Introduction

The six chapters in this volume were prepared for a one-day conference, "Improving Health System Efficiency: Achieving Better Value for Money", held on 17 September 2008 in Brussels. Jointly organised by the European Commission and the OECD, the purpose of the conference was to assess policies leading to more rational use of resources in the health care sector and the potential of such policies to promote long-term sustainability of health systems. Attendees included officials of the two hosting institutions and other international organisations, representatives of their member countries who hold policy-setting positions and technical experts.

Both organisations have emphasised that health-care systems are coming under pressure due to rising expectations for high-quality care in a period of population ageing and rapid technological change. Member countries of the OECD and of the European Union have highlighted the need for better value for money in health systems during the deliberations of the OECD Health Committee and through the European Commission's Open Method of Co-ordination (OMC) on Social Protection and Social Inclusion.[1] The September 2008 meeting drew on the experiences of both organisations. In case of the European Union, a wide range of policies to encourage more rational resource use were identified in the 2006 National Strategy Reports and the 2007 Joint Report on Social Protection and Social Inclusion (European Commission, 2007).[2] These included: strengthening primary care provision and referral systems to secondary care; shifting care to an outpatient basis; increasing the productivity and quality of inpatient care; improving care co-ordination, improving incentives in payment systems and greater use of information and communications technologies (ICT) and e-health solutions. The OECD has been conducting in depth policy work on strategies for improving the performance of health-care systems, focusing on, among other things, care co-ordination, pharmaceutical pricing, and health information systems and information and ICT.[3]

Policy questions

Absolute growth in health expenditure and its growth in relation to national income raise the difficult question of whether and how to constrain it. Can systems become more efficient in how they spend their money? Where can savings be achieved without doing harm to the health of people in need of care, for example by reducing access to health care? As technological advances change the very nature of health care delivery, policy makers face difficult decisions about the additional expense associated with new life saving and life enhancing therapeutic agents, vaccines, imaging, and surgical techniques. How do the potential advances in health status and health services delivery weigh against the additional strain on societal resources?

The key policy question is "How can health systems improve efficiency of resource use and, thereby, help ensure the financial sustainability of health care systems?" In considering the policy approach most appropriate in any country, policy makers can benefit from a clear articulation of the problem, the potential solutions, the trade-offs they must make in pursuing various goals and the experiences of other countries. Thus, one important aim of the conference was to help policy makers as they grapple with these issues by identifying a checklist of policies or good practices worthy of consideration by national administrations. The six chapters in this volume provide analyses of multinational datasets, case studies of policy innovations, and discussion of both the challenges and opportunities to enhance value for money.

Unraveling cross national differences in health expenditures

In Chapter 1, "Patterns of Health Care Spending Growth", David Morgan and Howard Oxley of the OECD set the context for the chapters that follow. Drawing on the most recent OECD data, the chapter summarises trends in health expenditure among OECD countries since 1995. The authors note that, while growth in health spending was slow in the early part of the 1990s, the latter half of the decade was marked by strong growth in overall health spending across OECD countries, with health expenditure outstripping economic growth by almost two to one. Since 2003, this growth has abated but it remains unclear whether this is a temporary phenomenon or the beginning of a new trend. As of 2006, average health spending among OECD countries amounted to 9 % of GDP, up from just over 5% in 1970 and around 7% in 1990.

The chapter also looks at the components of growth and documents the substantial differences across OECD countries in expenditure, prices, volume, and types of services. For example, ten OECD countries spend more than 10% of GDP on health goods and services, including (in descending order) the United States, Switzerland, France, and Germany. By contrast, the Czech Republic, Korea, Mexico, Poland, and Turkey spend less than 7%.

A significant portion of the chapter focuses on the potential reasons for cross country variation, searching, in effect, for clues about areas that appear most promising for policy intervention As they note, "although the research evidence is not conclusive, policy makers still must make choices in their search for improved performance, focusing on either demand or supply related factors, or a combination of both." The chapter assembles a vast array of data on both demand and supply factors, ranging from national income, age distribution, and disease prevalence to the supply of health care professionals, remuneration of professionals, and the intensity of care and technological capacity. For example, an exploratory study in ten OECD countries of hospital costs associated with several conditions found wide variations and suggested that, on average, if unit costs were reduced to the level of the best performers, average costs could potentially be reduced by 5% and 48%. Similarly, data on the number of cardio-vascular procedures performed show the United States at twice the OECD average. By contrast, the rate in Switzerland is less than half the OECD average.

Market mechanisms: promise and limitations

In Chapter 2, "Market Mechanisms and the Use of Health Care Resources", Peter C. Smith of the Imperial College Business School (London) considers whether market mechanisms can lead to more rational use of health care resources. Smith points out the many ways in which the market for health care services departs from the neoclassical model, including the lack of information for consumers to make choices about care, the role of physicians and other professionals acting as agents for consumers, constraints on exit and entry into the market, financing of education and research as public goods, and the fact that patients rarely bear the full cost of the care they receive. But he also notes that "sole reliance on non-market mechanisms, such as the public sector, also gives rise to serious problems…There are unclear lines of accountability, between patients, providers, governments, taxpayers, and provider institutions such as hospitals, that offer enormous opportunities for opportunistic behaviour and inefficiency." The issue for policy makers thus is not whether markets are good or bad, but determining whether fostering some aspects of competition

and markets in the health sector can lead to more rational use of resources, and which aspects of competition have the greatest potential to get results.

Smith examines the research evidence from experience with markets and competition to date. The chapter analyses three types of competition that give rise to quite different sets of incentives: competition for health insurance, competition for collectively purchased health services, and competition for individual patients. He points to a number of findings from the research literature that may be useful to policy makers, for example that provider markets respond to the priorities of purchasers, the choice of services that are the subject of competition have profound implications for system performance, and providers are responsive to payment incentives. He also offers some words of caution about the impact of provider competition for individual patients on cost competition. He concludes with some insights on policy designs that could take advantage of the power of markets while mitigating some of their more damaging effects. For example, Smith notes that pursuing competition in insurance requires creation of both risk sharing arrangements (to discourage cream skimming) as well as processes for quality assurance. He notes, however, that creating incentives for insurers to undertake long-term activities to foster population health outcomes may prove difficult, suggesting that such responsibilities may be better left to governments. He is more optimistic about the potential of market forces to yield cost efficiencies if purchasers have the ability to contract selectively with providers.

Care co-ordination

In Chapter 3, "Improving Health Care System Performance through Better Co-ordination of Care," Howard Oxley (OECD) addresses the scope for improving cost efficiency and quality of care through better care co-ordination, issues that are particularly important given the growing number of individuals living with chronic disease and the elderly who may have difficulty navigating fragmented health care systems or who are in need of long-term institutional care. Co-ordination problems can happen throughout health systems but most particularly at the barriers between primary, specialist, acute inpatient and long-term care.

Oxley presents a broad overview of care co-ordination issues and approaches from OECD countries plus several other nations that are part of the European Union. Common themes include widespread concern about care co-ordination, the importance of policies affecting referrals, and the key role of primary care providers in managing care, even when the arrangements are not formal. Drawing on a survey to which 26 of these countries responded, he also identifies the key impediments to care

co-ordination such as fragmented financing, limitations on different providers' scope of practice, and spanning levels of care. The chapter also examines whether targeted programmes, primarily those structured to provide disease or case management, can improve the quality and cost-efficiency or cost-effectiveness of health care systems. Oxley concludes by suggesting four key areas are critical for achieving improvements in care co-ordination and in overall system performance: improved information technology and communication infrastructure for information transfer; review of the adequacy of resources devoted to ambulatory and primary care; reconfiguring provider systems and incentives to enhance care co-ordination, and breaking down barriers between levels and components of care. Discussion at the September 2008 conference noted the need for policy makers to carefully consider culture, history, and specific aspects of system design when making reforms to improve care co-ordination.

Pharmaceutical policy: finding the right balance

Although accounting for a relatively small portion of health expenditure for OECD countries, spending on pharmaceuticals is growing at an average annual rate of 5.7%, outstripping growth both for other types of health care and gross domestic product (GDP). Policy makers are thus increasingly concerned about pricing and reimbursement policies for drugs. In Chapter 4, "Ensuring Efficiency in Pharmaceutical Expenditures", Elizabeth Docteur and Valerie Paris of the OECD explore options as to how to structure these policies to promote cost efficiency. The global nature of the pharmaceutical industry, however, creates special concerns since policies in one country can have repercussions in others.

Policy making with respect to pharmaceuticals must deal with the twin objectives of promoting innovation in drug development while also securing the best possible price for consumers and payers. As they note, "perhaps the most difficult trade-off in pharmaceutical policy is that between static efficiency (maximising consumer welfare by getting the most health value from today's expenditures constrained by the limits of present technological capability) and dynamic efficiency (creating incentives for research and development of products that improve capacity to prevent health conditions and cure diseases in the future)." An additional concern is whether the distribution system, which can account for a third or more of the retail price, is functioning efficiently.

Docteur and Paris provide an overview of current policies related to coverage, pricing, and other techniques to influence the demand and mix of pharmaceuticals. The section on pricing is particularly rich, sketching the variation across OECD countries in the use of external benchmarking,

internal reference pricing, pricing using pharmaco-economic assessment, price-volume agreements, and risk-sharing regimes. They also offer a menu of options for reforming policies including changes in reimbursement and pricing, increasing the role of pharmaco-economic assessment in determining value for expenditure, steering demand towards products of greatest value, and providing incentives for more efficient distribution mechanisms. The chapter concludes with a checklist to guide policy makers as they grapple with these issues. For example, the authors suggest that policy makers should:

- consider relative cost-effectiveness in pricing and purchasing decisions, while ensuring that rewards to innovation are consistent with the value of benefits offered;
- seek opportunities for establishing price-volume agreements or confidential rebates when value-based prices cannot be established;
- explore using risk-sharing arrangements to reduce the financial risk presented by new medicines when information on their cost and their expected effect on health outcomes is insufficient;
- encourage generic substitution and price competition in the off-patent market;
- create incentives for appropriate prescribing, dispensing and use of medicines;
- consider whether there are opportunities for efficiencies in the distribution chain; and,
- ensure that overall health care spending efficiency is not compromised by efforts to improve efficiency of pharmaceutical expenditure.

Improving data systems to promote quality of care

In Chapter 5, "Using ICT to Monitor and Improve Quality in Health Care", Nicolaas Klazinga and Elettra Ronchi of the OECD focus on a key strategy for enhancing value for money: improving the quality of health care services. Although there is controversy regarding the accuracy of available estimates, they comment, "there is, today, general agreement that quality problems are likely to have a significant health and economic impact in OECD countries." Quality improvement through greater ICT use offers the promise of both reducing system waste (by eliminating the use of unnecessary services) and leading to real improvements in population

health. Their chapter looks at the potential for increasing use of ICT at all levels of health-care system to monitor service delivery and patient outcomes and to facilitate changes in system design that will enhance the technical quality of care and patient satisfaction.

Klazinga and Ronchi note that improvements in the transmission of medical information – from patient to provider, among providers, and from provider to payer – have the potential to improve care co-ordination, reduce delivery of duplicative services, reduce administrative costs, give feedback to providers, and provide the basis for better planning and system enhancements. Their chapter describes the data sources that can be applied to quality improvement and outlines several of the strategies that have been implemented in OECD countries, focusing particular attention on the so-called pay-for-performance programmes in the United States and the United Kingdom. Special attention is also given to an innovative program in the Canadian province of British Columbia to monitor prescription drug use.

Klazinga and Ronchi are optimistic about the adoption of ICT more broadly throughout health care systems. Yet, information technology is capital intensive and costs of creating new systems and maintaining them over time must be balanced against purported gains. Key issues to be addressed include facilitating interoperability, the ability of different data systems to connect with each other via common data definitions and unique patient identifiers. Interoperability concerns also affect the ability of researchers to provide policy makers with reliable cross-country comparisons. The authors also note the importance of addressing privacy concerns head on, commenting that "although health care organisations have a strong interest in maintaining privacy and security, they must also balance this interest against the need to ensure that information can be retrieved easily when required for care." They further note that "the main challenge for decision makers is creating a smooth interface between privacy policy, legislation and technological requirements."

Discussion at the conference focused on the considerable challenges in securing resources for data systems and ensuring that data are entered reliably and accurately at the patient level. Given the level of investment and the desirability of making comparisons across systems, participants raised the potential for international co-operation involving OECD, the World Health Organisation, and the European Commission.

Understanding the effects of user charges

Finally, in Chapter 6 on "The Impact of User Charges in Health Care", Peter C. Smith of Imperial College Business School (London) examines the

impact of user charges on utilisation, spending, and outcomes. Smith notes the dual purposes of imposing user charges: to finance the health system, and to influence the care-seeking behaviour of patients when there is no direct price to them (other than through the tax system or social contributions) for access to health care. In most developed nations, user charges are primarily intended to mitigate this problem of moral hazard. But does the research indicate that user charges actually result in the intended effects of reducing the use of services that are not necessarily needed?

Smith's chapter begins by examining the extent to which OECD countries currently rely on user charges in health care, describing recent policy innovations in Sweden, the Netherlands, Germany, and France, along with reference pricing techniques for drugs in the Slovak Republic.

The issue of whether current initiatives have proven effective in minimising frivolous use of health services that are not cost effective (and thus enhancing value of money) remains unknown. Important findings from the RAND health insurance experiment with variable levels of user charge in the United States, notable for its use of an experimental research design, indicated that higher user charges may lead to significant reductions in health care demand. Whilst this did not appear to affect the health status of most of the population, it did have severe health consequences for people with low incomes and chronic conditions. For example, when charges were imposed, poor control of hypertension resulted in an increase of the annual likelihood of death of approximately 10%.

Smith argues for a fundamental rethinking of user charges to ensure that their use is consistent with broader societal objectives, stating that: "The central policy problem is to decide which health care technologies should be subsidized from public funds. A policy of user charges then flows naturally from the choice of the subsidized treatments. Once the public package of care is chosen, patients would still be free to purchase the remaining unsubsidised interventions at market prices, or to purchase complementary private insurance to cover such interventions."

Policy makers will face difficult choices in their efforts to constrain health care growth and ensure that public expenditure is matched by commensurate benefits. The policies they choose to adopt will differ based on the characteristics of the health systems they administer. The analyses presented in this volume should help them understand the menu of policy options and the trade-offs implicit in their design, as well as the most current empirical knowledge about their use in other countries.

Notes

1. See *http://ec.europa.eu/employment_social/spsi/the_process_en.htm* for more information on the process.

2. See *http://ec.europa.eu/employment_social/spsi/joint_reports_en.htm* for the Joint Reports on Social Protection and Social Inclusion 2007 and *http://ec.europa.eu/employment_social/spsi/strategy_reports_en.htm* for the National Strategy Reports.

3. For a more complete description on the work conducted by the OECD, see *www.oecd.org/document/60/0,2340,en_2649_33929_37103164_1_1_1_1,00.html*