Health care reforms in Europe and their implications for Japan Peter C. Smith

ABSTRACT

Attempts to 'reform' the design of the health system have been a recurrent theme in western European countries for thirty years. Although the reforms have taken a variety of forms, many have been aimed broadly at improving the costeffectiveness of the health system. To this end, early reforms in the 1980s emphasized cost containment. The characteristic of the 1990s was an attempt to promote efficiency by introducing competition and markets into health care. In the early years of the new century, the focus has switched towards effectiveness, in the form of promoting various notions of health care 'quality'. This paper traces the themes European reforms underlying aimed enhancing cost-effectiveness, and assesses their success. It then briefly seeks to draw some conclusions regarding the most promising directions for health policy in Japan.

Keywords: Health system reform; cost containment; health care markets; quality improvement

1. BACKGROUND

Europe has been the crucible of socialized health care. Over the course of the twentieth century the countries of western Europe secured remarkable success in improving the health of their populations and protecting citizens from the potentially catastrophic expenditure associated with health care. However, in common with all industrialized economies, the growing challenges of restraining costs, improving quality and assuring universal access have put the health systems of Europe under severe pressure.

In recent years European policy makers have therefore experimented with numerous reforms to the finance, organization and delivery of health care. The purpose of this paper is to describe some recent experience with reform, to discuss its effectiveness, to identify challenges for the future, and to assess the implications for Japanese policy makers. Throughout, I concentrate on the countries of western Europe. Important developments are also occurring in eastern Europe, but the reform process there is at an early stage, and usable evidence therefore sparse.

Western European health systems can be divided into four broad categories: centralized public sector systems funded out of general taxation (such as the English National Health Service); devolved public sector systems organized by local government and funded in part by local taxation (as found in much of Scandinavia); traditional social insurance systems in which citizens are assigned to sickness funds on the basis of employment sector (as in Austria and France); and reformed social insurance systems in which citizens are free to choose from competing sickness funds (as in Belgium, Germany and the Netherlands).

Although it is helpful to consider these distinct forms of organization, in practice no system is designed along such pure lines, and most systems exhibit mixed modes of organization and finance. For example, the UK public health system is supplemented by a small but significant system of voluntary private insurance, the Belgian social insurance system is augmented by large financial transfers from general taxation, and national standards and finance remain an important element of many local government systems. Furthermore, many systems are in a process of transition. For example, the previously national health services of Spain and Italy are in the process of decentralizing policy and finance to regions.

Also, in spite of the superficial differences between the health systems of western Europe, they exhibit many common characteristics. Indeed, the differences between the systems are minor compared to their commonalities, which include:

- a broad package of insured health care, embracing most mainstream health interventions (but not always long term care of older people);
- universal coverage of all citizens, regardless of financial or health status;
- low reliance on direct user charges for health care;
- financial contributions according to ability to pay, independent of health status;

high levels of regulation of providers.

Many commentators consider the unifying principle of European health care to be the principle of 'solidarity', under which the health risks of all citizens are pooled, with contributions to the risk pool unrelated to health status (Chinitz, D., A. Preker and J. Wasem 1998).

In many respects these similarities have arisen because of the geographical proximity of the countries and their eagerness to emulate what is seen to be good practice in their neighbouring health systems. In particular, the systems of social insurance derive mainly from the original German model of health insurance, and the national health systems of Spain and Italy were based on the United Kingdom model. This

process of policy learning continues to be important. Recent commitments to increase health care expenditure in the United Kingdom have been heavily influenced by a perception that health care quality in the UK lags behind many of its European counterparts.

JAPAN United Kingdom Public Sweden □ Private Spain Italy Ireland Germany France Finland Denmark Belgium Austria 0 2 4 6 8 10 12

Figure 1. Public and private health expenditure as a percent of GDP, 2001

(Source: OECD Health Data)

The promotion of cost-effectiveness has been an enduring preoccupation of all European health systems, and was discussed extensively by the World Health Organization in the World Health Report 2000. Whilst there is some room for debate about what the objectives of a health system should be, there has been widespread agreement that effectiveness comprises at least three important components: health outcomes (as expressed in disability and life expectancy); responsiveness (as expressed in concepts such as ease of access, dignity and autonomy); and financial protection. In addition, there continue to be important concern about the fairness of the health system, in the sense that certain population groups have systematically less access to health care, or enjoy poorer health outcomes, than the population as a whole.

In general, whatever the precise basis for comparison, European health systems tend to be amongst world's most effective, whether attainment is measured by health outcomes, responsiveness, financial protection or equity. Furthermore, in many cases expenditure is relatively low. As a result, cost-effectiveness – as measured by the ratio of outputs to inputs – is

high compared with many other developed countries, such as Switzerland and the United States. Japan, which enjoys good performance (especially in health outcomes) at modest levels of expenditure, is of course a major non-European exception to this observation.

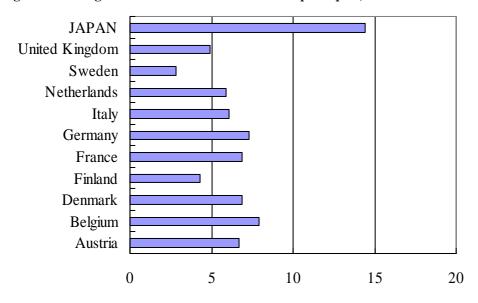
Figure 1 shows European levels of health care expenditure as a percentage of gross domestic product, and the two broad sources of finance: public (including government taxation and social insurance) and private (including out-of-pocket payments and voluntary health insurance). Typically, about 8% of GDP is spent on health care (this figure is growing rapidly), of which about 75% is financed from public sources.

In the pursuit of health system costeffectiveness, two fundamental concerns have been at the forefront of European policymakers' attention since the late 1970s: cost containment and quality improvement. In the following sections I therefore concentrate on these two broad areas of reform. In doing so, I should not wish to imply that other dimensions such as equity, public health and financial sustainability are of secondary importance. Rather, cost containment and quality improvement are the domains where there appears to be most scope for reform, and where the emerging European lessons are of universal interest.

This short paper can only offer a brief and very selective overview of recent developments in Europe. Much of the evidence I cite, and an enormous amount of fuller detail, can be found in the work of the WHO European Observatory on Health Systems, the website of which is at www.observatory.dk. In particular, Observatory publishes a series of HIT (Healthcare in Transition) reports for each country, and has produced a series of books on key reform topics, including financing and purchasing, which have greatly influenced this paper.

The structure of the paper reflects very roughly the sequence of preoccupations that have influenced European health reform. Early efforts tended to emphasize cost containment. These naturally led to concerns about improving efficiency – the ratio of outputs to expenditure. The most recent trend has been towards improving the quality of health care. Having considered these three approaches towards securing cost-effectiveness, I summarize some of the key lessons, and draw some inferences for Japanese health policy.

Figure 2. Average number of doctor consultations per capita, 2000



(Source: OECD Health Data)

2. COST CONTAINMENT

The primary motivation behind many of the earliest health system reforms was cost Mossialos and Le Grand (Mossialos, E. and J. Le Grand, eds 1999) comprehensively document many of the European initiatives. Many approaches have sought out supply side unit cost reductions through comparative costing data and market mechanisms, as described in Section 3 below. However, a distinct category of reforms has sought to contain costs through moderating In this section we highlight three approaches to demand management: gatekeeping, copayments and community care.

Gatekeeping

Medical gatekeeping is an arrangement under which patients can gain access to specialist care (or other aspects of health care) only if they have been referred by a nominated physician. This arrangement has traditionally been adopted in public sector systems such as the UK, Scandinavia, Italy and Spain. An important purpose of primary care gatekeeping has been to assure continuity of care for patients, and thereby improve effectiveness. However, it has also been perceived to be an important device for moderating demand for secondary care in many countries, particularly those funded by taxation. Evidence on the effectiveness of gatekeeping in containing costs appears to differ between countries, probably because the precise nature and strength of the gatekeeping role varies markedly between countries

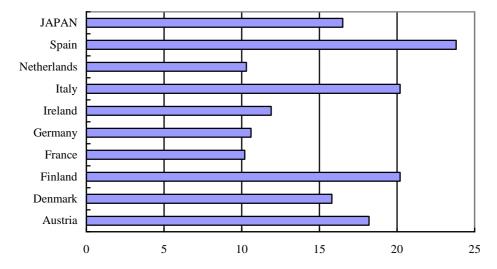
The UK experimented with an especially ambitious experiment under which larger primary care practices (typically with about 10,000 patients) could choose to become 'fundholders'. Under this initiative, fundholders were given an annual budget with which they were expected to meet the costs of prescribing and most non-emergency hospital treatment for their practice population. The fundholding experiment was abandoned in 1998, because of concern about preferential treatment for patients in fundholding practices. The abandonment of the initiative offered a good natural experiment to explore the impact of a policy change, and evaluations have suggested that:

- fundholding did slow the rise in prescribing costs;
- fundholding patients enjoyed lower waiting times than other patients;

- fundholding practices reduced referrals to secondary care by about 5% compared to nonfundholders;
- fundholding patients had lower levels of satisfaction with the health system than other patients.

Therefore, fundholding does appear to contribute to cost containment, albeit possibly at the expense of some patient satisfaction (Croxson, B., C. Propper and A. Perkins 2001, Dusheiko, M., H. Gravelle and R. Jacobs forthcoming, Dusheiko, M., H. Gravelle and N. Yu 2004, Dusheiko, M., H. Gravelle, R. Jacobs and P. Smith 2002). A new variant of fundholding is likely to be introduced in England in the near future.





(Source: OECD Health Data)

Social insurance countries have traditionally given patients freedom to consult with specialists without reference to gatekeepers. Insurance funds have passively reimbursed providers according to a set fee schedule, and have not sought to influence patient actions. Figure 2 confirms the tendency for higher number of doctor consultations in social insurance countries, and there is a concern that traditional patient freedom has led to excessive and unnecessary use of specialists. Mechanisms are therefore being sought to encourage the development of a gatekeeping function. For example, a reform currently proposed in France suggests the establishment of a physician gatekeeper for all patients (Jemiai, N. 2004).

Patients who wish to consult a specialist without reference to their gatekeeper may incur a supplementary charge.

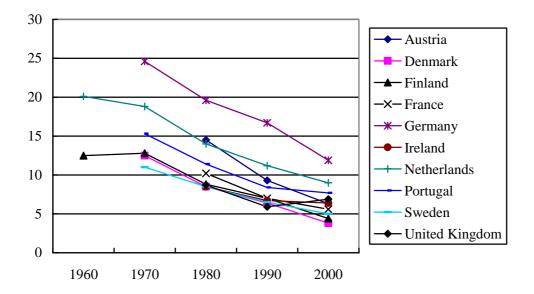
Copayments

A continuing debate within Europe is the role and scope of copayments for health care. Almost all countries charge patients for prescribed drugs (albeit with waivers for the young, the old, the poor and the sick). Particularly high copayments are charged in France and Ireland (for primary care). However, the impact of these copayments is abated by a flourishing market in voluntary complementary health insurance that is routinely bought by many citizens (or their employers)(Mossialos, E.

and S. Thomson 2002). The existence of such insurance protects patients from direct payments, but seriously dilutes the capacity of copayments to moderate the demand for health care. Figure

3 shows the range of levels of out-of-pocket payments in Europe (excluding private payments covered by voluntary insurance).

Figure 4. Trends in average length of stay, all acute episodes



(Source: OECD Health Data)

Some systems that have previously rejected user charges are experimenting with increased use of copayments. In Sweden a visit to a general practitioner now attracts a fixed fee, and the Netherlands parliament is currently debating the introduction of copayments for the first time (Helderman, J., F. Schut, T. Van der Grinten and W.P.M.M. Van de Ven 2005, Saltman, R. and S. Bergman 2005). The motive for introducing such copayments is to affect demand by reducing frivolous use of primary care, rather than act as a significant source of health care financing. However, there is considerable popular and political antipathy to the principle of copayments, and policy makers see little scope for making them a major source of health care finance. For example, Italy has sought to introduce three categories of health care intervention: fully subsidized (no copayment); partially subsidized; and not subsidized. It is noteworthy that the last two categories are quite sparsely populated.

In England, the Wanless review of long term trends in health has highlighted the critical importance for cost containment of a 'fully engaged' citizenry that recognizes its own responsibility for maintaining health (Wanless, D. 2002). This has raised the possibility that patients who have not looked after their own health should be charged higher fees for the use

of public health systems. No European government has yet seriously considered this notion, although clearly taxes on tobacco and alcohol represent an indirect charge on unhealthy behaviour.

A special form of copayment has been introduced through the use of reference pricing for pharmaceuticals in many countries, such as Germany, Spain and Portugal. Under reference pricing, similar drugs are clustered into families for which a single reimbursement rate is set – the family's 'reference price'. If a patient chooses a drug with a price that exceeds its family reference price, then the patient must pay the difference between the drug price and the reference price. In a sense, therefore, the copayment is 'optional', and the intention is to encourage patients to choose cheaper generic substitutes for branded drugs. The design of reference pricing raises difficult technical issues, such as the choice of homogeneous families of drugs, and the setting of the level of the reference prices.

Furthermore, full evaluation of reference pricing systems is difficult, and empirical evidence from Europe is sparse (López-Casasnovas, G. and J. Puig-Junoy 1999). On the supply side, reference pricing may have complex effects on pharmaceutical pricing policy, product

development, innovation and marketing. On the demand side, as well as inducing cost-consciousness, as intended, reference pricing may also induce patients to select inappropriate substitute drugs, or opt for expensive hospital treatment as a substitute for drug therapy.

Community care

Hospital care is expensive, and European countries have experimented with a number of reforms to reduce the use made of inpatient beds. These include a range of experiments with community care or 'intermediate' care that seek to promote the broad objective of keeping patients out of hospital, and minimizing their stay once admitted. Figure 4 illustrates the steady dramatic fall in lengths of stay in European hospitals. Recent data suggest that the scope for further reductions is limited.

One of the major causes of long lengths of stay is the phenomenon of 'bed blocking' by patients who are clinically ready for discharge, but who do not have suitable home circumstances. A number of instruments seeking to minimize the length of inpatient stay have therefore been tested. These include placing a maximum length of stay covered by statutory insurance (such as 90 days in Belgium). Beyond the maximum, user charges are incurred, although patients might seek to circumvent this rule by changing hospitals, and the rule is clearly a very blunt instrument.

In England, local governments are responsible for social care, and a system of financial penalties has been introduced under which hospitals can charge local governments a daily fee for patients whose discharge is unnecessarily delayed. There is some evidence that these incentives have encouraged local governments to improve the quality of integrates health and social care, and to reduce the number of delayed discharges (Commission for Social Care Inspection 2004).

3. MARKETS AND COMPETITION

In the pursuit of efficiency, some of the most fundamental reforms have occurred in the development of markets and competition. In this section I discuss five aspects relevant to market mechanisms: the development of provider markets, the design of payment mechanisms, the development of health insurance markets, the role of information in markets, and health technology assessment. Reforms linked to these concepts can have important implications for costs, outputs and health care quality, and

therefore for the overall cost-effectiveness of the health system.

The Provider market

Historically, the finance and provision of health care was in many systems vertically integrated within institutions that acted as both local insurer and local provider of health care. The most obvious examples of this integration occurred in public sector systems, such as Scandinavian local government and the English NHS, where local health authorities planned and provided health care. However, throughout the 1990s, European countries experimented in various ways with separating the planning and provision of health care (Smith, P., ed. 2000). intention was to create a market in which providers (in particular hospitals) had to compete for business from local health authority purchasers. Of course such markets already existed in systems of social insurance, in which patients traditionally enjoyed the freedom to choose care from a variety of providers. However, even in social insurance countries there have been efforts to encourage a more competitive provider market (Brown, L. and V. Amelung 1999).

Specific examples of internal health care markets include a variety of experiments by councils with Swedish county market mechanisms and attempts in Finland and some of the Italian regions to introduce markets (Saltman, R. and S. Bergman 2005, France, G. and F. Taroni 2005). Perhaps the most widely documented experiment with markets was the 'internal market' created in the UK NHS. Providers remained public service institutions, but competed for business from a range of local health authorities and general practitioners (Smith, P., ed. 2000).

The provider markets that have been created continue to be highly regulated. As a result, the markets (or quasi-markets as they are often called) have never been allowed to work in the way that a true market would function. Regulators have been reluctant to allow failing hospitals to go out of business, and there remain quite large barriers to entry. For example, in Finland local governments have sought wherever possible to negotiate contracts only with their local hospitals. The incentives of a true market have therefore been severely attenuated. However, as well as reducing the potential benefits of markets, the high degree of regulation has also helped abate many of their potential risks, such as market instability and poor

integration and quality of care (Le Grand, J., N. Mays and J. Mulligan, eds 1999).

Countries such as England and the Netherlands are now seeking to embed the principle of competition more strongly into their provider markets by encouraging contestability. For example, in order to sharpen competitive pressures, there have been some experiments with changing the ownership structure of providers, by increasing the autonomy of publicowned providers, by encouraging market entry of for-profit providers, and by privatizing some Yet the ownership structure of providers. European health care organizations varies widely between countries, without any discernible effect on health system performance, reinforcing the ambivalent results from the United States (Cutler, D.M., ed. 2000). It therefore seems unlikely that by itself - the ownership of provider organizations has a major influence on health system performance. Rather, the more important influence is likely to be the system of incentives for cost containment put in place by contracting and funding mechanisms. However, it has not yet been possible reliably to evaluate the success otherwise of market-based policies (Helderman, J., F. Schut, T. Van der Grinten and W.P.M.M. Van de Ven 2005, Stevens, S. 2004).

Payment mechanisms

Payment mechanisms offer the most direct and fundamental incentive within health care (Duran, D., I. Sheiman, M. Schneider and J. Øvretveit, 2004, Langenbrunner, J., E. Orosz, J. Kutzin and M. Wiley, 2004). For hospital providers, almost all European health systems operate some form of diagnosis related group (DRG) funding mechanism. These systems reimburse providers according to activity levels, adjusted for case mix complexity, whilst offering only a fixed revenue for each episode of care. The attraction of DRG systems is therefore that they encourage efficiency in production. However, there are well-documented concerns associated with DRG schemes, such as encouraging providers to supply unnecessary hospital treatment, reduced willingness to treat complex cases, and inferior quality of care.

These concerns have encouraged European health systems to introduce a number of instruments designed to avoid some of the adverse consequences of rigid payment mechanisms. For example:

 In Norway, funding of local governments is partly on the basis of DRGs (that is, actual activity) and partly on the basis of risk-

- adjusted capitation (that is, expected activity). The intention is to moderate the incentive for excessive activity under a pure DRG system.
- In the Netherlands, some cost-sharing between the payer and the provider occurs once provider costs on a particular patient exceed some threshold. The intention is to transfer some of the expenditure risk back to the payer, and reduce the incentive for providers to 'cream-skim' only relatively healthy patients.
- Almost all systems augment the pure DRG payment with other sources of finance, such as local government subsidies for capital resources (Austria) and tax subsidies (Belgium)(Mossialos, E., A. Dixon, J. Figueras and J. Kutzin, eds 2002).
- In Germany, patients in registered chronic disease programmes attract additional capitation payments for sickness funds (Busse, R. 2004).

Notwithstanding the widely-documented concerns with pure DRG systems, England is in the process of introducing a system under which hospitals will be almost 100% funded on the basis of a fixed national payment tariff. It will be interesting to see whether this exceedingly rigid payment mechanism is sustainable (Sussex, J. and A. Street, eds 2004).

A key unresolved issue is to what organizational level to make the DRG payment. For example, In Norway, DRG payment has been to local governments. Local governments then vary in the extent to which they pass on the DRG payment incentive directly to hospitals. Even when hospitals receive DRG payments, they often do not pass on the incentives to clinical teams and individual specialists, whose remuneration is unrelated to activity. Given the autonomy of medical professionals, therefore, the incentives inherent in DRG payments may be attenuated. Countries such as England are seeking to address this by incorporating an activity-based incentive directly into the remuneration of salaried specialists (Bloor, K. and A. Maynard, 2005).

Payment incentives have been tested mainly in hospital care, and are less well developed in ambulatory and chronic care (McKee, M. and H. Brand, 2004). In practice, primary care and ambulatory physicians in most countries receive a complex mix of salary, fee-for-service and capitation payments. Within every health system there remains a big research agenda for establishing the optimal contractual and payment arrangements for such physicians.

Purchaser market

Worldwide, there is a growing recognition that one of the weakest elements of most health systems is the collective 'purchasing' of health care from providers, in the form of an explicit contract embracing the volume, scope and quality of care. Purchasing institutions, such as local governments or insurers, have instead traditionally passively reimbursed providers, often according to fixed fee schedules, without seeking actively to influence the costs or quality of care. A book on purchasing prepared by the European Observatory of the World Health Organization has concluded that there has been slow and piecemeal progress with development of a more active purchasing role (Figueras, J., R. Robinson and R. Jakubowski, eds (2004).

The most extensive reform designed to address the purchasing function has been the introduction of competition into social insurance markets in Belgium, the Netherlands Germany and Switzerland (Van de Ven, W.P.M.M. and R. Ellis, 2000). These reforms allow citizens to choose with which sickness fund they are insured, based on the premium rate and the perceived quality of the insurer. The funds are not formally allowed to refuse any application for coverage, and must charge the same rate of premium to all members, irrespective of age or health status. The intention is to encourage purchasers to seek out market advantage by enhancing quality and responsiveness, and reducing costs. In countries such as the Netherlands, there is a standard package of care that all insurers must offer, so competition is mainly on the basis of a variable per capita premium. Competitive insurance markets have led to major reorganizations of social insurance markets, mainly in the form of insurance fund mergers.

The impact of social insurance competition has hitherto been severely diminished by the continued use of fixed national reimbursement rates for health care interventions. In general, patients continue to enjoy the freedom to use any provider, and so insurers have very little leverage with which to affect provider behaviour. In order to address this problem, tentative experiments have been made with 'selective' contracting by sickness funds. For example, in Switzerland some funds have offered premium discounts to patients prepared to use only preferred providers, and there are some emerging experiments in the Netherlands with selective These experiments open up the contracting.

possibility of developing a more active purchasing function. The selective contracting can be used to secure efficiency and quality gains, and some of the savings can be passed on to patients in the form of reduced premiums.

However to date such experiments are at an early developmental stage. The main commercial gains for providers are perceived to lie in attracting relatively healthy members (and deterring the relatively unhealthy). In an attempt to prevent such 'cream skimming' of relatively healthy citizens by insurers, extensive financial transfers are effected between the sickness funds. These transfers seek to compensate the funds for (a) the relative sickness of their insured population and (b) the size of their revenue base (the incomes of their employed members). The intention is to give every fund the opportunity to charge a standard premium for a standard package of health care, assuming a standard level of administrative efficiency. If they are well-designed, therefore, the inter-fund transfers should promote transparency and accountability, by highlighting differences in efficiency.

However the requirements of these transfers between sickness funds have given rise to increasingly complex technical calculations, in the form of risk adjustment mechanisms (Van de Ven, W.P.M.M. and R. Ellis, 2000). These result in major transfers from funds with rich, healthy populations to those with poor, sick populations, but there remain doubts as to whether the risk adjustment process operates as intended (Rice, N. and P. Smith 2001). More generally, the effectiveness of competitive insurance markets is therefore so far unproven.

Information

The World Health Report 2000 emphasized the crucial role that information has to play in enhancing health system performance (World Health Organization 2000). In particular, one of the principal requirements for a competitive provider market is the availability of good information on the quality of health care provision. Hitherto, the information base in health care markets has been weak, and many commentators consider these weaknesses to be a central reason for the disappointing outcomes of experiments with implementing health care markets. However, some European countries are implementing important performance measurement initiatives (Smith, P., ed. 2002), and these better information bases offer the potential for great improvements in efficiency by enabling patients, insurers and local health

authorities to make more informed purchasing decisions.

England has taken the lead on public reporting of quality within Europe (Smith, P.C. 2002). Every public health care organization is given an annual report card on a range of quality data. A complex algorithm is used to convert these data into a 'star rating' for each hospital (zero to three stars), with rewards of increased revenue, increased autonomy and enhanced careers for good performers. managerial Hitherto, the star ratings have emphasized reductions in waiting times, a key policy problem in England. Indeed major improvements in the longest waiting times have been secured, in large part due to the performance reporting. However, there have been strong criticisms of the star ratings system because it largely ignores clinical quality, and many other important aspects of care (Horton, R. 2004). The intention in the future is to shift the reporting emphasis towards the quality of clinical outcomes, and to integrate qualitative evidence with quantitative data (Healthcare Commission 2004).

Good information is also a more general cornerstone of health care accountability, and many health systems are seeking to put in place information systems that promote better regulation and accountability of providers. For example, The Netherlands is implementing an ambitious performance measurement framework (Arah, O., N. Klazinga, D. Delnoij, A. Asbroek and T. Custers 2003). Finland has put in place an extensive hospital benchmarking system that allows managers and regulators to compare performance, to understand why variations are occurring, and to offer prescriptions for remedial interventions (Häkkinen, U. and J. Lehto 2005).

The expansion of information about health care organizations reflects the reduced cost of assembling data brought about by the revolution in information technology, and the development of the electronic health record may soon offer a further major opportunity to enhance the quality, timeliness and scope of comparative performance data. However, it is important to bear in mind that - although the direct costs of providing data are declining rapidly - public release of performance data can sometimes induce unintended responses in providers, such as cream-skimming healthier patients (Smith, P. 1995). Such responses do not invalidate the principle of publication, but they do suggest a need for caution in implementing and monitoring the impact of public reporting schemes carefully.

Health Technology Assessment

Almost all European systems seek actively to circumscribe the package of care available to publicly insured citizens, whilst seeking to retain reasonably comprehensive coverage. Instruments for limiting the range of services available to patients include:

- 'positive' lists of services, for which reimbursement can be claimed (widespread in social insurance systems);
- 'negative' lists of excluded services (as developed, for example, in Italy);
- development of guidelines of best clinical practice, to which physicians are expected (but not in general forced) to adhere.

The most obvious instrument for securing adherence to guidelines is to ensure that – where payment is by fee-for-service – the schedule of services contains only those activities that are consistent with efficient practice. However, the schedules are rarely sophisticated enough to ensure that services are given only when clinically needed. Therefore, more refined and sensitive mechanisms are required to encourage physicians to deliver appropriate services.

In this context, one of the most important developments for promoting cost-effectiveness has been the integration of health technology assessment methods into the regulatory practice. For example, the National Health Service (NHS) in England and Wales has set up a National Institute for Clinical Excellence (NICE) which evaluates new technologies, and effectively licenses their use in the NHS (Stevens, A. and R. Milne 2004). An important input into the NICE decision-making methodology is an estimate of the cost-effectiveness of new technologies, and an informal cut-off of about €45,000 per quality adjusted life year (QALY) is said to inform its judgements. Other countries, such as Sweden, Finland and Germany have set up analogous health technology regulators. However, the development of mechanisms to ensure adherence to recommendations is at an early stage, and the challenge of making technology assessment universal and consistent is enormous (Oliver, A., E. Mossialos and R. Robinson 2004).

4. QUALITY IMPROVEMENT

Most of the reforms noted above have been direct primarily at improving cost-effectiveness by containing costs. However internationally there has been a growing awareness that there is a serious problem of major shortcomings in effectiveness, in the form of the quality of health

care (Institute of Medicine 2001). Quality can take a number of forms, such as patient safety, the health outcomes of treatment, and responsiveness, for example in the form of times and patient satisfaction. waiting Traditionally, health care quality problems have been largely ignored by policy makers, perhaps because it has generally proved infeasible to measure quality in any realistic fashion. But as metrics for measuring quality become increasingly available, the pressure to regulate and improve quality is intensifying.

Professional Improvement

An OECD report has summarized worldwide experience with measuring quality, and pointed to especially interesting innovations in Europe (Smith, P., ed. 2002). Sweden has developed the notion of voluntary 'quality registers' for health care professionals (Rehnqvist, N., 2002). The aim of these is to disseminate good medical practice to practitioners, to provide comparative performance data and to secure continuous quality improvement. Each register is based on a clinical speciality and managed by a group based in one of the university hospitals. There are about 50 registers. Examples include the cataract surgery register (covering 95% of all cataract surgery) and the hip arthroplasty register (the first register, initiated in 1979, which now covers 100% of hip replacements). The usual model is that a national register develops gradually from a local initiative. Funding is provided by the National Board for Health and Welfare and local government and medical organizations. About 70% of eligible clinicians participate in each register, and participants meet regularly to discuss comparative results aggregated to departments in participating The data collected vary from institutions. register to register, but might include patient data on diagnosis, treatment, patient experience and outcomes.

In the Netherlands, quality assurance of clinical practice is secured through a system of self-regulation (Klazinga, N., D. Delnoij Kulu-Glasgow, 2002, Casparie, A., E. Sluijs, C. Wagner and D. de Bakker 1997). Ouality systems are developed by the health care professions and institutions, with the objective of promoting quality improvement and securing accountability. Patients. external local governments and sickness funds are involved in system development, and the regulatory role of the national government - enshrined in law - is to ensure that suitable systems are put in place.

Numerous quality assurance systems are now in place, with many different models employed. Care has been taken to ensure that the general management quality models are tailored to the needs of health care. The main emphasis has been on developing internal quality assurance using clinical guidelines and protocols. It is mandatory to have in place some system of external inspection. However the development of performance indicators has so far not been a high priority.

In contrast to the models of self-regulation, England has chosen to develop a system of independent regulation, in the form of the Healthcare Commission. This regulator has only recently been established, but will be responsible for ensuring that providers deliver good quality health care in line with national standards.

Patient Empowerment

Some of the most interesting debates in European health policy revolve around the notion of patient choice of provider and treatment. There are contradictory pressures at work within Europe, with public systems such as Denmark and England seeking to expand and enhance levels of choice (Vrangbaek, K. and M. Bech 2004), whilst social insurance systems such as Germany and France are seeking ways to restrain traditionally high levels of choice in order to promote cost containment and improve coordination of care. There is considerable evidence that traditionally high degree of patient autonomy regarding choice of provider is an important reason for the high levels of popular satisfaction with the social insurance systems in Germany, France and elsewhere. Likewise, limitations to choice have been perceived as an important weakness of public systems, most notably the UK and Scandinavia. However, there is equally a recognition that, whilst free patient choice can lead to substantial gains in patient satisfaction, it can also impose substantial costs on the system, for example in the form of requiring a greater volume and range of providers. An experiment in London designed to reduce waiting times by increasing patient choice did achieve many of its objectives, and improved patient satisfaction. However, it required the creation of substantial additional surgical capacity in the city (Dawson, D., R. Jacobs, S. Martin and P. Smith 2004).

The interest in patient choice reflects a wider growing concern with the importance of the 'responsiveness' of the health system to patient requirements. There has been a major

move towards reorienting health systems towards patients, and one line of thinking is that - as well as securing improved quality - this will also lead to improved efficiency. This is particularly likely to be relevant to patients with long-term disabilities. There has been a move towards the notion of an 'expert patient', brought about by improved information and autonomy for patients with chronic needs (Department of Health 2001). A focus on the patient raises the possibility that - in the extreme - once a patient's needs have been assessed, the patient can be awarded a cash sum with which to purchase health care (or indeed personal care if that is considered a higher priority). This would effectively introduce a 'voucher' scheme for some aspects of chronic care. However, although a topic of active debate in Europe, it has only been used in a small way – for example for some patients with chronic psychiatric conditions in the Netherlands and England.

The promotion of patient choice requires the development of good information systems that enable patients to make informed decisions. To date, the crude information systems described in the preceding section have not been suitable for

such purposes, as patients require detailed information relevant to their health problem. It is therefore not surprising to find that patients make little use of publicly reported quality data Marshall, M., P. Shekelle, H. Davies and P. Smith 2003). In the UK, an independent company called Dr Foster is seeking to provide web-based comparative information on provider performance. Its publications and web site http://www.drfoster.co.uk/ is one of the most ambitious European efforts to provide quality information commercially.

Incentives for Quality

Notwithstanding the experiments described above, there is a growing belief that indirect methods of promoting quality – such as markets and patient choice – are inadequate, and that direct incentives are required Casalino, L., R. Gillies, S. Shortell, J. Schmittdiel, T. Bodenheimer, J. Robinson, T. Rundall, N. Oswald, H. Schauffler and M. Wang 2003). The most ambitious scheme to promote health care quality is contained in a new contract for general practitioners in England (Smith, P. and N. York 2003).

Table 1: The GP contract – the hypertension indicators, sliding scales, and total points at risk (maximum 105)

(maximum 103)			
	Min % score	Max % score	Total
	below which	above which no	points
	no points	further points	at risk
	earned	earned	
Clinical records			
BP 1. The practice can produce a register of patients with established hypertension	NA	NA	9
Diagnosis and initial management BP 2.The percentage of patients with hypertension whose notes record smoking status at least once	25	90	10
BP 3.The % of patients with hypertension who smoke, whose notes contain a record that smoking cessation advice has been offered at least once	25	90	10
Ongoing Management			
BP 4.The % of patients with hypertension in which there is a record of the blood pressure in the past 9 months	25	90	20
BP 5. The % of patients with hypertension in whom the last blood pressure (in last 9 months) is 150/90 or less	25	70	56

(Source: Department of Health, Investing in General Practice: the New GMS Contract, 2003.)

General practices (average populations about 7,000) can accumulate 'quality points' across seven areas of practice. A maximum of 1,050 points are available across a total of 146 performance indicators. Up to 20% of a

practice's income is determined by the total points it secures.

The most heavily weighted area of practice is the clinical, for which 550 points are available. Other areas include indicators for practice organisation (184 points) and patient experience

(100 points). The clinical indicators are in turn distributed across ten domains of care, of which the three most heavily weighted are coronary heart disease (121 points), hypertension (105) and diabetes (99).

An example of the points scheme for hypertension is shown in Table 1. indicators are used, covering structure (clinical records), process (diagnosis and management) and outcome. For most indicators there is a lower limit (at which points can start to be earned), and an upper limit at which all available points are secured. The number of points available for each indicator is shown in the right hand column. So for example for indicator BP2, points start to accumulate once the notes of 25% of patients with hypertension record smoking status at least once. A maximum of ten points is secured when the smoking status of 90% of such patients is recorded.

5. FUTURE CHALLENGES AND UNRESOLVED ISSUES IN EUROPE

The World Health Report 2000 argued that whatever the type of health system put in place – the ultimate responsibility for the performance of the system rests with the national government. That is, the national government is the highest level principal, acting on behalf of patients and citizens. To develop this theme, WHR 2000 introduced the notion of 'stewardship' to describe the rules, institutional arrangements, information systems, markets and regulatory practices put in place by the national government. Of course in many health systems, the national government effectively delegates responsibility for the operation of the health system to other actors, such as lower levels of government, social insurers, competitive markets, and independent regulators. However, this paper shares the WHO viewpoint that accountability for health system performance rests ultimately with the national government.

This paper has discussed selected aspects of health system reform in Europe, most of which have been implemented by national governments. It has sought to describe policies implemented to address three major areas of reform associated with cost-effectiveness: cost containment, competition, and quality improvement. There remain many other policy concerns that have not been discussed here. For example, there are debates in most European health systems about the sustainability of current systems of financing. In particular, social insurance systems rely mainly on a single revenue base (a payroll tax)

and are therefore coming under especially severe fiscal pressure. Tax based health systems enjoy a wider revenue base, but suffer competition from other demands on public expenditure. When viewed in conjunction with likely increases in demand for health care expenditure, the apparent fragility of these revenue bases has prompted some policy makers to search for new sources of finance. However it is difficult to identify significant alternative sources. particular, large increases in user charges or voluntary health insurance run the risk of compromising European principles of solidarity and fair access to health care. In recent years, no European health system has proposed or tested major reforms to its sources of finance.

Many European health systems are experiencing severe problems in training and recruiting health care professionals. To some extent this has been addressed by seeking to recruit from lower income countries. However, there are serious ethical questions raised by this policy, as it denudes already fragile health systems of scarce personnel. Alternative policies include increased attention to training, and exploring the potential for substituting cheaper capital or labour for scarce professional skills. Such 'skills substitution' is likely to be a critical cost containment issue in the future. However, such policies are in their infancy, and pose immense design and implementation problems.

The paper has also not described the complex regulatory mechanisms associated with pharmaceutical expenditure. There are numerous developments in Europe in this domain, such as various incentives for generic substitution (Mossialos, E., M. Mrazek and T. Walley 2004). However, consideration is beyond the scope of this short paper.

Finally, in the opinion of commentators, the aging population is a fundamental driver of both cost increases and shrinking revenue base in all health systems. The magnitude of the problem brought about by increased longevity and lower fertility is a matter However, some countries are for debate. beginning to recognize that the costs imposed by an aging population are amenable to policy interventions. In particular, many of the highest health system costs arise from the needs of those suffering chronic disease or disability. policy question centres on what is the appropriate mix of long term social care and health care to offer those with chronic needs, as discussed briefly in section 2.

6. IMPLICATIONS FOR JAPAN

Europe has undertaken numerous experiments with health system reform (Saltman, R., J. Figueras and C. Sakellarides, eds 1998). Such reforms are inherently difficult to evaluate, and unambiguous evidence to date on their success (or otherwise) is very sparse. Moreover, the effectiveness of a reform is often highly dependent on the context within which it is implemented. To some extent the lack of evidence is not surprising. Health systems are immensely complex creations, and interventions in one domain often have unintended side effects elsewhere. Full evaluation of a reform is therefore very challenging if all the system-wide consequences are to be taken into account.

Moreover, a forthcoming special issue of the Journal of Health Politics, Policy and Law argues that the development of European health systems is highly 'path dependent' (Oliver, A. and E. Mossialos 2005). Therefore, it is not straightforward directly to translate lessons from one system to another. The implication is that, rather than asking the question 'what works?' in other health systems, Japanese policy makers should use experience from other systems to develop new ideas, to suggest potential modes of implementation, and to create awareness of possible unintended consequences.

By any standards, Japan secures exceptional health outcomes at modest cost with high levels of coverage and equity. There nevertheless exist obvious challenges for the Japanese health system, and clear merits in experimenting with promising reforms (Ikegami, N. and J. Campbell 1999, Ikegami, N. and J. Campbell 2004). The poor evidence base on the effectiveness of reforms elsewhere suggests that Japanese policy makers should continue to approach reform incrementally, and to seek to evaluate innovations carefully.

The Japanese strategy of incremental reform is consistent with similar caution being exercised in many other systems (Oliver, A. and E. Mossialos 2005, Altenstetter, C. and R. Busse 2005). A major exception to the principle of cautious reform is England, where policy makers have deliberately introduced numerous reforms simultaneously, under a principle 'constructive discomfort' for the health system (Stevens, S. 2004). The effectiveness of this multidimensional approach to reform is open to question. It makes evaluation of any single instrument difficult, and places extreme strain on the managerial capacity of the health system.

The European reforms considered in this paper have been discussed under three headings: cost containment, competition, and quality improvement. The virtues of some of the reforms are largely uncontested, and the main debates surround how they can be implemented most effectively. Examples include: health technology assessment, improved purchaser functioning, better information resources, and improved community care.

There are some other general trends in Europe that also merit attention, but may require more careful evaluation before being considered by Japanese policy makers. The virtues of introducing greater competition in health care remain contested. Whilst some elements of the provider market – such as non-emergency hospital procedures – are clearly contestable, and would probably benefit from competitive forces, there must be considerable question marks over the relevance of competition for much chronic and ambulatory care. The virtues of competitive insurance markets are in my view even more questionable at this stage of development. To date competitive European insurance markets appear to have been preoccupied with risk selection rather than improved cost-effectiveness.

In general, social insurance systems continue to perform well relative to other organizational forms (Henke, K. and J. Schreyög 2004). Their weak points are:

- 1. questions over the continued sustainability of their narrow finance base;
- 2. difficulties for sickness funds in securing quality or cost control over providers;
- 3. lack of control over expenditure growth;
- 4. a lack of accountability of providers to insurers and patients.

Each of these problems can to some extent be addressed by relatively modest reforms:

- Traditional social insurance finance bases can be readily augmented by cross subsidy from general taxation or other sources of finance. From an accountability perspective, the important consideration is to make these subsidies consistent and transparent.
- 2. More active purchasing of health services by insurers can be encouraged by the use of selective contracting and incentives for patients to use preferred providers. This implies a need for new types of managerial expertise in insurers. Increased application of health technology assessment may also contribute to a more active purchasing role.
- 3. Techniques such as gatekeeping and creative adjustments to copayment policy may be

- deployed to secure more rigorous constraints on expenditure growth.
- 4. The provision of greatly improved information, particularly on the quality and costs of providers, can contribute to cost-effectiveness in a number of ways, and enhance accountability throughout the system.

In a Japanese context, it should be possible to introduce many such reforms incrementally, perhaps at first on a pilot basis with appropriate evaluation.

Finally, on the basis of the European experience and my regrettably superficial observations of the Japanese situation, I would tentatively suggest that the following three areas in the health system appear to be most amenable to immediate reform:

- 1. Improvement of comparative information on the quality and efficiency of providers and insurers. This is becoming a central feature of the accountability framework of all health systems, and is an essential prerequisite of many other system reforms. Although there are some risks and costs associated with improved information, these are small relative to the potential benefits.
- 2. Experimentation with financial incentives for patients. Japan has an advantage over many other health systems because it already imposes relatively high levels of copayments. This offers great scope for using variations in copayment rates to encourage desired behaviour on the part of patients (such as using 'preferred' providers, or complying with treatment regimes).
- 3. Encouragement of more active and flexible purchasing by sickness funds. Insurers should be encouraged to adopt a more active approach towards purchasing health care, including the freedom to use financial incentives. This suggests the need to break away from a rigid national fee schedule, for example by allowing insurers to make some of the fee paid to providers dependent on quality.

Acknowledgements: I should like to thank Nobuyuki Izumida, Tetsuo Fukawa, Naoki Ikegami and Adam Oliver, whose helpful comments on an early draft led to an immense improvement in this paper. I am currently funded by funded by UK Economic and Social Research Council fellowship R000271253.

References

- Chinitz, D., A. Preker and J. Wasem, (1998)
 Balancing competition and solidarity in
 health care financing, in Critical challenges
 for health care reform in Europe, R. Saltman,
 J. Figueras and C. Sakellarides, Editors.
 Open University Press: Buckingham.
- Mossialos, E. and J. Le Grand, eds (1999) Health care and cost containment in the European Union. Ashgate: Aldershot.
- Croxson, B., C. Propper and A. Perkins (2001), "Do doctors respond to financial incentives? UK family doctors and the GP fundholding scheme", Journal of Public Economics. 79(2), 375-398.
- Dusheiko, M., H. Gravelle and R. Jacobs (forthcoming), "The effect of practice budgets on patient waiting times: allowing for selection bias", Health Economics.
- Dusheiko, M., H. Gravelle and N. Yu (2004) The impact of budgets for gatekeeping physicians on patient satisfaction: evidence from fundholding. Centre for Health Economics: University of York.
- Dusheiko, M., H. Gravelle, R. Jacobs and P. Smith (2002) The effect of budgets on doctor behaviour: evidence from a natural experiment. York: Centre for Health Economics, University of York.
- Jemiai, N. (2004), "Recent French health system reform proposals", Euro Observer. 6(2), 1-4.
- Mossialos, E. and S. Thomson, (2002) Voluntary health insurance in the European Union, in Funding health care: options for Europe, E. Mossialos, A. Dixon, J. Figueras and J. Kutzin, Editors. Open University Press: Buckingham.
- Helderman, J., F. Schut, T. Van der Grinten and W.P.M.M. Van de Ven (2005), "Marketoriented health care reforms and policy learning in the Netherlands", Journal of Health Politics, Policy and Law. 30(1), forthcoming.
- Saltman, R. and S. Bergman (2005), "Renovating the commons: Swedish health care reforms in perspective", Journal of Health Politics, Policy and Law. 30(1), forthcoming.
- Wanless, D. (2002) Securing our future health: taking a long-term view. London: HM Treasury.
- López-Casasnovas, G. and J. Puig-Junoy (1999) Review of the literature on reference pricing. Barcelona: Universitat Pompeu Fabra.
- Commission for Social Care Inspection (2004) Leaving hospital - the price of delays.

- London: Commission for Social Care Inspection.
- Smith, P., ed. (2000) Reforming markets in health care: an economic perspective. Open University Press: Buckingham.
- Brown, L. and V. Amelung (1999), "Manacled competition': market reform in Germany", Health Affairs. 18(3), 76-91.
- France, G. and F. Taroni (2005), "The evolution of health policy making in Italy", Journal of Health Politics, Policy and Law. 30(1), forthcoming.
- Le Grand, J., N. Mays and J. Mulligan, eds (1999) Learning from the NHS internal market. King's Fund Institute: London.
- Cutler, D.M., ed. (2000) The changing hospital industry: comparing not-for-profit and for-profit institutions. University of Chicago Press: Chicago.
- Stevens, S. (2004), "Reform strategies for the English NHS", Health Affairs. 23(3), 37-44.
- Duran, D., I. Sheiman, M. Schneider and J. Øvretveit, (2004) Purchasers, providers and contracts, in Purchasing to improve health system performance, J. Figueras, R. Robinson and R. Jakubowski, Editors. Open University Press: Buckingham.
- Langenbrunner, J., E. Orosz, J. Kutzin and M. Wiley, (2004) Purchasing and paying providers, in Purchasing to improve health system performance, J. Figueras, R. Robinson and R. Jakubowski, Editors. Open University Press: Buckingham.
- Mossialos, E., A. Dixon, J. Figueras and J. Kutzin, eds (2002) Funding health care: options for Europe. Open University Press: Buckingham.
- Busse, R. (2004), "Disease management programs in Germany's statutory health insurance system", Health Affairs. 23(3), 56-67.
- Sussex, J. and A. Street, eds (2004) Activity based funding for hospitals: English policy, international evidence. Office for Health Economics: London.
- Bloor, K. and A. Maynard, (2005) Incentives and the UK medical market, in Health policy and economics: opprtunities and challenges, P. Smith, L. Ginnelly and M. Sculpher, Editors. Open University Press: London.
- McKee, M. and H. Brand, (2004) Purchasing to promote population health, in Purchasing to improve health system performance, J. Figueras, R. Robinson and R. Jakubowski, Editors. Open University Press: Buckingham.

- Figueras, J., R. Robinson and R. Jakubowski, eds (2004) Purchasing to improve health system performance. Open University Press: Buckingham.
- Van de Ven, W.P.M.M. and R. Ellis, (2000) Risk adjustment in competitive health plan markets, in Handbook of health economics, J.P. Newhouse and A.J. Culyer, Editors. Elsevier: Amsterdam.
- Rice, N. and P. Smith (2001), "Capitation and risk adjustment in health care financing: an international progress report", The Milbank Quarterly. 79(1), 81-113.
- World Health Organization (2000) The World Health Report 2000. Health systems: improving performance. Geneva: World Health Organization.
- Smith, P., ed. (2002) Measuring up: improving health systems performance in OECD countries. OECD: Paris.
- Smith, P.C. (2002), "Performance management in British health care: Will it deliver?" Health Affairs. 21(3), 103-115.
- Horton, R. (2004), "Why is Ian Kennedy's Healthcare Commission damaging NHS care?" The Lancet. 364, 401-402.
- Healthcare Commission (2004) Assessment for improvement. London: Healthcare Commission.
- Arah, O., N. Klazinga, D. Delnoij, A. Asbroek and T. Custers (2003), "Conceptual frameworks for health systems performance: a quest for effectiveness, quality, and improvement", International Journal for Quality in Health Care. 15(5), 377-398.
- Häkkinen, U. and J. Lehto (2005), "Reform, change and continuity in Finnish health care", Journal of Health Politics, Policy and Law. 30(1), forthcoming.
- Smith, P. (1995), "On the unintended consequences of publishing performance data in the public sector", International Journal of Public Administration. 18(2/3), 277-310.
- Stevens, A. and R. Milne (2004), "Health technology assessment in England and Wales", International Journal of Technology Assessment in Health Care. 20(1), 11-24.
- Oliver, A., E. Mossialos and R. Robinson (2004), "Health technology assessment and its influence on health-care priority setting", International Journal of Technology Assessment in Health Care. 20(1), 1-10.
- Institute of Medicine (2001) Crossing the Quality Chasm: A New Health System for

- the 21st Century. Washington: National Academy Press.
- Rehnqvist, N., (2002) Improving accountability in a decentralised system, in Measuring up: improving health systems performance in OECD countries, P. Smith, Editor. OECD: Paris.
- Klazinga, N., D. Delnoij and I. Kulu-Glasgow, (2002) Can a tulip become a rose? The Dutch route of guided self-regulation toward a community based integrated health care system, in Measuring up: improving health systems performance in OECD countries, P. Smith, Editor. OECD: Paris.
- Casparie, A., E. Sluijs, C. Wagner and D. de Bakker (1997), "Quality systems in Dutch health care institutions", Health Policy. 42(3), 255-267.
- Vrangbaek, K. and M. Bech (2004), "County level responses to the introduction of DRG rates for "extended choice" hospital patients in Denmark", Health Policy. 67(1), 25-37.
- Dawson, D., R. Jacobs, S. Martin and P. Smith (2004) Evaluation of the London Patient Choice Project: System wide impacts, Final Report, A report to the London Patient Choice Project. York: Centre for Health Economics.
- Department of Health (2001) The Expert Patient: a new approach to chronic disease management for the 21st century. London: Department of Health.
- Marshall, M., P. Shekelle, H. Davies and P. Smith (2003), "Public reporting on quality: lessons from the United States and the United Kingdom", Health Affairs. 22(3), 134-148.
- Casalino, L., R. Gillies, S. Shortell, J. Schmittdiel, T. Bodenheimer, J. Robinson, T. Rundall, N. Oswald, H. Schauffler and M. Wang (2003), "External incentives, information technology, and organized processes to improve health care quality for patients with chronic diseases", Journal of the American Medical Association. 289(4), 434-441.

- Smith, P. and N. York (2003) Quality Incentives: the case of UK General Practitioners. York: Centre for Health Economics, University of York.
- Mossialos, E., M. Mrazek and T. Walley (2004) Regulating pharmaceuticals in Europe: striving for efficiency, equity and quality. Buckingham: Open University Press.
- Saltman, R., J. Figueras and C. Sakellarides, eds (1998) Critical challenges for health care reform in Europe. Open University Press: Buckingham.
- Oliver, A. and E. Mossialos (2005), "European health system reforms: looking backward to see forward?" Journal of Health Politics, Policy and Law. 30(1), forthcoming.
- Ikegami, N. and J. Campbell (1999), "Health care reforms in Japan: the virtues of muddling through", Health Affairs. 18(3), 56-75.
- Ikegami, N. and J. Campbell (2004), "Japan's health care system: containing costs and attempting reform", Health Affairs. 23(3), 26-36.
- Altenstetter, C. and R. Busse (2005), "Health care reform in Germany: patchwork change within established governance structures", Journal of Health Politics, Policy and Law. 30(1), forthcoming.
- Henke, K. and J. Schreyög (2004) Towards sustainable health care systems: strategies in health insurance schemes in France, Germany, Japan and the Netherlands. A comparative study. Geneva: International Social Security Association.

Peter C. Smith (Professor, York University)