small, with a median population of 275 000 people. Only three have more than 500 000 residents. Counties usually divide themselves into several healthcare districts, each of which is run by an elected board. The counties are grouped loosely into six medical care regions that are designed to improve co-operation in highly specialised care, research and training. Each region has a population of 1-2 million and includes at least one university hospital. The counties also regulate privately run but publicly financed healthcare providers. They control the establishment of new private practices and the rules about the number of patients that private practitioners can see each year and set the fee schedule that must be adhered to if a private provider wants to be reimbursed by the social insurance system. Most primary care is publicly provided. Only a quarter of outpatient consultations are conducted in private facilities, and most of those are in the larger cities and have contracts with the county council. Purely private primary care is rare. Long-term psychiatric care and care of the elderly and the disabled are the responsibility of the 289 local authorities (municipalities). The central government (through its National Board of Health and Welfare) plays a role by setting national goals and guidelines, although these are not always implemented consistently across the country.

It is financed mainly through income taxes

Health expenditure is financed mostly through income taxes, with the private funding share (around 15%) below the OECD average but in line with the other Nordic countries. Out-of-pocket spending is well below the OECD average.² Private health insurance is almost non-existent, covering less than 1% of healthcare costs. Overall, the financing of the system is close to proportional, *i.e.* neither pro-rich nor pro-poor.³

After having been much higher than in almost any other country throughout the 1970s and 1980s, total health spending is now in line with the level that would be expected considering the country's GDP per capita (Figure 2). Expenditure was very restrained from the mid-1980s to the mid-1990s, reflecting a general need to rein in the health sector and the fallout from the fiscal crisis in the early 1990s that led to severe cutbacks right through the public sector. In healthcare, a large contribution to cost control came from a structural reform in 1992 in which the responsibility for elderly care and some other functions was shifted from counties to municipalities. As part of this process, a large number of elderly "bed blockers" were moved from acute care beds into either home care or public nursing homes. Despite this shift, there is a general impression that the Swedish system is still skewed towards hospital care rather than primary care, although it is difficult to back up that impression with hard evidence (Figure 3).

The period of expenditure restraint now seems to have come to an end. Spending surged by 23% between 2000 and 2003, which is especially remarkable considering that increases in pharmaceutical costs have been subdued. The recent jump has far outstripped the increase in the volume of services, implying that much of this extra cash has gone into higher wages and prices, or lower productivity, rather than generating an increase in output (although there is some uncertainty about growth in the volume of services).

Future spending pressures will be significant, especially for elderly care

Sweden's relatively old population means its healthcare expenditure is about 10% higher than it would be if the population was as young as in Ireland or the United States, for example (SALA, 2004). Despite having this "head start", spending is still expected to rise by more than the OECD average over coming decades (Bains and Oxley, 2005). The key reason is its expensive elderly care system, where the increase in expenditure is projected to be larger than for healthcare itself (Figure 4).⁵

^{2.} Out-of-pocket spending is around 10% of the total (based on the household expenditure survey, which found that 2% of households' disposable income was spent on healthcare in 1999).

^{3.} De Graeve and van Ourti (2003), for example, show that health financing is fairly neutral (although *slightly* regressive on balance), because the tax system is relatively flat and there are small (but regressive) out-of-pocket payments. See also Gerdtham and Sundberg (1996).

^{4.} There is a commonly expressed view that the Swedish system is more hospital-based than in other countries, but there is very little hard data to prove it. However, the bottom-left panel of Figure 5.3 does confirm that the share of physicians based in a hospital is higher than in other Nordic countries, while the bottom-right panel shows a low ratio of GPs to specialists (even after adjusting the Swedish data to account for the fact that all GPs are also counted as specialists).

^{5.} These projections are obviously highly uncertain. For example, there is some evidence that healthcare costs for most individuals are concentrated in the last few years of life; if so, forecasts that are based only on the age profile of spending will overstate the upcoming increase in public spending. The government's baseline scenario for long-term care shown in Figure 5.4 builds in a steady improvement in health at a given age, but it does not make such an adjustment for healthcare itself. For every year that life expectancy rises, half of that increase is assumed to be healthy years (so a 77.5 year-old in 2050 is assumed to use the

Total health expenditure per capita (US dollars at current PPP, 2002) Usa • Che • Gro Fin • Ńzl Esp Tur • 5000 GDP per capita Total health expenditure Total health expenditure As a percentage of GDP Per capita, US dollars at 1995 prices and PPPs SWEDEN OECD average (2) **SWEDEN** OECD average (1)

Figure 2. Total health expenditure is in line with national income

Unweighted average of 23 countries.

2. Unweighted average of 22 countries. *Source*: OECD Health Data 2004.

same level of elderly care services as a 75 year-old today). Without this assumption, elderly care spending would rise by an extra 1.3 percentage points of GDP by 2050. But if the same assumption were applied to healthcare, spending would be around 0.5% of GDP lower.

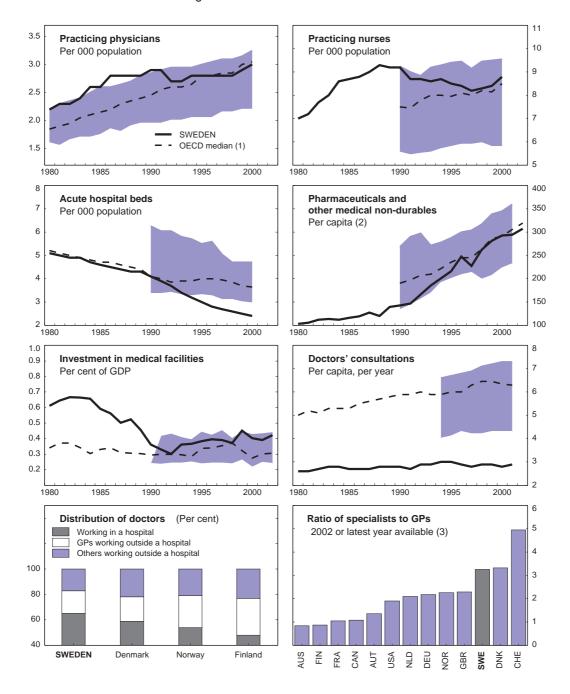


Figure 3. Health resource utilisation

- 1. The shaded area shows the middle two quartiles (*i.e.* half the countries fall in this range). The number of countries used to calculate the median is different in each panel, but ranges from 12 to 24. The inter-quartile range is calculated only if at least 18 countries are available.
- 2. US dollars at 1995 prices and PPPs.
- 3. For Sweden, the number of specialists excludes specialists in family medicine. *Source*: OECD Health Data 2004.

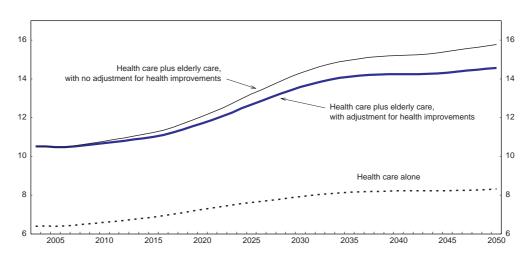


Figure 4. Long-term spending pressures
Per cent of GDP

Note: This chart shows public expenditure on health and elderly care expenditure, rather than total expenditure. Source: Ministry of Finance.

The ageing pressures will also be felt in the labour market, with some regions likely to face critical staff shortages. If the ratio of staff to patients is to remain unchanged, the elderly care sector will need to employ nearly 9% of the labour force by 2050, while the health sector overall would employ more than one in six workers. For this reason, Sweden's fiscal forecasts assume that, by 2020, public-sector wages will have to rise by around 10% more than in the private sector to help attract staff.

Strengths

Quality appears to be high

As noted above, the population is healthy by international standards. But it is hard to know how much of this can be attributed to the health system and how much is due to lifestyle and genetic factors. Clinical outcomes, such as treatment survival rates, provide a better measure than health status when it comes to assessing the performance of healthcare systems. Unfortunately, international comparisons of outcomes are scarce and difficult to interpret. However, Sweden does well in the handful of international comparisons that have been made. One recent analysis, which modified the World Health Organisation's well-known ranking of health systems, looked at standardised death rates from causes that health systems can do something about; in that study, Sweden ranked first out of 19 OECD countries.⁶ It also performed well in the OECD's three disease-based comparisons of health-sector outcomes (which looked at survival rates for stroke victims, for example).⁷

^{6.} See Nolte and McKee (2003) and WHO (2000). The World Health Organisation study ranked health systems according to the level and distribution of health attainment, system responsiveness and the fairness of financing, taking into account a country's economic and educational attainment. The Nolte and McKee study, by comparison, looked only at amenable mortality – *i.e.* conditions that are amenable to treatment by the healthcare system. Sweden ranked fourth rather than first if ischaemic heart disease is also taken into account, although the authors argue that it is unclear whether that condition should count as "amenable".

^{7.} These studies show that fatality rates are relatively low for ischaemic stroke patients; the five-year survival rate for breast cancer victims has risen substantially since 1980 and is now above the European average (although differences between countries are not particularly large); and survival and readmission rates for people admitted to hospital with acute myocardial infarction (heart attack) are around average. See

The system is innovative and flexible

By international standards, the Swedish healthcare system appears to be one of the more flexible and innovative. The high degree of decentralisation is a contributing factor. County councils can choose their own operational structure, and many give considerable autonomy to each clinic. Some counties have run with this freedom and have been at the leading edge of international trends in healthcare. The so-called "Stockholm model" is the most well known, but it is not the only innovative district. Successful experiments in one county tend to be adopted in various forms by others. Compared with many countries, primary care has shifted more quickly towards well equipped multidisciplinary centres rather than solitary GPs; district nurses have broad responsibilities that include managing their own caseloads and doing home visits; there has been some shift towards "continuous care" by improving the transition between inpatient and outpatient care (although this is not yet working as well as it could); hospitals have become more specialised and (with some exceptions) tend to be funded and run in a more professional manner than in the past; and there is greater transparency and willingness to do something about long waiting times.

Evidence-based medicine is used to raise quality and set priorities

Sweden is a leader in the use of medical databases to benchmark and improve the quality of treatment throughout the country. Its flagship product is the set of around 50 National Quality Registers. These contain individual-based data on diagnoses, treatment and outcomes for specific diseases or conditions. The first registers were started up by the medical profession in the 1970s. Their purpose is to support research and learning about best practice. Participation is voluntary, but peer pressure has ensured that most databases have very high coverage rates. They are primarily hospital based, so coverage of outpatient services is poor. A quality register in psychiatry is only now starting to be developed.

The registers have been a powerful way of waking up hospitals that are underperforming in particular procedures. They have also led to faster dissemination of information about treatment methods and problem areas and have given early warnings about shortcomings in new methods of treatment and new technologies (Box 1). Health professionals are slowly opening up the registers to the public, and this has led to intensive media scrutiny of those at the bottom of the league tables.

Some of the players in the healthcare system have begun to use clinical evidence to drive a formal priority-setting exercise. The aim is to be more rigorous and open about the prioritisation decisions that have always been hidden within the system. Östergötland County has been leading this approach, ranking treatments on a priority scale based on assessments of medical and cost effectiveness, and publishing the results on the Internet. It also released a list of low-priority procedures that would no longer be publicly funded, but a media maelstrom forced it to back down. It has also set up, in conjunction with Linköping University, a *Center for Medical Technology Assessment* that undertakes condition-based comparisons of technologies in order to help set priorities. For example, before finalising a contract with private chiropractors the County Council asked the *Center* to look at whether chiropractic care was more cost-effective than physiotherapy. *The National Board of Health and Welfare* also has several projects on priority setting, while the *Swedish Council on Technology Assessment in Healthcare* (SBU) reviews and summarises the international medical literature in order to disseminate best practice through the profession.

Moon (2003), Hughes (2003) and Moïse (2003) for summaries of these projects. While these studies provide some useful information, it is hard to draw strong conclusions because there are too many factors other than the health system that influence survival rates – especially differences in the severity of cases in different countries.

8. There are also four compulsory registers. They collect data on outcomes but have only limited information on treatments and case mix. They cover cancer, hospital discharges, medical birth and cause of death.

Box 1. Examples of National Quality Registers

The National Heart Surgery Registry was established in 1992 and records information on virtually every heart operation. It covers basic patient data such as age and sex, risk factors such as height and weight, previous diseases and drugs used, methods of diagnosis, details of treatment, complications and the date of death. The main outcome measure is the mortality rate. A report on 30-day mortality rates in each participating department is published each year, and these have triggered intense discussions about the differences among heart units. This has contributed to a fall in 30-day mortality for coronary surgery to rates that compare well with other countries.

The National Hip Replacement Registry was established in 1979 and, like the Heart Surgery Registry, has 100% coverage. It covers the patient's age and sex, preoperative diagnosis, the type of prosthesis and fixation techniques and the number of re-operations. The main outcome measure is the number of re-operations. Research based on the Registry showed better success and fewer complications from using cemented rather than un-cemented prostheses. This led to improved cementing techniques and a significant reduction in re-operation rates. Today, un-cemented total hip replacement is used in just 4% of cases, compared to 14% in Norway and 50% in the United States.

The *National Stroke Registry* began in 1995. It records details of treatment immediately following an acute stroke and the types of aftercare provided in the three months after the attack. Analysis of the registry confirmed results from randomized studies that patients treated in a specialised stroke unit had lower mortality and fewer disabilities and were more likely to return to their own home. It also revealed large differences across the country in the proportion of stroke patients that were treated in a stroke unit and in the use of drugs such as anti-coagulants (which ranged from less than 10% of patients in one unit to more than half in another). Identifying these variations has helped to reduce them.

There is considerable patient choice

County councils have progressively increased patients' freedom as to where and by whom they will be treated. Patients can choose their primary care clinic, their GP and their preferred hospital. They can also choose whether to be treated at a health centre or to go directly to a hospital outpatient department. In some counties, a referral from a GP is needed if a person wishes to see a specialist. A referral may also be needed to receive care outside his or her county. While patients have much freedom, counties try to influence their decisions by, for example, charging less for a GP visit than a hospital visit and more if a patient seeks treatment in another county.

Key challenges

Despite these strengths, the system faces some ongoing challenges. These include improving access and productivity in primary care to take some of the pressure off the hospital sector; improving co-ordination and reducing fragmentation among the different parts of the system; taking the productivity-enhancing reforms that have been carried out in some county hospitals and introducing them throughout the country; and trying to ensure that financing becomes more stable and sustainable in the long term.

Improving access to primary care

Access to primary care can be difficult. Opening hours are inconvenient, and getting an appointment is not easy. 9 Consequently, half of all patients go straight to a hospital for their primary care.

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^{9.} Half of respondents to a survey in 2003 said it was hard to get through to a primary clinic on the telephone. Of those who did eventually get through, half could see a doctor the same day, and 80% within a week (NBHW, 2003). But many people do not bother, and go to a hospital instead.

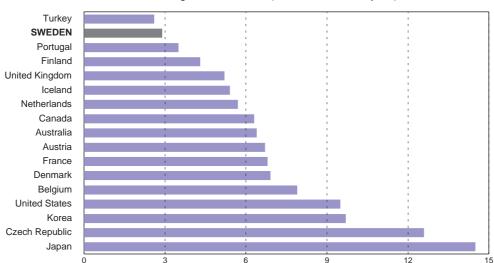


Figure 5. **Swedes do not see a doctor very often**Consultations with an ambulatory care physician per person, per year
Average 1998 to 2002 (or latest available year)

Source: OECD Health Data 2004.

This contributes to the relatively low number of doctors' consultations in primary care (Figure 5). This is both inconvenient and costly, and means that physicians are less likely to provide the "seamless" or "continuous" care that many patients need.

There is a shortage of family doctors, and they work short hours

While the number of practicing doctors per capita is in line with OECD standards, the structure of specialisation is not. In particular, there are too many specialists relative to GPs. That makes the system less efficient, but more importantly it puts quality at risk as surgeons have to perform a minimum number of procedures each year in order to "stay in practice". The low number of primary-care physicians is compounded by their having the shortest working week of any doctors in Europe (Eurostat, 2001).¹¹ Physicians' productivity could be boosted by changing the way they are paid. Most doctors receive a fixed salary and therefore have few incentives to see more patients or deal with them more efficiently. Moving to some form of activity-based payment would help, as the international evidence on fee-for-service payment methods shows that they boost the supply of medical services. However, they can reduce rates of referral and the volume of prescriptions, and a pure fee-for-service system creates incentives for over-servicing (OECD, 2004). Several countries are therefore moving towards a mixture of capitation and fee-for-service. Sweden experimented briefly with such a system in 1994. The Family Doctor's Act, which had the goal of encouraging primary care physicians to "go private", introduced a mixed payment system and allowed patients to change their family doctor every 12 months. Nevertheless, the Act was repealed a year later by the incoming government despite most physicians believing the reform was a success (Quaye, 2001). Stockholm County has experimented more recently with a mixed payment system. The results were

^{10.} The number of doctors' consultations may also be low because of Sweden's emphasis on team-based working methods, such as nurse practitioners performing tasks that are done by GPs in other countries. Not all of these consultations will be recorded in the statistics.

^{11.} The short working week means that the average GP sees 15-20 patients a day, well below rates in the Netherlands, Switzerland, the United Kingdom and Spain (around 26-30 a day). See Quaye (2001) for data on Sweden, and The Royal College of General Practitioners (1992) for other European countries.

positive, so from 2005 it has moved to a 50-50 mixture of capitation and fee-for-service for all its primary care providers. However, any move towards activity-based funding would need to be carefully designed so that it would not lower productivity by encouraging physicians to carry out the basic services that they currently leave to nurses.

People on high incomes have better access to primary care

Sweden is one of a group of countries (including the United States, Portugal, Mexico and Finland) that has inequitable access to primary care in the sense that people on higher incomes are more likely to visit a GP (Figure 6).¹² This disparity in access seems to have worsened over time (Whitehead *et al.*, 1997). In contrast, access to inpatient care does not depend on an individual's income. Although people on higher incomes also have better access to dental care, this is true of all OECD countries, and Sweden is the least pro-rich among them. In any case, it is a matter of judgement as to whether the inequities in access to primary care are "large": after adjusting for differences in need, the average number of GP visits for people in the bottom income quintile is 0.81 per quarter, compared with 0.98 for the top fifth of income earners.

It is not obvious why access to primary-care physicians is less equitable than in other countries. The fees for seeing a doctor may be one explanation, but this is not at all clear. Patients pay a small charge for most medical services. Each county sets its own fee, although they are fairly similar across the country. A GP visit, for example, costs around SEK 100 (€11), although it is free for people under 20 years old. In

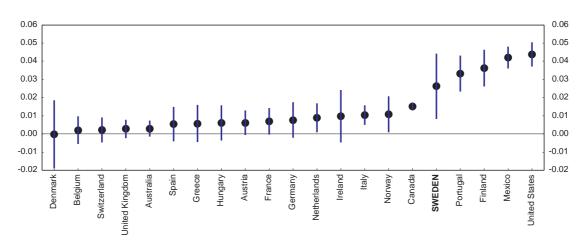


Figure 6. Access to physicians is relatively inequitable Horizontal inequity (HI) indices for probability of a doctor visit, 2000

Note: The plotted points are horizontal inequity (HI) indices which summarize the inequality in the probability of at least one doctor visit (per annum) across income quintiles after need differences (variations in self reported health) have been taken into account. Positive values of HI indicate inequity favouring the rich; negative values indicate inequity favouring the poor. The vertical lines show the 95% confidence interval.

Source: Van Doorslaer, Eddy and Cristina Masseria (2004) "Income Related Inequality in the Use of Medical Care in 21 OECD countries", OECD Health Working Paper No. 14.

^{12.} The estimates for equity of access in Figure 6 are corrected for differences in need (based on self-reported health). There is an important difference in the data between Sweden and the other countries in the study in that the Swedish data records how many doctor visits were made in the previous three months; most other countries record visits over the previous year. This means that the probability of a visit cannot be compared with the others, but it should not bias the estimate of equity of access across income groups. The German result, for example, is also based on a three-month reporting period but shows no signs of income inequity, while pro-rich inequities based on 12-month data are confirmed for Sweden by van Doorslaer *et al.* (2002).

addition, the central government imposes a ceiling on out-of-pocket payments so that nobody pays more than about €100 a year for outpatient care. Swedish evidence on access to primary care suggests that differences across income groups exist only for infrequent users; heavy use of the healthcare system is unrelated to income (Gerdtham and Trivedi, 2000). This pattern is exactly what would be expected in a system like Sweden's where there are user fees with an annual cap. Yet survey evidence suggests that fees are not shutting people out of medical treatment to any significant extent: in 1999, just 2.3% of the adult population (and 1½ per cent of those over 60 years old) said they had avoided treatment for reasons of cost. A second explanation for the inequitable access is that it might reflect supply rather than demand, as private GPs are much more common in the richer neighbourhoods of the big cities. Most private doctors have contracts with the county council and are reimbursed with public funds, the main difference being that they tend to be reimbursed on a per-case basis rather than getting the fixed salary that publicly employed doctors receive. Hence, they have incentives to work longer hours and to see more patients. If so, the "inequity" possibly tells us more about the advantages of fee-for-service payment mechanisms than about the drawbacks of user charges.

Cutting waiting times for elective surgery

Excessive waiting times for elective surgery have been a political issue for many years and have prompted measures such as the maximum waiting time guarantee (see Box 2). There is little information, however, to assess whether Sweden's problem is worse than in other countries with free public systems

Box 2. The maximum waiting time guarantee

Waiting times for some procedures had reached unacceptable levels by the end of the 1980s: it was normal to wait more than a year for a hip replacement, a coronary bypass or a cataract operation, for instance. In 1991, the county councils and the government agreed to introduce a maximum waiting time for 12 procedures. The agreement was that a patient who could not get treatment within three months at their local hospital should be offered treatment at another public or private hospital, paid for by the county. Around SEK 500 million of extra funding was provided (equivalent to a 0.4% rise in the health budget).

The policy led to a dramatic cut in waiting times, at least initially. For example, the average wait for coronary artery surgery fell from more than a year to just 6 weeks by the end of 1992. The proportion of cataract patients receiving treatment within three months rose from 25% in 1991 to 70% in 1992 and 60% in 1993.

The initial success seems to have been due to increased supply and better management of waiting lists. Extra work, reorganization and a transition to new technologies – especially day surgery – were the most common strategies adopted by hospitals (Or, 2002). In general, the introduction of the guarantee appears to have led to improved resource use within hospitals. Interestingly, patients were seldom sent to other departments with shorter waiting lists. Moreover, the implementation of the guarantee did not have any significant side effects such as crowding out other procedures that were not subject to the maximum waiting time (Hanning, 1996).

The success, however, was temporary. Average waiting times began to creep up again after the first couple of years and in some cases were close to their original levels by the end of 1996 when a revised guarantee was introduced. That new policy focused on access, setting maximum waiting times for first contact with GPs and outpatient visits to specialists in secondary care. There was no maximum wait for treatment. This policy was never formally evaluated and was superseded in 2003 (see the main text).

^{13.} These survey results are cited in Hjertqvist (2002).

(but the fact that there is little demand for private insurance suggests that it may not be). ¹⁴ A new *National Treatment Guarantee* was agreed in 2003, although implementation has been delayed by disagreement with the counties over whether they need extra funding to honour it (it will be implemented on 1 November this year). The guarantee is based on the "0-7-90-90" rule – meaning instant contact (0 delay) with the healthcare system; seeing a GP within 7 days; consulting a specialist within 90 days; and waiting no more than 90 days after being diagnosed to get treatment.

A problem with such a guarantee is that it does not necessarily reduce the median waiting time for the system as a whole. Unless output rises, either through an increase in resources or productivity, it may just cut long waits by increasing short waits. That is not necessarily a bad thing, since total welfare may rise as the gain in welfare for a patient who had been waiting a very long time probably exceeds the loss in welfare of someone whose short wait is extended a little. But it may contradict the government's principle that the people with the greatest need should be treated first. Instead, Sweden should look at a more sophisticated alternative such as New Zealand's scoring system for prioritising patients. By doing so, duration in the queue would be one of several factors – rather than the only one – for determining priority once a person has been placed on the queue.

Further structural reforms are likely to be more successful than the Treatment Guarantee at cutting waiting times. Siciliani and Hurst (2003) show that waiting times are likely to be shorter in systems with greater capacity (more beds or physicians, for example) and with activity-based payment for doctors and hospitals. Direct financial incentives to providers may also help. In Spain, for example, inpatient waiting times were cut sharply after the introduction of bonuses for staff and hospitals who managed to reduce their waiting times.

Could the private sector be used to shorten queues?

Private insurance may be one way to take some of the pressure off the public system, although it must be carefully regulated to ensure that the private market does not have adverse spillovers onto the public system. Currently, only 1½ per cent of the population has private insurance cover. They are usually executives, and premiums are paid by their employers. Policies normally cover only supplementary elective procedures, and treatment takes place in a private hospital. The market has not developed as much in Sweden as in some other countries partly because there is no tax break for private health insurance, although it may also be a signal that the system works reasonably well for people with serious disorders.

The main advantages of having a parallel privately-funded and privately-run sector are that it brings extra funding into the health system without calling on the public purse, and improves patient welfare by shortening waiting times. If some patients choose to go private, they not only make themselves better off but they also shorten the waiting time for others in the public queue. Private hospitals expand capacity, and this can have an additional benefit for the public system. For example, Sophiahemmet, Sweden's largest private hospital, sells spare capacity to the local county council, which helps cut waiting times at public hospitals. The government's main concern is that private insurance may lead to queue jumping if private patients are treated in public hospitals. In principle, that should not be possible in Sweden, but in practice the public and private caregivers co-operate closely, with doctors circulating between both types of hospital (Lofgren, 2002a). Consequently, the government would need to strengthen the regulatory framework if the private insurance market expanded significantly. Moreover, there is a short-term transition issue in that the supply of physicians cannot be increased overnight, so if there is little

^{14.} Siciliani and Hurst (2003) report that the mean waiting time for cataract surgery in 2000 was long by international standards, while Lofgren (2002a) shows that waiting times were similar in Stockholm and Vancouver for a range of surgery. The information vacuum is compounded by inadequate data on surgery rates, as day surgery is counted as a routine GP visit rather than as a surgical procedure.

spare capacity then an overly speedy expansion of the private sector may crowd out supply in the public system.

The system may be too fragmented

It is unclear whether the current degree of decentralisation is appropriate for a 21st century medical system in which "seamless" care, greater use of expensive technologies and enhanced European integration will play increasing roles. Problems related to the small size of some parts of the system are already becoming apparent. There are two distinct aspects to this – the size of the political units (counties) and the size of individual hospitals or clinics. The most serious problems are the ones that affect quality and medical safety. It is difficult to say what the optimal size of a hospital or medical region should be (and that obviously depends on the treatment), but the Health and Welfare Board considers that an emergency hospital needs a catchment area of at least 80 000 to 90 000 inhabitants. While a few smaller units have been closed or merged, one in three emergency hospitals is still under this minimum safe size. Excessive fragmentation can also affect quality by reducing coherence among providers, with patient records being held in dozens of incompatible computer systems, for example. Dealing with these problems would be easier with fewer counties because larger political units would probably be more able to rationalise resources by, for instance, increasing the amount of specialisation among their hospitals (and, in some cases, closing them). While county councils are loosely grouped into six medical care regions to improve co-operation in highly specialised care (so that not every county has a thoracic surgery unit, for example), there is much less co-operation when it comes to "ordinary" treatments and day-to-day administrative matters.¹⁵ Other problems caused by decentralisation and fragmentation include: waste through duplication (such as having 21 pharmaceutical boards); greater difficulty in reallocating resources (progress at shifting resources away from inpatient care in hospitals and towards outpatient and primary care is slower than the government wants); instability in funding (revenues of small counties are more volatile); and more difficulty reducing regional variations in quality and medical practice (see below).

These problems have prompted a debate about the rationale for decentralisation in the first place. The standard fiscal federalism argument for decentralisation is based on local democracy: small local units are better placed to take account of regional differences in preferences. However, healthcare is an area where this argument is weak or even irrelevant: when it comes to healthcare, people are unwilling to accept differences in quality or in what is offered across the country. In any case, county council tax rates – which provide the bulk of healthcare funding – are virtually the same everywhere: 18 out of 20 county tax rates are within ± 0.5 percentage points of the mean. A committee is currently reviewing the structure of government and the division of responsibility for all public services, with a special focus on healthcare, and is due to report in 2007. There is a strong case for reducing the number of county councils to perhaps half a dozen or fewer. Some commentators would go further, eliminating that layer of government entirely and shifting responsibility for the hospital sector to the central government (as Norway has recently done). That would have certain advantages, but it risks losing one of Sweden's strengths, namely the ability for the more innovative counties to try out new ways of providing and paying for healthcare.

The transition from hospital care to social care is not as smooth as it should be

Long-term care is a much more important part of Sweden's health and social welfare systems than in most other countries. Sweden spends more than any other OECD member on long-term care for the elderly and disabled (when measured as a percentage of GDP – see Table 1). This is partly by choice and

Even six regions may be too many for some treatments, and the government intends to concentrate certain activities in to two or three centres of excellence. It will be up to the Health and Welfare Board to decide how many and which hospitals will perform particular procedures.

Table 1. Expenditure on long-term care
Per cent of GDP

	Home care	Institutional care	Total	of which: Public Private		Share of population aged 65 and over receiving long- term care in an institution	Share of population aged 65 and over receiving home- care benefits	
Sweden	0.8	2.1	2.9	2.7	0.1	7.9	9.1	
Denmark				2.5				
Norway	0.7	1.5	2.2	1.9	0.3	6.0	18.0	
Austria				1.3		3.6	14.8	
Germany	0.5	0.9	1.4	1.0	0.4	3.9	7.1	
Ireland	0.2	0.4	0.6	0.5	0.1	4.6	5.0	
Netherlands	0.6	0.8	1.4	1.3	0.1	2.4	12.3	
Spain	0.2	0.4	0.6	0.2	0.5			
Switzerland	0.2	1.3	1.5			7.0	5.4	
United Kingdom	0.4	1.0	1.4	0.9	0.5	5.1	20.3	
Australia	0.4	0.8	1.2	0.9	0.3	5.3	14.7	
Canada	0.2	1.1	1.2	1.0	0.2	3.7		
Japan	0.3	0.6	0.8	0.8	0.1	3.2	5.5	
New Zealand	0.1	0.6	0.7	0.5	0.2		5.2	
United States	0.3	1.0	1.3	0.7	0.6	4.3	2.8	

Source: OECD (2005a), "Long-term Care Policies for Older People", forthcoming.

partly by necessity, as the high employment rate among women creates a need for a formal system of care for the elderly. Services are almost entirely publicly financed (user charges amount to around 5% of costs) and mostly publicly provided (eight out of ten local authorities provide 90% or more of these services – the Stockholm area being the main exception).

The elderly-care system underwent major organisational changes following the Ädel reforms in 1992 when responsibility for long-term medical care of the elderly and disabled was transferred from county councils to municipalities. Care provided by doctors, however, remained with the counties. The aim was to change the culture from medical to social care. Municipalities became financially responsible at the same time and now have strong financial incentives to find care outside a hospital because they have to reimburse county councils for patients who are medically ready to be discharged but who stay in hospital. In one swoop that moved around 40 000 "bed blockers" out of expensive acute care beds and into other forms of care – either at home or in a municipal nursing home.

Home care has also undergone major changes. The proportion of elderly people receiving home help has more than halved since 1995. Tight constraints on municipal finances have led to stricter rationing of home care and a shift towards personal care and home nursing rather than help with domestic chores such as cleaning, laundry and shopping. There are large variations across municipalities as to what they now offer by way of home care assistance, although it can be quite intensive: a fifth of those who get home help receive at least 50 hours a month.

There are considerable problems in the "grey area" where responsibility moves from county councils to municipalities. The municipalities claim that patients are now sent home "quicker and sicker" because counties have a financial incentive to discharge them as early as possible. ¹⁶ Municipalities are sometimes unable to provide the medical care they feel is needed, partly because they are not permitted to

^{16.} The decision to discharge a patient is entirely up to the hospital doctor.

employ their own doctors. The counties counter that municipalities are not providing enough elderly or long-stay beds, so around one in ten hospital beds is still occupied by someone who is medically ready to be discharged and who should be treated in primary care or at home. The co-ordination problem is most noticeable for people undergoing rehabilitation but is also apparent for those with psychiatric, drug or alcohol problems. Rehabilitation efforts are inadequate, with too little home care provision and poorly functioning collaboration between social welfare provision and healthcare. Last year, a committee delivered recommendations on how to improve the boundary between the two parts of the system. It proposed putting a greater responsibility on municipalities to provide integrated social and health care while giving them the ability to hire their own doctors if they feel that the counties are not allocating enough physician time to municipal home care (SOU, 2004).

What is clear is that some municipalities are not living up to their obligations. In 2000, around 5 000 elderly people were either waiting to receive assistance to which they were entitled or had their application for support rejected unfairly (Parliamentary Auditors, 2000). The government believes this problem still exists today and is caused by the financial difficulties of some local governments.

There are similar issues of inadequate funding and quality in psychiatric care and care for people with alcohol or drug addictions. The government has recently appointed a national co-ordinator who will work with the providers of psychiatric care. One of his tasks is to estimate if patients with severe psychiatric disorders are receiving the medical care they need. Another is to improve collaboration between healthcare and social services for people with chronic psychiatric disorders.

The care sector also faces a severe recruitment problem. Wage levels are relatively unattractive, and so staff turnover is high. There has also been a surge in the number of care workers absent on sick leave or retiring early. In addition to trying to retain the current workforce, municipalities need to expand employment in line with the increase in the number of elderly under their care. The National Board of Health and Welfare foresees a need to recruit 200 000 people over the coming decade (to put this in perspective, around 280 000 people are employed in the sector today). If nothing else, this suggests that wages for care workers will need to increase faster than in other sectors, adding to the financial pressures that municipalities will face in the future.

Co-ordination failures, under-provision and recruitment problems all point to a basic problem of funding not matching the aspirations for the system. The choice is between spending more (even though Sweden already spends a very large amount on social care), accepting a lower level of public provision or introducing more private financing.

At the same time, Sweden may get better quality and value for money through greater customer choice and private provision. These are currently quite limited: private providers account for only 15% of the market, and only ten municipalities allow residents to choose who will provide long-term and home care. In each of these cases, the local government decides which services a person should receive and gives them a voucher to spend where they wish. Some other countries, such as Germany, the Netherlands and Austria, have gone a step further by giving consumers a portion of their support in cash and allowing them to decide for themselves what to spend it on. There have been no evaluations of free choice or private provision in Sweden, and so it is hard to know what their impact on quality has been. But overseas experiences have been positive (OECD, 2005a). In the Netherlands, for example, people receiving care *via* a personal budget felt less dependent because they had more control over when care is provided and by whom – the latter being particularly important since long-term care often involves the most intimate aspects of a person's life: dressing, bathing and toileting (Miltenburg and Ramakers, 1999).

Regional variations in quality and medical practice could be reduced

Indicators discussed earlier in the chapter suggest that the average quality of medical care is high by international standards. Moreover, quality seems to be improving. Analysis based on data in the quality registers shows a steady improvement in results following many procedures, and no area has had a deterioration in quality (NBHW, 2003). However, there are considerable regional differences in the use of scientifically accepted treatment methods and in the type of medication prescribed. These differences do not seem to be related to the health needs of local populations; instead, they may reflect differences in the ability of some of the smaller health units to pay for expensive pharmaceutical courses, and perhaps also differences in practices among medical providers.

Resources could be freed up by creating a more efficient hospital sector

Progress towards running the hospital sector on a more professional and business-like way has been mixed. Some counties have been more proactive and innovative than others, moving away from the "command and control" model by making clinic managers responsible for outcomes but giving them more management autonomy in the process. Others have tended to run the system much as it has been in the past, with central control and inflexible line-by-line budgets. As a consequence, there are large variations in efficiency levels between the county councils: after adjusting for age, distance, mortality and morbidity, expenditure levels vary by more than 30% (Saltman and Berleen, 2000). Several options for lifting the efficiency of the system while keeping it predominantly publicly financed are discussed below.

Improve payment methods so they reward productivity

Most counties who have separated the purchaser and provider roles use some form of per-case payments, often complemented with volume ceilings and quality requirements. NordDRG is the most common system. Some studies of the experiments in Stockholm County in the 1990s found that the shift towards per-case payments permanently lifted productivity by 10–15% relative to clinics that continued to use global budgets. DRG payment systems have become more widespread in recent years, being used to some extent in two-thirds of counties. In six counties, they are fully integrated into the internal budgets of hospitals (meaning they are also used to allocate funding *within* hospitals).

There are potential risks associated with activity-based payment systems, but they are unlikely to be large enough to outweigh the likely productivity gains. Stockholm's experience in particular shows no evidence of "DRG creep", cream skimming or over-treatment of patients, ¹⁹ while the impact on quality is unknown. The main problem that arose – as in other countries – was that the rise in output induced by the new system led to budget over-runs. Whether this is a good or bad depends on one's point of view. The positive interpretation is that activity-based funding unleashed hidden productivity in the sector, helping to reduce the waiting list problem. ²⁰ The downside is that the county has less control over its budget, but if it

^{17.} For example, there are large differences in the use of reperfusion treatment of heart attack patients, access to care at stroke units following a stroke and eye operations to treat cataracts (NBHW, 2003).

^{18.} In their first year of use in Stockholm County, for example, inpatient care rose by 8%, day surgery by 50% and outpatient visits by 15%. See Hakansson (2000) for a review of the relevant studies.

^{19.} See Hakansson (2000) for a review of the evidence available up to that time. Quaye (2001) interviewed various Swedish health professionals and, when asking whether they thought DRG a good system for allocating healthcare resources, found that "overwhelmingly politicians, physicians and health economists reported that it is the best system available so far".

^{20.} In principle, increased output is not necessarily helpful if it is due to so-called supplier-induced demand. But as noted above, there is no evidence that this was the case in Stockholm.

is unhappy with that then it is implicitly saying it is unwilling to pay for the level of output that its healthcare system is capable of producing once its incentives are sharpened. Indeed, Stockholm County responded by imposing budget caps and cutting DRG prices, thereby sharing the productivity gains between the county and the clinic. Most other counties have also capped spending, meaning that many systems have more or less reverted to the global budgeting that existed in the 1980s. At best this means they are not getting the full potential of per-case payment systems; at worst, it can create perverse incentives as certain treatments stop once a hospital has hit its annual funding ceiling.

There are variations of activity-based payment mechanisms that are based on more than just output. The day surgery department at Huddinge University Hospital, for example, has experimented with a team-based incentive model. A bonus wage system was introduced, based on a balanced scorecard comprising output, cost and patient satisfaction. It led to greater productivity, improved financial performance and increased patient satisfaction. It was well liked by the staff and helped to ease recruitment problems (Arvidsson *et al.*, 2004). Modified fee-for-service payments have also been introduced in Gävleborg (where money follows only those patients who choose a hospital outside their own district) and in Jönköping. Stockholm County is moving to a mixed funding system in which hospitals will be reimbursed in three parts: fee-for-service, a fixed capitation-based component and a 2% slice that is related to quality and performance.

A more diverse range of providers

Most Swedes want to retain a primarily tax-financed system. But public financing does not necessarily mean that the providers have to be publicly owned. However, in Sweden the private sector plays a tiny role in the hospital sector, accounting for just 3% of employment. The government claims to be in favour of more diversity among providers through county councils entering into contracts with co-operative and voluntary care providers. But policy is currently unclear regarding how the public and private systems should interact (whether there should be complete separation, for example) and on the role of for-profit providers. After one of Stockholm's emergency hospitals (St. Göran's) was sold to a private company, the government temporarily banned any deals that would transfer the operation of a public hospital to a private company. This decision was made despite St. Göran's being the most cost-efficient acute-care hospital in Stockholm and one of the clinics most respected by patients and staff (see Box 3). The ban has now expired, but the government is considering a rule that every county must run at least one public hospital. As it stands today, a public hospital that accepted privately-financed patients would be in breach of local government legislation if it made a profit by doing so.²¹ But there is no way to enforce this law, nor is it clear whether the government wants to strictly enforce it. This might create increasing problems over time as employers are obliged to pay for rehabilitation measures under the sickness insurance scheme (see Rae, 2005), and it would be natural for them to buy such services from public hospitals where they have spare capacity. It is uncertain, however, whether they are able to do so. This situation needs to be clarified. For the future, the government is reluctant to see any expansion in for-profit providers, believing they would be more likely to cream skim or over-treat patients and be less likely to spend on preventative care. While the government's fears are understandable, they are probably exaggerated. The combination of public financing and private delivery works well in several countries, and the government is more likely to achieve its goal of having a greater diversity of providers if it allows for-profit companies into the market. The regulatory environment is more important than ownership or the profit motive. Rather than a blanket restriction on for-profit activities in all public hospitals, it could

^{21.} An exception to this rule is that local governments can export services "abroad", which in this context means they can make a profit by treating foreigners in Sweden.

Box 3. Privatising St. Göran's Hospital

St. Göran's Hospital has been at the centre of an ideological tug of war for the past decade. It is an acute-care hospital in Stockholm and employs around 1 100 staff – making it mid-size by European standards. It was the first acute-care hospital in Sweden to be restructured as a company, and the only one to be privatised.

In 1994, the conservative Stockholm county government gave St. Göran's a company structure with the intention of selling it. Later that year the incoming Social Democratic government promised to return the hospital to a more traditional structure, but backed down due to strong opposition from hospital staff and their union (Lofgren, 2002b). It was operated as a council-owned business enterprise until 1999, when it was sold to Capio, a company that owns hospitals throughout Europe.

The exercise appears to have been a success. St. Göran's has always been one of the more efficient hospitals, and it continues to operate at a cost level at least 10% below its most efficient public counterpart in Stockholm (Hjertqvist, 2001). It has a reputation for being one of the more innovative hospitals, is rated highly by the public and is regarded by the staff as being a more rewarding place to work than it used to be. There have been no complaints about a deterioration in quality or that the profit motive has distorted behaviour in medically inappropriate ways. Some people have questioned whether the contract with Stockholm County favours St Göran's relative to public providers, although this is not clear.

instead limit the ban to university research hospitals. That would coincide with international practice and would be in line with the recommendations of the government's 2002 commission on for-profit providers in healthcare. Alternatively, it could allow for-profit providers only in metropolitan regions where the public has plenty of alternatives. But it would need a robust regulatory framework to ensure that public and private providers follow the same rules in order to minimise any risk of adverse selection. It would probably require greater centralisation as well.

Managing demand through user charges

It is difficult – and usually unnecessary – to try to influence demand in the hospital sector. The main exception is when patients go to an emergency room for treatment they should be getting from their local GP, which is common in Sweden. User fees are designed to steer patients towards the right type of treatment, which is why specialists cost more than a GP and a self-referral to an emergency room costs about three times as much – around €30 to €35 – as a trip to the family doctor. However, the relatively low ceiling on patient fees means that these incentives do not bite for many people – around ten million "fee free" outpatient visits are made each year. One option is to raise this ceiling. The current annual maxima were set in 1992, and average wages have increased by around 70% since then, implying a significant fall in the real burden on households. A second possibility is to have the ceiling depend on household income, so that nobody pays more than, say, 1% of their annual income in out-of-pocket charges. This might have been a hard system to administer ten years ago, but should be relatively easy with modern smart-card technology. Doing so would re-instate the price signals of the system and raise the amount of co-payments by those on higher incomes, without jeopardising access.²²

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^{22.} Income-related user charges already exist in a certain form in elderly care. Charges are capped, and there is a low-income floor to ensure that individuals have a minimum amount of disposable income left after paying their user charges. This means that the lowest-income elderly people pay nothing, while those on slightly higher incomes pay reduced charges until the constraint of the income floor no longer binds.

Better management and cost accounting

Most clinics have a high degree of management autonomy, but the information on which they can make resource allocation decisions is sometimes lacking. Only one out of five hospitals has a case costing system for inpatient care, although some information is collated and distributed as a national database. Case costing systems for psychiatry, outpatient care and primary care are rare. Annual rather than multi-year budgeting also makes planning more difficult. Incorporating cost information into the National Quality Registers would be one way to provide efficiency benchmarks and to help set priorities.

Improving control over pharmaceutical spending

Real per-capita spending on pharmaceuticals rose by 115% between 1990 and 2002, one of the fastest rates of increase in the OECD. This is partly due to a simple "catch up" of the level of expenditure from below average to near the middle of the pack (Figure 7). But economic incentives have also played a part. Until recently, drugs were effectively free at the margin for county councils because costs were reimbursed directly by the central government. Patients pay some of the costs out of pocket, but with a cap so that nobody pays more than SEK 1 800 (€200) per year. Around one million people have hit this threshold at any point in time and are therefore entitled to free medicine.

A new system of pharmaceutical subsidies took effect in 2002. The aim of the reform was primarily to stem the rise in expenditure. A National Pharmaceutical Benefits Board now decides which medicines are to be subsidised and what their price will be (based partly on a proposal from the manufacturer), taking account of cost-effectiveness, both in absolute terms and compared with alternative ways of treating the same condition. All prescriptions must now be replaced at the pharmacy with the cheapest equivalent product unless the patient's doctor rules otherwise on medical grounds. However, the patient can choose a more expensive product and pay the difference.

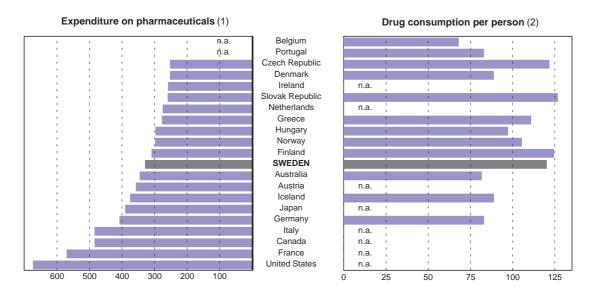


Figure 7. Spending on pharmaceuticals is around average

- Per person, US dollars at PPP, 2002 or closest available year. Includes expenditure on other medical non durables.
- Index of consumption measured in Defined Daily Doses (DDDs) across seven major drug classes. Average of available countries = 100.
 Source: OECD Health Data 2004.

These reforms have had a dramatic effect on the growth in drug spending: real expenditure per person was virtually unchanged in 2003 and 2004 (and is projected to be unchanged this year as well). This is partly thanks to increased price competition between generics and their brand-name equivalents, although it has helped that a couple of big-ticket drugs went off patent in 2003 and that fewer new drugs have been coming on stream.

The responsibility for financing pharmaceuticals is also being shifted. Since 1998, the central government has been in the process of handing over responsibility to the counties so that the drug budget becomes integrated with the rest of the healthcare system. In the latest of a series of "transition agreements", the block grant to counties has been increased for 2005-07 to cover pharmaceutical costs. The allocation of funds is largely based on demographic factors rather than pharmaceutical usage. While it makes sense to move to an integrated health budget, the counties have received what is to some extent a poisoned chalice. National bodies decide which drugs will be subsidised, what their price will be, and how much patients will have to pay (the SEK 1 800 ceiling is set by parliament). Counties, therefore, have almost no levers to help control spending except by trying to influence doctors' prescribing habits. But even there they have little influence because they have no access to information on prescription and purchasing habits, and they believe there is significant over-prescribing and that as many as one in ten inpatient visits is due to the effects of mixing drugs. For these reasons, the counties want greater access to the drug information register and a permanent financing arrangement in which the central government continues to carry some of the risk of future expenditure pressures.

The monopoly over retail distribution of drugs is unnecessary

The retail distribution of pharmaceuticals is in the hands of a state monopoly, Apoteket. Its objective is to ensure nationwide access at equal prices. Eliminating competition, however, runs the risk of raising prices and lowering service quality and convenience. Many other OECD countries impose restrictions on prices and entry to pharmaceutical retailing, usually because effective price competition is difficult when consumers are fully reimbursed for the cost of medicines and therefore have no incentive to shop around for the best price. But Sweden is the only country that restricts distribution to a single state-run monopoly. This is despite the conditions for price competition being *stronger* than in many other countries, as most consumers pay at least some of the cost of prescriptions out of their own pocket.

Aside from any efficiency considerations, on 31 May 2005 the European Court of Justice ruled that the distribution monopoly was illegal as there are no mechanisms in place to ensure that Apoteket cannot discriminate against other suppliers from other EU countries. Whether illegal or not, the monopoly is unnecessary. The government's objectives could still be met even if the distribution chain was opened up to some competitive pressure (as discussed in the previous *Survey*). For example, the government could tender out the right to run a pharmacy in certain locations or to run a nationwide chain. This approach of "competing for the market" would ensure that the most efficient provider would be selected. It would also reveal information about costs, and therefore about the appropriate retail margin. The government could also change the drug pricing policy so that it sets the *maximum* price rather than the actual price, which would bring it into line with its neighbours. This would allow competition to drive down prices in urban areas; by doing so, many consumers would be made better off but none would be made worse off. Sweden could learn from the favourable deregulation experiences in Norway, Denmark and Iceland. In each case, customers enjoyed improved accessibility thanks to more pharmacies, longer opening hours and reduced waiting times. Consumers in Norway and Iceland also benefited from considerable price discounts (IHE, 2001: Anell, 2004).

The case for liberalising the sale of non-prescription drugs is more clear-cut. Most over-the-counter medicines are not subsidised, even when prescribed by a doctor. Allowing them to be sold

in other retail outlets such as supermarkets could help reduce prices and increase convenience for consumers. Apoteket's monopoly over these products should be abolished.

Making financing more stable and sustainable

Most of the discussion so far has centred on ways to boost productivity and quality. While these are important, they will do little to solve the biggest long-term problem – how to pay for the surge in costs that is sure to come over the next few decades. Tax revenues cannot be expected to finance the expansion of elderly care and healthcare in the future (Finansdepartementet, 2004; OECD, 2004). Even if the bulk of the system remains publicly funded, other sources of revenue will need to be found at the margins. And with resources unable to keep pace with demand, some difficult choices will have to be made about which sectors must reduce expenditure and which services might be discontinued altogether (NBHW, 2003). This will require stronger co-ordination and priority setting than exists among the various parts of the welfare system today.

Currently, the counties are responsible for around 85% of public spending on healthcare. The bulk of their revenue comes from a flat-rate income tax. Central government grants, some of which are earmarked for specific uses, account for almost all of the remainder. The relative split between local taxes and central grants has been virtually unchanged since 1980 (Table 2). Municipalities also raise their revenue using proportional income taxes.

This funding arrangement creates several problems. First, because the counties are responsible for very little apart from healthcare, ²³ it is almost like having 21 earmarked health taxes. And because the tax rates are so similar, the system is not much different to having a single national health tax. This means it is hard to trade off health spending against other demands on the public purse – a problem that will become more and more apparent as ageing populations demand a greater share of public resources. For example, the declining number of children creates an opportunity to switch resources from education and towards healthcare, but this is hampered because education and healthcare are run by two different levels of government. The central government can bring about this sort of reallocation by adjusting its grants to local government, but it then becomes a political decision with winners and losers and would almost certainly be more difficult to achieve than reallocating funds within a single political entity. Moreover, the separation of responsibilities between county councils and municipalities makes it harder to re-allocate between the health and elderly care sector, such as shifting resources out of the hospital sector and into institutional or home care for the elderly. The different financing sources for sickness insurance and

Table 2. Financing county council medical care

Per cent

	1980	1989	2001
County taxes	70.6	72.8	70.4
Central government grants, etc.	26.0	25.4	26.8
Patient charges	3.4	1.8	2.8

Source: Federation of County Councils and Ministry of Finance.

^{23.} Counties are also responsible for public transport, certain educational activities at high schools and upper-secondary schools, and cultural activities, but healthcare represents around 90% of their outlays.

healthcare create similar problems. Nobody has an incentive to try to minimise the *total* costs of ill health; waiting lists, for example, are a useful way to control expenditure in hospitals but they reduce labour supply and make the sickness insurance scheme more expensive if people stay away from work and draw a sickness benefit while waiting to be treated.

A second problem is that the fastest-growing spending area is tied to a fairly slow-growing tax base.²⁴ For the counties, the effects on healthcare costs of ageing alone could be financed with a modest increase in tax rates, though the required increase for municipalities to balance their budget is much greater (Table 3). But demand is sure to grow more quickly than incomes, and under current arrangements this pressure will have to be financed by income taxes at a time when the number of people at work will be falling. Granting counties a broader tax base, such as a property tax or share of the national sales tax, would help make the system more financially sustainable.²⁵

Table 3. Consumption and taxes in the long term

	2003	2020	2035	2050	Change, 2003-2050		
			Iblic consum Per cent of GI				
Elderly care	4.1	4.4	6.0	6.3	+2.2		
School education	4.5	4.3	4.7	4.6	+0.1		
Other purposes	4.8	5.1	5.1	5.1	+0.3		
Total, municipalities	13.4	13.8	15.8	16.0	+2.6		
Healthcare	6.4	7.3	8.1	8.3	+1.9		
Other purposes	0.4	0.3	0.4	0.3	-0.1		
Total, county councils	6.8	7.6	8.5	8.6	+1.8		
University education	1.5	1.4	1.5	1.5	+0.0		
Other purposes	6.5	6.2	6.3	6.1	-0.4		
Total, central government	8.1	7.6	7.8	7.6	-0.5		
Total, general government	28.3	29.0	32.1	32.2	+3.9		
	Income tax rates required to balance the budget ² Per cent						
Municipal rate	20.8 ¹	21.0	23.4	23.5	+2.7		
County council rate	10.5 ¹	11.0	11.6	11.6	+1.1		
	Alternative scenario: elderly care without the health adjustment ³						
Municipal consumption	13.4	14.3	16.7	17.3	+3.9		
Municipal tax rate	20.8 ¹	21.2	24.3	24.8	+4.0		

^{1. 2004}

^{2.} Central government transfers are assumed to be a constant proportion of revenues, including income tax revenues from private pensions.

^{3.} This scenario does not make any adjustment for healthier lives as people live longer. Source: Ministry of Finance and OECD calculations.

^{24.} The personal income tax base will fall as a share of GDP due to the decline in the number of people at work, but this will be partly offset by income tax paid as people draw down their pension savings.

^{25.} Although these tax bases would be more sustainable, they may be less stable over the business cycle. Various smoothing mechanisms should therefore be considered, such as basing the transfer of VAT revenues from central to local governments on a rolling multi-year average of the tax base.

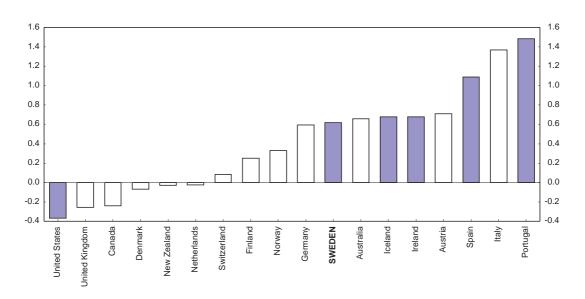


Figure 8. **Health spending is significantly pro-cyclical**Slope coefficient from a regression of growth in per-capita health spending *vs* growth in per-capita GDP, 1980-2002

Note: Statistically significant relationships are shaded Source: OECD calculations based on OECD Health Data 2004.

Third, public health expenditure is sensitive to the business cycle because county councils have just one tax base and face balanced budget rules (Figure 8). This business cycle risk should be shifted off the healthcare budget. One way to achieve this is to give counties access to a non-cyclical tax base, such as property or land tax. A second option is for the central government to run a stabilisation fund, adjusting its block grants counter-cyclically, as was recommended by the STEMU Committee in 2002. Having fewer but larger counties should also stabilise revenues since bigger counties would be less susceptible to idiosyncratic revenue shocks. Finally, counties could shift to a medium-term fiscal framework along the lines of those used by many central governments: they would lay out spending plans several years in advance, be given more short-term flexibility to run cyclical deficits but face a tougher medium-term constraint in the form of a strict debt target and sanctions for non-compliance.

The fourth problem is that the budget constraint is too soft. Supplementary "one off" funding is given to county councils and municipalities twice a year in the main budget bill and the Spring Update. The amounts have averaged nearly 1% of local government revenues each year over the past decade (Table 4). While in principle the grants are given for specific purposes, in practice they largely compensate for the fact that the standard block grant mechanism does not make any allowance for wage and price increases. Cost control would improve if there was more certainty over financing. Currently, the counties know that the central government will probably bail them out with additional "temporary" grants if they are facing a deficit.

There are no easy answers to these funding issues. The right mix of funding mechanisms depends in part on how the delivery of services is organised:

As a general rule, the institutions responsible for providing services should also be responsible
for funding them. Otherwise, if they do not face the full (marginal) cost of production, they may
use resources wastefully and have less incentive to improve productivity; it is precisely this

Table 4. Supplementary appropriation	ons to local government are common
Per cent of local government revenues (excluding supplementary appropriations)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Decisions made in:										
1996	1.0	1.8	1.7	1.7	1.6	1.6	1.5	1.4	1.4	1.3
1997		0.9	1.7	2.6	2.4	2.3	2.2	2.2	2.0	2.0
1998			0.3	0.3	0.8	1.0	1.3	1.4	1.4	1.3
1999					0.5					
2000					0.1	0.5	0.7	0.9	0.8	0.8
2001						1.2				
2002							0.9	0.8		
2003								0.1	1.4	1.8
2004								0.3	1.4	1.4
Total	1.0	2.6	3.7	4.5	5.5	6.6	6.7	7.0	8.3	8.6
Annual increase	1.0	1.7	1.1	0.8	0.9	1.1	0.1	0.3	1.3	0.2

Note: The figures cover supplementary appropriations for all activities, not just healthcare, and include tax expenditures. Source: National Institute of Economic Research.

problem that led to a lack of control over pharmaceutical spending, for example. This can be taken as a warning against a model where county councils continue to be responsible for delivery but are funded solely by block grants from the centre.

- If delivery and financing are to be aligned, then why not abolish county councils and have healthcare run from the centre? Indeed, this chapter has noted some of the problems in terms of efficiency and patient safety caused by excessive fragmentation, and that current arrangements have evolved to be very much like having a single national health tax anyway. On purely economic grounds, there seems little rationale for retaining this extra layer of government. But as noted earlier, one of the strengths of the Swedish approach is its willingness to experiment and innovate, and that may be lost if the system were run by a central bureaucracy. There is clearly a tradeoff here.
- Compulsory social insurance is similar to tax financing except that it is easier to partly pre-fund
 ageing-related expenditures (because the money can be ring-fenced, much like in the pension
 system). This would improve equity since medical care is currently financed as a distributional
 system, while the significance of age argues in favour of redistribution across time (which can be
 done through either the government redistributing across time or through individual health
 accounts).
- Private insurance can bring extra funding into medical care, and will be almost inevitable if counties continue their trend towards limiting the services they provide for free. But as noted above, it can cause problems unless the public and private systems are well separated and regulated. It also has equity implications.
- Greater private financing through user charges will also improve the long-term sustainability of the system. Clearly, up-front fees cannot be too high or they will shut some people out of treatment that they need. But Sweden has more scope than most countries to use patient charges because its income distribution is so equal there are relatively few people who are genuinely too poor to be able to pay at least something towards their medical treatment.

The issues of long-term financial sustainability are similar but more severe for long-term care. Municipal finances are already under strain. The past decade has seen a reduction in the proportions of people aged 80 and over receiving home help and institutional care, and municipalities are planning further cutbacks in institutional care in the years to come (NBHW, 2003). Long-term projections imply that municipalities will need to raise tax rates by between 2½ and 4 percentage points in order to maintain the current level of services (Table 3). There is a stronger case here, however, for individuals to pay a greater share of long-term care costs. Incomes of older generations have risen relative to those at the start of their careers, and many retired people are relatively asset-rich. One option is to look again at the level of user charges. Since 2002, the central government has set limits on municipal fees; these have the effect that a third of the elderly who receive home help or residential care get it for free, and nobody pays more than SEK 1 572 (€170) a month.

A second option for elderly care is to increase private financing through a social insurance scheme and to set the contribution rate so that it is at least partly pre-funded. Mandatory insurance has at least two advantages. *First*, it is an efficient way to pool risks so that individuals or families do not face catastrophic costs of nursing home care. *Second*, it allows more pre-funding than in a pay-as-you-go system and is therefore more equitable since today's workers would contribute more to their post-retirement expenses. Japan, Germany, Austria and Luxembourg have all introduced mandatory insurance for long-term care, a step that has been well received by the public (OECD, 2005a). Indeed, a mixture of higher fees, compulsory insurance and tax financing has recently been suggested by the local government association. A greater private contribution to care costs would be more feasible if the government were able to encourage the development of actuarially fair annuity and reverse mortgage markets²⁶ to help people convert some of their wealth into income. In the longer term, one could also imagine a system whereby older people, who usually have significant assets, accumulate user fees (up to a limit) and have the charges taken from their estates when they die (although this can create its own problems.²⁷)

Summary and recommendations for reform

The most immediate challenge is for municipalities to improve the funding and quality of psychiatric and social care. In the medium term, the challenges are to improve access to primary care, lift quality in the lower-performing regions and increase value for money in the hospital sector. The longer-term challenges revolve around financing. Funding needs to become more stable, and additional sources of finance need to be found, especially in elderly care. At the same time, this needs to remain consistent with Swedish social *mores*. These themes are not new. They are similar to the issues discussed a decade ago in a review of Nordic healthcare systems (Alban and Christiansen, 1995), and the commission that is currently looking at the financing of healthcare is covering similar ground to a commission that reported in 1992. That does not mean that nothing has happened since then – far from it. Rather, it emphasises that most of the reforms do not imply a radical change to the system but represent a continuous evolution in line with the changing demands placed on the healthcare system.

^{26.} See OECD (2005b) for a discussion of why these markets are relatively thin at present.

^{27.} There is a potential problem that if the asset testing is too stringent, then it may alter the level of savings before retirement. It may also distort savings decisions if people try to shift savings into "sheltered" areas, such as housing, other physical assets or family trusts, and may increase the incentive to hide assets offshore.

Box 4. Recommendations for reform

Access

Improve access to primary care by making it easier to become a family doctor (e.g. allow people to practice as a GP as soon as they become a doctor, make it easier for specialists in other fields to retrain as family doctors or completely remove the requirement to be a family care specialist). Encourage GPs to work longer hours and deal with patients more efficiently by introducing mixed payment systems that include a fee-for-service element.

Adjust the *Waiting Time Guarantee* to make it consistent with the principle that those most in need should be treated first (by making duration in the queue just one of several factors that determines who gets treated when).

Quality

Reduce fragmentation. Reduce the number of counties from 20 to perhaps half a dozen or fewer. Merge emergency units to minimise the number that are under the smallest safe size.

Improve the "grey area" between social and healthcare by clarifying responsibilities and improving co-ordination between municipalities and county councils. Step up rehabilitation efforts, especially for people with psychiatric, drug or alcohol problems. Ensure municipalities live up to their legal obligations, perhaps through financial sanctions.

Work towards reducing regional variations in quality and medical practice, e.g. through greater benchmarking.

Structure and management

Hospital sector: enhance the role of purchasers; improve hospital funding mechanisms, including some form of per-case payment; encourage a greater diversity of providers by removing the ban on for-profit hospitals or allowing exemptions on a case-by-case basis – but only when a robust regulatory framework is in place to minimise the risk of cream skimming; improve management through better case costing systems, especially in psychiatric, outpatient and primary care; make more use of multi-year budgets. These reforms are primarily the responsibility of the county councils.

Expand customer choice and private provision in elderly care.

Abolish Apoteket's monopoly - certainly for non-prescription drugs and probably for other drugs as well.

Financing

More stable and sustainable financing: reduce the cyclical influence on county council budgets by giving them a less-cyclical tax base, using a medium-term fiscal framework or running a central stabilisation fund. Increase the sustainability of their tax base by broadening it to include property tax or a share of the national sales tax. In elderly care, look again at the level of user charges, which are unsustainably low, and consider mandatory insurance as a way of funding part of the system over the long term.

User charges: either raise the high-cost protection ceilings on patient charges, which have fallen significantly in real terms over time, or make the ceiling a set percentage of household income (instead of a flat amount).

Bibliography

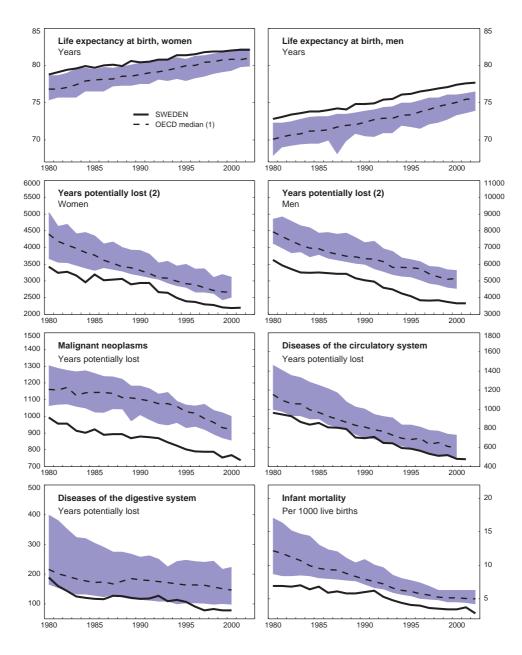
- Alban, Anita and Terkel Christiansen (eds) (1995), *The Nordic Lights: New Initiatives in Health Care Systems*, Odense University Press, Odense.
- Anell, A. (2004), "Nya villkor för apotek och läkemedelsförsäljning. Erfarenheter från avregleringar i Danmark, Island och Norge", IHE Report 2004:2, Swedish Institute of Health Economics (www.ihe.se).
- Arvidsson, Per, Tomas Movin and Christina Rosell (2004), "Empirical Study of a Team-based Incentive Model in the Day Surgical Department at Huddinge University Hospital", Stockholm School of Economics, Working Paper in Business Administration, 2004:4.
- Bains, M and H. Oxley (2005), "Ageing-related Spending Projections for Health and Long-term Care", Towards Higher-Performing Health Systems: Policy Studies from the OECD Health Project, OECD, forthcoming, Paris.
- Eurostat (2001), Labour Force Statistics 2001, Brussels.
- Finansdepartementet (2004), *Sveriges ekonomi utsikter till 2020* (Medium Term Economic Survey Until 2020), Ministry of Finance, Stockholm.
- Gerdtham, Ulf-G. and Pravin K. Trivedi (2000), "Equity in Swedish Healthcare Reconsidered: New Results Based on the Finite Mixture Model", Stockholm School of Economics Working Paper No. 365.
- Gerdtham, Ulf-G. and Gun Sundberg (1996), "Redistributive Effects of the Swedish Health Care Financing System", Stockholm School of Economics Working Paper No. 115.
- de Graeve, Diana and Tom van Ourti (2003), "The Distributional Impact of Health Financing in Europe: A Review", *The World Economy*, Vol. 26(10).
- Hakansson, Stefan (2000), "Productivity Changes After Introduction of Prospective Hospital Payments in Sweden", *Casemix*, Vol. 2, No. 2.
- Hanning, Marianne (1996), "Maximum waiting-time guarantee an attempt to reduce waiting lists in Sweden", *Health Policy*, Vol. 36(1).
- Hjertqvist, Johan (2001), Swedish Healthcare Reform: From Public Monopolies to Market Services, Montreal Economic Institute.
- Hjertqvist, Johan (2002), *User Fees for Healthcare in Sweden: A Two-Tier Threat or a Tool for Solidarity?*, Frontier Centre for Public Policy (www.fcpp.org), Winnipeg.

- Hughes, Melissa (2003), "Summary of Results from Breast Cancer Disease Study", Chapter I.4 in A Disease-based Comparison of Health Systems: What is Best and at What Cost?, OECD, Paris.
- IHE (2001), "Effects of Deregulating the Operation of Pharmacies Experiences From Iceland, Norway and Denmark", *Institute for Health Information Bulletin* 2/2001, Swedish Institute for Health Economics (www.ihe.se).
- Lofgren, Ragnar (2002a), "Healthcare Waiting List Initiatives in Sweden", *Public Policy Sources*, No. 62, Fraser Institute, Vancouver.
- Lofgren, Ragnar (2002b), "The Swedish Healthcare System: Recent Reforms, Problems and Opportunities", *Public Policy Sources*, No. 59, Fraser Institute, Vancouver.
- Miltenburg, F.M. and C.C. Ramakers (1999), "Evaluatie-onderzoek persoonsgebonden budget in Nederland" (Evaluation of personal care budgets in the Netherlands), *Tijdschrift voor gezondheidswetenschappen*, Vol. 77, No. 7.
- Moïse, Pierre (2003), "The Heart of the Healthcare System: Summary of the Ischaemic Heart Disease Part of the OECD Ageing-Related Diseases Study", Chapter I.2 in *A Disease-based Comparison of Health Systems: What is Best and at What Cost?*, OECD, Paris.
- Moon, Lynelle (2003), "Stroke Treatment and Care: A Comparison of Approaches in OECD Countries", Chapter I.3 in *A Disease-based Comparison of Health Systems: What is Best and at What Cost?*, OECD, Paris.
- NBHW (2003), Current Developments in Care of the Elderly in Sweden: 2004, National Board of Health and Welfare, Stockholm.
- Nolte, Ellen and Martin McKee (2003), "Measuring the Health of Nations: Analysis of Mortality Amenable to Healthcare", *British Medical Journal*, Vol. 327, No. 15.
- OECD (2004), Towards High-Performing Health Systems, OECD, Paris.
- OECD (2005a), Long-term Care Policies for Older People, forthcoming, Paris.
- OECD (2005b), "The Impact of Ageing on Demand, Factor Markets and Growth", ECO/CPE/WP1(2005)4, Paris.
- Or, Zynep (2002), "Improving the Performance of Healthcare Systems: From Measures to Action (A Review of Experiences in Four OECD Countries)", Labour Market and Social Policy Occasional Papers No. 57, OECD, Paris.
- Parliamentary Auditors (2000), *National Objectives in Municipal Elderly Care*, Stockholm (www.riksdagen.se/rr).
- Quaye, Randolph K. (2001), "Internal Market Systems in Sweden: Seven Years After the Stockholm Model", *European Journal of Public Health*, Vol. 11, No. 4.
- Rae, David (2005), "How to Reduce Sickness Absences in Sweden: Lessons from International Experience", OECD Economics Department Working Papers No. 442, Paris.

- The Royal College of General Practitioners (1992), *The European Study of Referrals from Primary to Secondary Care*, Occasional Paper No. 56, London.
- SALA (2004), *Swedish Healthcare in Transition: Resources and Results with International Comparisons*, Swedish Association of Local Authorities and Swedish Federation of County Councils, Stockholm.
- Saltman, Richard B. and Göran Berleen (2000), "The Role of Outpatient Hospital Care in Sweden and Stockholm County", Report written for the Center for International Health at Boston University for the Russian Legal and Regulatory Health Project.
- Siciliani, L. and Jeremy Hurst (2003), "Explaining Waiting Times Variations for Elective Surgery Across OECD Countries", OECD Health Working Papers No. 7.
- SOU (2004), Sammenhållen hemvård, Äldrevårdsutredningen, SOU 2004:68.
- Van Doorslaer, Eddy *et al.* (2002), "Equity in the delivery of healthcare in Europe and the US", *Journal of Health Economics* 19.
- Van Doorslaer, Eddy and Cristina Masseria (2004), "Income-related Inequality in the Use of Medical Care in 21 OECD Countries", *OECD Health Working Paper No. 14*, OECD, Paris.
- Whitehead, Margaret, Maria Evandrou, Bengt Haglund and Finn Diderichsen (1997), "As the Health Divide Widens in Sweden and Britain, What's Happening to Access to Care?", *British Medical Journal*, Vol. 315.
- WHO (2000), The World Health Report 2000. Health Systems: Improving Performance, Geneva.

Annex A1

Indicators of health status

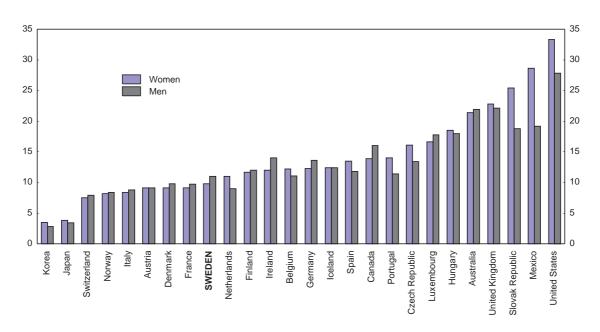


- 1. The shaded area shows the middle two quartiles (i.e. half the countries fall in this range).
- The Potential Years of Life Lost is a summary measure of avoidable or premature mortality, providing an explicit
 way of weighting deaths occurring at younger ages (before 70 years), that are in principle preventable. It is
 measured as years lost per 100 000 people.
 Source: OECD Health Data 2004.

Annex A2

Lifestyle factors that influence health

Figure A2.1 **Swedes are relatively slim**Percentage of people with a body mass index of 30 kg/m2 or more, 2002

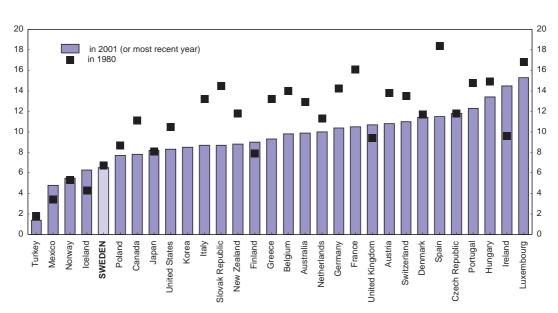


Source: OECD Health Data 2004.

4000 4000 3800 3800 in 2001 in 1980 3600 3600 3400 3400 3200 3200 3000 3000 2800 2800 2600 2600 2400 2400 2200 2200 2000 2000 Finland Turkey Norway Hungary Ireland Korea Mexico Iceland Netherlands United Kingdom Spain Germany Italy Belgium United States Austria Australia SWEDEN Canada New Zealand Switzerland Denmark

Figure A2.2. **Calorie intake is low** Total calories per capita per day

Source: OECD Health Data 2004.



36

Figure A2.3. **Alcohol consumption is low**Annual consumption of pure alcohol, litres per person aged 15 and over

Source: OECD Health Data 2004.

60 60 Women 50 50 40 40 30 30 20 20 10 10 Greece Korea Germany France Poland Mexico Canada Finland Norway Italy Belgium Luxembourg Hungary United States Australia Iceland New Zealand Slovak Republic United Kingdom Switzerland Denmark Czech Republic Netherlands SWEDEN

Figure A2.4. **Smoking rates are low**Percentage of the population that smokes daily, 2002 or most recent year

Source: OECD Health Data 2004.

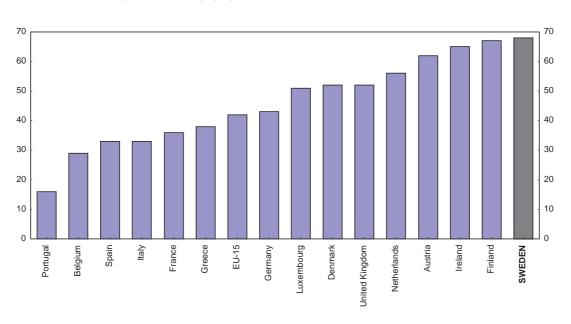


Figure A2.5. **Swedes exercise a lot**Percentage of adults engaging in sport at least 3 hours per week, per cent, 1997

Source: Institute of European Food Studies.

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