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Health Care Spending in the New EU Member States

Controlling Costs and Improving Quality

Mukesh Chawla



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The report is part of a series of studies on current issues in public finance reform in the Central European and Baltic countries (Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, and Slovenia—the "EU8") which joined the European Union on May 1, 2004. These studies have been undertaken since 2005 and coordinated and edited by Thomas Laursen, Lead Economist for Central Europe and the Baltic States in the World Bank. Marta Michalska provided excellent administrative and logistical support throughout the process of preparing these studies.

Executive Summary[1]

Following the transition from central planning toward market-based economies, the EU8 countries (Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, and Slovenia) introduced a number of reforms in the finance, management, and organization of the health sector. Reforms removed the state monopoly on healthcare by privatization and decentralization, and started the process of establishing an economic relationship between the healthcare provider and the patient through changes in healthcare financing. Almost all countries adopted the Bismarckian social health insurance model, and in all cases one or more Social Health Insurance Agencies started operating independently of the state budget. In most countries, subsequent reforms also addressed the pharmaceutical sector, and brought about changes in the health financing structure in an effort to address the manifold problems brought about by the insurance system. However, reforms have generally been less successful in securing sustainability of health care financing, improving efficiency, enhancing equity in healthcare financing and delivery, and managing the quality of health services. The study by Mukesh Chawla and Marzena Kulis takes stock of recent trends in health expenditure and discusses directions for reform consistent with the objectives of stabilizing the fiscal situation in these countries without adversely affecting the production, delivery and utilization of health services.

EU8 countries have generally been successful in safeguarding resources for the health sector and a reasonable health status of their people. Total spending on health in the EU8 countries is at levels roughly commensurate with per capita GDP in these countries, and is not out of line with other European countries and high-performing middle income countries. In some EU8 countries like Estonia and Latvia, however, health spending is on the low side relative to per capita GDP. The health status of the people in the EU8 countries is at levels commensurate with their levels of health spending and income, but is generally poor compared to the EU15. The difference between the EU15 and EU8 average life expectancy has decreased in recent years, but most EU8 countries have some five years shorter life expectancy than the EU15 average.

Health expenditures in the EU8 countries are mainly financed from public sources. On average, public financing accounts for about three-fourths of total health spending in EU8 countries, which is comparable to the EU15. Out-of-pocket payments in the health sector account for the bulk of the residual financing and have been increasing in recent years. Social health insurance is the dominant form of public financing of the health system in EU8 countries, although many also transfer funds from the state budget to the social insurance system. Most countries have a single agent who purchases health services on behalf of the insured. The public financing system in all EU8 countries provides generous coverage of health services, in most cases with little or no financial participation from the patient at the point of service.

Health expenditures in almost all EU8 countries are dominated by inpatient care and pharmaceuticals, which account for roughly 40 percent and 30 percent of total health expenditures, respectively. Primary and specialist outpatient care, long-term care, and

1. Prepared by Thomas Laursen.

administrative expenses comprise the balance. The general trend over time has been that of rising expenditures on pharmaceuticals, falling expenditures on inpatient care and increasing expenditures on outpatient care. This structure of spending is not very different from the OECD countries. The relatively fast growth in pharmaceutical costs in both groups of countries reflects higher volumes and the entry of new, more expensive drugs, rather than general price increases.

In addition, excessive hospital infrastructure is a major drain on scarce health sector resources, and salaries and the cost of new technology are also rising fast. The EU8 countries inherited a disproportionately excessive number of hospitals and hospital beds, and while almost all countries have taken many bold steps to reduce the number of hospitals and acute-care hospital beds, but the number of beds per 100,000 inhabitants is still 30 percent higher than the average for EU15 countries. Salaries in the health sector—which account for more than 60 percent of health expenditures in these countries—are rising faster than average salaries. This reflects greater availability of outside opportunities following EU accession, and also the push to bring the ratio of salaries in the health sector to average salaries in the economy in line with EU15 proportions.[2] Further, widespread and extensive use of new and expensive medical technology has made it a major cost-driver in the health systems in many EU15 countries, and this trend is likely to continue.[3]

A defining feature of the health sector in almost all the EU8 countries is the widespread and growing indebtedness.[4] Buoyed by generous benefit packages (offering ineffective and non-essential services), extensive infrastructures, and pressured in recent years by increasing pharmaceutical costs and higher salaries, expenditures on health in country after country have consistently surpassed the available resources, leaving huge unpaid bills for services already delivered. This situation is particularly severe in the Visegrad countries, although some of the Baltic countries are also beginning to feel the pressures. Regions with an excessive concentration of public hospitals and hospital beds expectedly also generate the largest debts in the health sector. Hospital contracts with health insurance companies do not cover the full costs of maintaining the large hospital infrastructure and associated fixed costs, and the resources allocated by the central and local governments (who own most public hospitals in most EU8 countries) are not sufficient to pay for all the expenses. In addition, public hospitals tend to provide services irrespective of the value of contracts concluded with the sickness funds, and bear costs that are refunded neither from health insurance nor from the state budget.

Financing and delivering healthcare for the growing population of the elderly is likely going to be the largest future cost-driver in the health systems of the EU8. All countries in the region face the consequences of population ageing caused by reduced fertility and mortality rates on the one hand, and increasing life expectancies on the other. The share of

2. The ratio of physician salaries to the national average is significantly lower than two (the average EU15 level) in many EU8 countries, but are likely to rise toward the EU15 average as medical professionals from the new member states are in great demand there.

3. The tax-funded health systems of Spain and the UK have the lowest density of MRI units and CT Scanners, and also report the lowest hospital capacities and inpatient expenditure shares, as well as the lowest total health expenditures.

4. Debts refer to payments outstanding and past due, not liabilities which are a natural consequence of the financial management of health facilities.

people aged 60 years and older in the total population in EU8 countries, which was 16 percent in 1995, is projected to increase to 27 percent in 2025. Correspondingly, the old age dependency ratio is expected to rise sharply. Older persons are more likely to have greater health needs and are more likely to consume more expensive healthcare services, particularly during the last years of life.

Thus, despite a decade of reforms, the underlying supply-side incentives in the health system continue to be weak and generally ineffective, almost matching the near-absence of demand-side incentives which promote cost-consciousness. While most countries have introduced risk-sharing at the primary care level by paying the providers on the basis of capitation, similar incentives are by and large absent at the secondary and tertiary levels. Most hospitals in the EU8 countries are owned by the local or central governments and most hospital managers have no claim to any residual balances that may result from good management of the facilities. Prices for health services are typically set at the level of the central government, usually at levels very close to the costs of production and delivery of services, and with few rewards and penalties for staying within/breaching the budget, health providers pay scant attention to the cost side of the equation.

The health insurance system in many countries continues to function like centralized collection and reimbursement agencies, and many of the tasks and responsibilities usually identified with an insurance system are lacking. On the delivery side, the shift from the more resource intensive inpatient care to less expensive outpatient care has not been accomplished, and the culture of over-hospitalization and seeking specialized care persists. Recent gains from the reduction in length of hospital stays per episode, and increases in bed occupancy rates in individual facilities have been negated by slow progress in addressing the over-supply of hospital infrastructure. On the financing side, not all healthcare systems have been able to find appropriate mechanisms of reimbursement so as to motivate providers to deliver better quality of services, and to produce them in an efficient and cost-effective manner. On the management side, even though most state-owned hospitals enjoy a fair degree of de jure autonomy, few efforts have been made to improve administrative capacity and management within hospitals.

The scope of services covered by the public system have generally not been clearly defined and articulated, and formal copayments remain limited in most countries. Further, the pervasiveness of informal payments in health in many EU8 countries has become a serious impediment to healthcare reform. Besides contributing to the general environment of corrupt practices and the growth of a parallel healthcare financing system, informal payments introduce perverse incentives in the health system, and compromise efforts to improve efficiency, accountability, and equity in the delivery of health services. The non-transparent and discretionary nature of informal payments adversely affect access to healthcare, particularly for the more vulnerable segments of the population who have to pay disproportionately large amounts for health services that are supposed to be available free of charge.

Much remains to be done to improve the quality of health care. Most EU8 countries do not have well-functioning quality controls that regularly incorporate evidence-based medicine in the production, delivery, and financing of healthcare services, and institutional mechanisms to review the quality of care at the health facility level are generally lacking. Clinical protocols for major diseases are outdated and non-compatible with evidence-based medicine and cost-effectiveness analysis. The existing quality improvement systems are fragmented and are not integrated across different elements of the healthcare system,

including professional self-regulation, purchasing by health insurance funds, training of health professionals, and management of individual healthcare practices.

The solutions to these three problems are obvious and include some combination of: (i) rationalization of the benefit package and introduction of supplementary health insurance; (ii) introduction of co-payments or other mechanisms to make people take greater responsibility of their health and healthcare-seeking behavior; (iii) creating competition among healthcare providers; (iv) consolidating and closing public hospitals and reducing hospital beds; (v) risk-pooling and rational purchasing of health services; and (vi) introducing provider payment mechanisms that promote incentives for cost management and quality enhancement. While rationalization of health spending may also pave the way for lowering health contributions and the tax burden on labor, the latter objective may also be achieved by moving toward greater reliance on broader based general taxes for financing health care. This is the direction in which several European countries have gone, and with good results—perhaps reflecting greater effectiveness of government interventions to control costs in the health sector in such systems.

Creating a universally acceptable benefit package to be funded from public sources is an attractive, but difficult proposition. Health insurance funds (or governments) tend to exclude some treatments or entitlements, which do not solve the problem. For the fiscal sustainability of health systems, a flexible mechanism needs to be in place that allows for a benefit package that responds to population needs and can be serviced within the given budget constraints. This flexibility needs two types of decisions. First, setting priorities and matching them with the principle of covering catastrophic costs; and second, ensuring legislative support for the package, so that full political responsibility for such decisions is taken and adequate levels of resources are earmarked.

To a great extent, demand for healthcare is controlled by the individual consumer, who has an incentive to over-consume if they are responsible for only a fraction of the costs. The key to containing excessive and unnecessary demand for health services therefore lies in making individuals and families sensitive to the costs of additional health spending, while still limiting each family's maximum outlays to affordable levels. This was the logic behind the introduction of patient co-payments in the health sector in Slovenia and Slovakia, a move that in both countries resulted in significant savings. The adverse equity effects of co-payments can be neutralized to a large extent by exempting the poor and vulnerable from making official co-payments or through targeted grants, though it is not easy to set up a system by which the poor and the vulnerable are always appropriately identified.

Further reforms are also needed to rationalize hospital infrastructure and contain the rapid growth in pharmaceutical costs and new expensive technology. Estonia has been a frontrunner in terms of downsizing hospital infrastructure, and much can be learned from the reforms there. Lessons can also be learned from the ongoing restructuring of hospitals in Slovakia, focused on the largest cities where over-capacity is most severe and where access is less of a concern. Drug price regulation is important and necessary, but the experience of many countries shows that regulation of consumption of pharmaceuticals is also critical in order to contain expenditures. Most countries have adopted demand-side measures for controlling consumption, and cost-sharing has proven to be the most effective. Lowering drug costs requires a multi-faceted approach, necessarily involving the policy-makers working together with payers, doctors, pharmacists, and patients, and involving a package of measures aimed at pricing, prescription, and safety of drug use. Finally, EU8

countries may be well-advised to consider regulating the use of high-end technologies, similar to most EU15 countries.[5]

Looking forward, the social health insurance system in the EU8 countries will come under even greater pressure unless urgent action is taken to address rising health expenditures. At the very least, the health reform package would have to consist of a combination of stricter supply-side measures, such as management of pharmaceutical expenditures and hospital restructuring, and demand-side measures, such as greater patient responsibility for their own health and greater patient contributions, including cost-sharing for pharmaceuticals. The objective of these measures in the short-run has to be the stabilization of the fiscal situation so that no new debts are created in the health system. Likewise, the emphasis in the medium term should be on improving efficiency and effectiveness, ensuring access to healthcare, and enhancing the quality of care.

Estonia, Slovenia and Latvia, all exposed to the same set of financial pressures as the other countries in the region, have effectively managed health care finances through good governance, strict adherence to the rules of financial discipline, and by simply not spending what they do not have. To be sure, all three countries also carried out a host of reforms to control pharmaceutical spending, reduce hospital infrastructure, improve hospital management and so on, but the underlying difference between these three countries and the others is that of sheer fiscal discipline. Also, important lessons may be learned from several other EU countries such as Austria that were in a similar state at the time of membership, but found ways of managing their budgets without bringing about huge destabilizing changes.

5. Countries with tax-based systems such as the UK and Spain have national agencies for high technology and technology control measures in their national health policies.

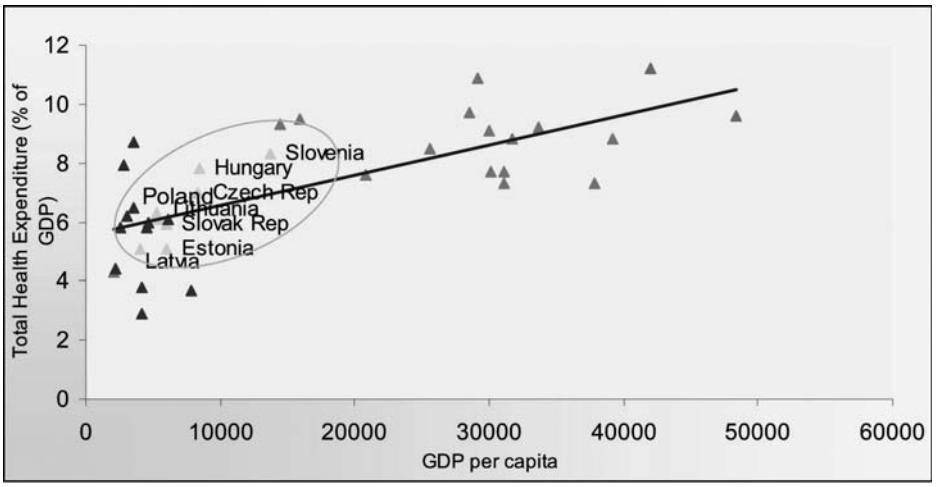
CHAPTER 1

Introduction

Following the transition from central planning toward market-based economies, the formerly communist states of Central and Eastern Europe introduced a number of reforms in the finance, management and organization of the health sector. Reforms in these countries have been synonymous with rapid dismantling of the state apparatus and with restoration of property and ownership rights, and have accompanied or followed broader structural changes in governance, authority relationships and ownership resulting from a combination of social, political and ideological forces. In almost all cases, the first set of reforms identified systemic problems in the centrally planned socialist health systems and sought to bring about widespread changes. Most importantly, in all EU8 countries the healthcare reforms removed the state monopoly on healthcare by privatization and decentralization, and started the process of establishing an economic relationship between the healthcare provider and the patient through changes in healthcare financing. Almost all countries adopted the Bismarckian social health insurance model, some earlier than others, and in all cases one or more Social Health Insurance Agencies started operating independently of the state budget. In most countries, the next set of reforms also touched the pharmaceutical sector, and brought about changes in the health financing structure in an effort to address the manifold problems brought about by the insurance system.

The health sector reforms in the EU8 countries have generally been successful in safeguarding resources for the health sector. Total spending on health in the most EU8 countries is not out of line when compared with other European countries and high-performing middle income countries (Figure 1). In Estonia and Latvia, though health spending levels are on the low side relative to their per capita GDP.

Figure 1. GDP and Health Expenditures, Selected EU, OECD and Other Countries (2002 or latest available year)



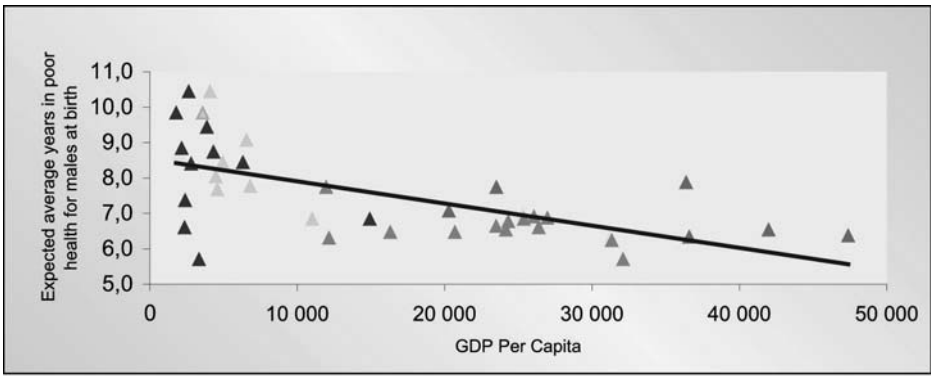
Source: IMF World Economic Outlook Database; World Bank SIMA. Reproduced from Mitra: Towards Sustainable Social Sector Expenditures in the New Member States of the European Union–Keynote Presentation, Chatham House, London, June 22–23, 2005.

The health status of the people of the eight new member states of the European Union is at levels commensurate with their levels of health spending and income, but is generally poorer compared to the health status of the people of the EU15 countries (Figure 2). Life expectancy in the EU8 countries varies between 70 years in Estonia and 77 years in Slovenia, and is lower than the average life expectancy of 79 years in EU15 countries. The difference between the EU15 and EU8 average life expectancy has decreased in recent years, but most EU8 countries have some 5 years shorter life expectancies (including disability adjusted life expectancies), than the EU15 average. Gender differences in life expectancy are also higher in the EU8 relative to EU15 averages. Infant death rates in the EU8 countries vary between 3.9 in the Czech Republic to 9.4 in Latvia, but for most countries are higher than the EU15 average of 4.6. The incidence of tuberculosis varies from 11 cases per 100,000 in the Czech Republic to 74 in Lithuania, much higher than the EU15 average of nine per 100,000.

A comparison of the death rates from main causes between countries gives broad indications of how far the observed mortality rates might be reduced. Standardized Death Rates (SDRs) from all causes range from 795 in Slovenia to 1114 in Latvia, significantly higher than the EU15 average of 640. Likewise, SDRs from circulatory system disorders, cerebrovascular disorders, ischemic heart diseases and cancers are higher in EU8 countries compared to the EU-15 average.

Within the EU8 countries, health status indicators in Slovenia are generally better compared to other countries, while the health status indicators in Hungary and the Baltic

Figure 2. Expected Years Spent in Poor Health, Selected EU, OECD and Other Countries (2002 or latest available year)



Source: IMF World Economic Outlook database; WHO Statistical Information System. Reproduced from Mitra: Towards Sustainable Social Sector Expenditures in the New Member States of the European Union–Keynote Presentation, Chatham House, London, June 22–23, 2005.

countries are on the lower side. The number of clinically diagnosed cases of AIDS is the highest in Latvia (2.5 per 100,000), followed by Estonia (0.7). SDRs from all causes are over 1,000 in the Baltic countries and Hungary, which also have the highest SDRs due to diseases of the circulatory system as well as cerebro-vascular and ischemic heart diseases. Death rates due to lung and cervical cancer are highest in Hungary and Poland, while Lithuania has the highest reported deaths due to cancer of the cervix. Latvia has the lowest rate among the EU8 countries for malignant neoplasms, but is still about 7 percent higher than the EU15 average. Hungary has the highest rate of almost all types of cancers among the EU8 countries, with figures for cervical cancer and trachea-bronchus-lung cancer almost triple and double respectively the EU15 averages. Since most causes of death due to cardiovascular diseases and cancer are influenced by societal, collective, and individual behaviors and lifestyles, health risks, diseases and premature deaths can potentially be reduced by a wide variety of health promotion and preventive measures. Further, observed mortality can be reduced significantly in the EU8 countries if the healthcare systems in these countries and other determinants of health are more effective in addressing health problems that account for prematurely high levels of mortality.

There is no doubt that the health sector reforms in EU8 countries succeeded in securing spending levels commensurate with their levels of development, and ensuring health outcomes at levels commensurate with spending on health. However, these efforts have addressed only one part of the problem, leaving a number of issues unresolved. First, commitments in the health sector are higher than actual spending, particularly in the Visegrad countries, resulting in huge and growing indebtedness in the health system. Only Estonia and Latvia, among the Baltic States, and Slovenia in Central Europe have managed

Table 1. EU8: Standardized Death Rates (per 100,000), by Various Causes (2003)

	Czech Republic	Estonia	Hungary	Latvia	Lithuania	Poland	Slovakia	Slovenia	EU-15 average
All Causes	899.6	1090.58	1047.97	1113.62	1008.26	891.55	971.49	795.49	**639.88**
Circulatory System	461.88	560.35	508.3	593.02	519.78	413.89	527.71	295.29	**236.32**
Cerebrovascular	132.37	154.06	134.59	206.23	117.37	98.57	88.18	78.76	**59.05**
Ischemic heart diseases	176.09	323	232.66	291.58	327.75	125.78	283.48	94.37	**92.89**
TB	0.68	6.1	2.41	8.7	9.45	2.33	1.19	1.05	**8.65**
Alcohol-Related Causes	89.74	174.29	149.55	160.22	176.98	88.95	92.8	111.42	**61.28**
Smoking-Related Causes	380.91	541.74	491.02	566.77	518.51	306.79	443.02	251.08	**220.78**
Malignant Neoplasms	234.22	200.6	263.81	193.4	193.57	216.67	213.32	203.66	**180.5**
Trachea Bronchus	45.27	40.43	66.49	36.85	36.2	53.22	38.11	41.23	**37.05**
Cancer of the Cervix	6.05	6.67	7.16	6.76	10.64	8.41	6.58	4.11	**2.35**
Infectious & Parasitic Disease	2.55	8.43	3.98	13.32	13.23	6.18	3.81	4.31	**8.38**
Respiratory System Diseases	42.35	36.26	41.42	29.32	39.1	37.62	55.2	62.05	**48.31**
Digestive System Diseases	38.5	42.82	79.94	38.07	41.99	36.68	52.86	53.33	**30.81**
Liver Diseases & Cirrhosis	16.66	21.72	53.53	14	20.98	12.98	26.55	31.31	**12.62**

Source: WHO (2005), European Health for All Database (January).

to exercise adequate expenditure control. However, longer-term sustainability of health care systems is a key concern in all EU8 countries.

Second, while health financing reforms have generally succeeded in safeguarding allocations to the health sector and protecting it from exogenous shocks, the accompanying reforms in efficiency have been half-hearted at best, and have not resulted in cost-containment. The health insurance system in many countries continues to function like centralized collection and reimbursement agencies, and many of the tasks and responsibilities usually identified with an insurance system are lacking. On the delivery side, the shift from the more resource intensive inpatient care to less expensive outpatient care has not been accomplished, and the culture of over-hospitalization and seeking specialized care persists. Recent gains from the reduction in length of hospital stays per episode, and increases in bed occupancy rates in individual facilities have been negated by slow progress in addressing the over-supply of hospital infrastructure. On the financing side, not all healthcare systems have been able to find appropriate mechanisms of reimbursement so as to motivate providers to deliver better quality of services, and to produce them in an efficient and costeffective manner. On the management side, even though most state-owned hospitals enjoy a fair degree of de-jure autonomy, few efforts have been made to improve administrative capacity and managerial acumen within hospitals, which continue to function as before.

Third, health sector reforms in most countries have avoided the contentious issue of the scope of services covered by the public system. The bases for determining the scope of services covered by the health insurance system are laid down in the Constitutions of most countries, and are generally interpreted to imply universal coverage and free-of-charge access to healthcare services through the means of compulsory health insurance built upon the principles of solidarity and the right of health protection for every citizen. This also forms the basis of peoples' expectations regarding the level of health services which they expect the social health insurance system to finance, and the state-run health system to provide. In most countries, the move from general tax to health insurance financing did not significantly reduce the scope of services provided free of charge to the patients, nor has it been accompanied by efforts to unambiguously define the scope of services to be covered by health insurance. In order to ascertain the appropriate use of available and mobilized resources for the health sector—including non-public sources such as private out-of-pocket payments and private insurance premiums—and in order to structure the system to effectively use these resources, it is necessary to provide more specificity with respect to the scope of publicly covered services. Without such specificity, it is also difficult to ascertain the role that might be played by private supplemental insurance and other non-public resources.

Fourth, health sector reforms in most EU8 countries have had little or no impact on the pervasiveness of informal payments (defined as payments in cash or kind that the recipients of such payments are not authorized to receive under the conditions of their contract or under the statutes of the governing bodies of the parent organizations) from patients to providers of healthcare, which constitute a financial burden especially for the poor, and have a negative impact on equity in healthcare financing. Informal payments undermine the impact of health reforms, siphon funds away from the health system, and negatively affect the quality of care for those who cannot or do not pay. Reliable estimates of the nature and extent of informal payments are generally not available, but the problem is known to be particularly severe in Poland and Slovakia, and widespread in many other countries as well.

Fifth, health sector reforms have generally not been accompanied by an emphasis on improving the quality of care. Most EU8 countries do not have a well-functioning quality control that regularly incorporates evidence-based medicine in the production, delivery, and financing of healthcare services, and institutional mechanisms to review the quality of care at the health facility level are generally lacking. Clinical protocols for major diseases are often outdated and non-compatible with evidence-based medicine and cost-effectiveness analysis, and there is anecdotal evidence that quality of care is generally low. The existing quality improvement systems are fragmented and are not integrated across different elements of the healthcare system, including professional self-regulation, purchasing by health insurance funds, training of health professionals, and management of individual health-care practices. As a result, the existing quality control institutions do not achieve the objective of continuous quality improvement.

Thus, while health sector reforms in the EU8 countries in the past decade have involved deep structural changes, they have generally been less successful in securing sustainability of health care financing, improving efficiency, enhancing equity in healthcare financing and delivery, and managing clinical quality of health services. Total health expenditures have increased in almost all countries, especially in recent years, and with revenues not keeping pace, huge debts have accumulated in the health sector. Population aging will add further strain on health care systems in the region. Efficiency gains have been few and far-between, and with the dynamic nature of technology and demographic changes increasing the complexity of health services and the health marketplace, further reforms are becoming even more difficult. The main objectives of this study, therefore, are to take stock of recent trends in health expenditure aggregates in the public sector and to identify specific areas of reform consistent with the objectives of consolidating the fiscal situation in these countries without adversely affecting the production, delivery and utilization of health services. The rest of this study is organized as follows: Chapter 2 discusses trends and structure of health expenditures in the EU8. Chapter 3 assesses the nature and extent of indebtedness in the health sectors. Cahpter 4 discusses the key expenditure areas. Chapter 5 presents population ageing and proliferation of medical technology as the future spending pressure points in the health sector. Chapter 6 focuses on the management of health expenditures. Finally, Chapter 7 concludes.

CHAPTER 2

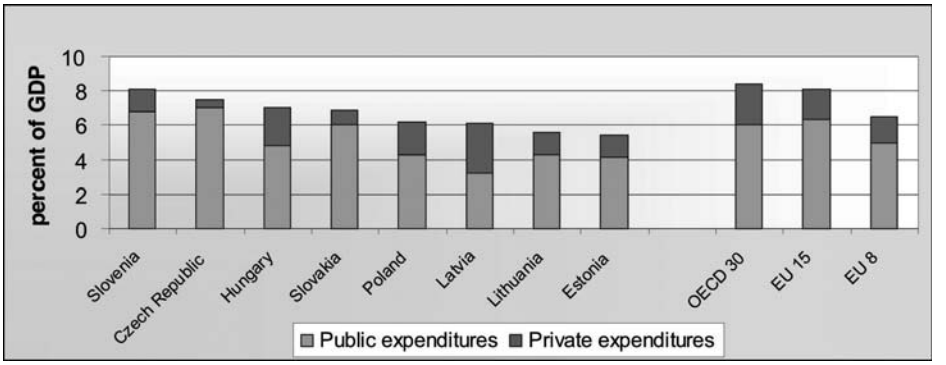
Health Expenditures

Healthcare spending in the EU8 countries varies greatly, from 8.1 percent of GDP in Slovenia to 5.4 percent of GDP in Estonia (Figure 3). Overall, the three Baltic countries spend less than 6 percent of GDP on health, the Visegrad-4 countries (henceforth V4) spend between 6.2 percent and 7.5 percent of GDP, and Slovenia spends a little over 8 percent of GDP. On average, the EU8 countries spend 6.6 percent of GDP on health, relative to 8.1 percent in EU15 countries.

Health expenditures in the EU8 countries are mainly financed from public sources, but the share of public financing of health expenditures has been declining in recent years. On average, public financing accounts for 77 percent of total health spending in EU8 countries, which is comparable to the EU15. The proportion of public financing of health expenditures is highest in the Czech Republic (93 percent) and lowest in Latvia (52 percent). The decline in public expenditures has gone hand in hand with an increasing volume of out-of-pocket payments in the health sector. Thus, the share of out-of-pocket spending on health in Slovakia increased from 8 percent in 1998 to over 13 percent in 2003, following the introduction of modest co-payments for health services. In Poland, out-of-pocket financing of health expenditures increased from 25 percent to 30 percent of total spending on health between 1997 and 2003. Likewise, in Latvia, the share of out-of-pocket payments increased in just three years, from 39 percent in 1998 to 47.5 percent in 2001, and has remained at that level since (Figure 4).

Social health insurance is the dominant form of public financing of the health system in EU8 countries, even though many also directly transfer funds from the state budget to the social insurance system. Latvia is the only exception among the EU8, where statutory healthcare resources consist partly of income tax collected at the central level (28.4 percent of income tax revenue is earmarked for healthcare), partly of subsidies from general revenues

Figure 3. Health Expenditures in EU8 Countries, Percent of GDP, 2003

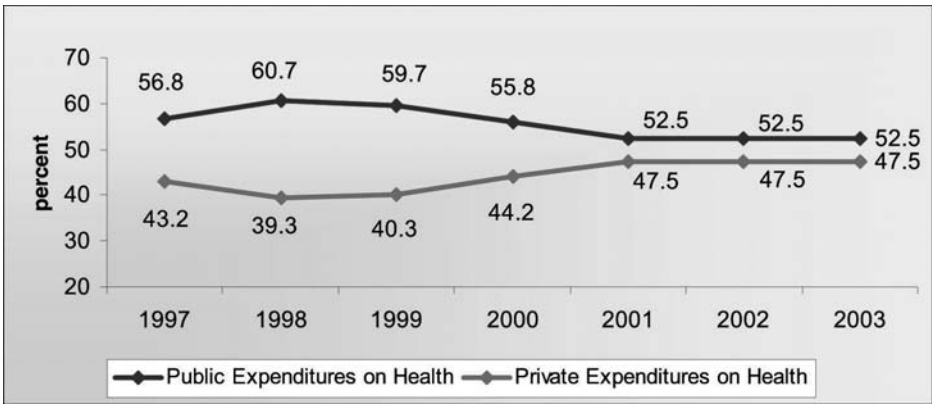


Source: Country Background Papers; OECD 2004.

(also financed by tax revenues at the central level) and partly of payments from patients and private insurers. In all other countries, the social health insurance system is at the core of health financing, with varying degrees of budgetary support. With the exception of the Czech Republic and Slovakia, all EU8 countries have a single monopsonist agent who purchases health services on behalf of the insurees. The public financing system in all EU8 countries provides generous coverage of health services, in most cases with little or no financial participation from the patient at the point of service (Table 2).

Health expenditures in almost all EU8 countries are dominated by inpatient care and pharmaceuticals, as the following examples show, and account for roughly 40 percent and

Figure 4. Public and Private Expenditures on Health in Latvia

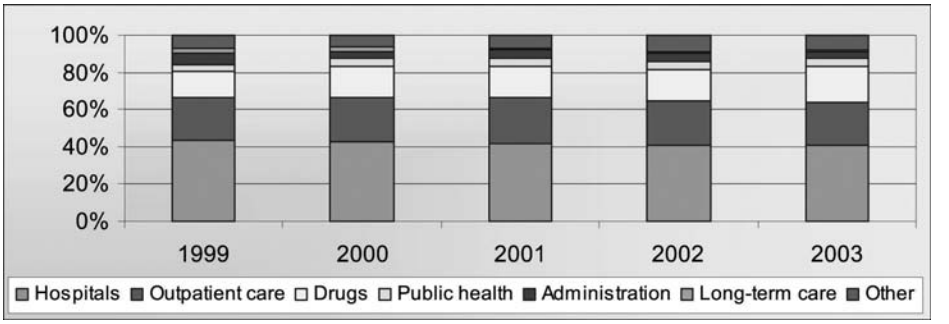


Source: Country Background Papers.

Table 2. EU8: Scope of Services Covered by Social Health Insurance

Country	Population (million)	Services Covered	Formal Co-payments
Czech Republic	10.2	Preventive services, diagnostic procedures, ambulatory and hospital curative care, including rehabilitation and care of the chronically ill, drugs and medical devices, medical transportation services, and spas.	Dental services, some drugs and medical aids.
Estonia	1.31	All, with some exclusions such as cosmetic surgery, alternative therapies and opticians' services, and limited coverage of adult dental care.	GP home visits, outpatient prescription drugs, outpatient specialist care, inpatient care.
Hungary	10.11	Almost all primary, secondary and tertiary care services.	Dental treatments, services without referral, and extra 'hotel' spaces of hospital services, chronic care and treatment in a sanatorium.
Latvia	2.31	Emergency care, treatment of acute and chronic diseases, prevention and treatment of sexually transmitted and contagious diseases, maternity care, immunization programs and drugs.	All patients receiving statutory benefits participate with co-payments. Pediatric, natal and emergency treatments are exempted from copayments.
Lithuania	3.41	All services covered.	Drugs and some medical aids for ambulatory treatment and spa services.
Poland	38.47	All, with some exclusions such as cosmetic surgery, alternative therapies and opticians' services.	Drugs, some medical aids, dental care.
Slovakia	5.39	All, with some exclusions such as cosmetic surgery, alternative therapies and opticians' services.	Introduced in June 2003 at all levels of care except for emergency care, preventive care and health services for children under the age of six years.
Slovenia	1.97	Full coverage of essential services, defined to include services for children and adolescents, family planning and obstetric care, preventive care, diagnosis and treatment of infectious diseases (including HIV), treatment and rehabilitation of a range of diseases including cancer, muscular and nervous diseases, mental diseases and disability, emergency care (including transport), nursing care visits and home care, donation and transplantation of tissues and organs, and long-term nursing care.	All inpatient and outpatient care not covered under essential services as defined in the previous cell, and drugs (though people may take complementary insurance to cover these co-payments). Several population groups are exempt from co-payments.

Figure 5. Structure of Health Expenditures in Poland, 1999–2003



Source: Poland Ministry of Health (2004).

30 percent of total health expenditures respectively. Primary and specialist outpatient care, long-term care, and administrative expenses comprise the balance.

The general trend over time has been that of rising expenditures on pharmaceuticals, (marginally) falling expenditures on inpatient care and (marginally) increasing expenditures on outpatient care. In Poland, the share of inpatient care in total public expenditures on health has fallen from 43.3 percent in 1999 to 40.6 percent in 2003. The share of outpatient care expenditures has remained more or less constant at 23 percent, while the share of expenditure on drugs increased from 13.7 percent to 19.6 percent (Figure 5). In Slovakia, a large share of public resources is devoted to hospital care as compared to primary and secondary level outpatient care. In 2002, inpatient care costs represented 40 percent of total health costs, as compared to 7 percent of total costs for primary care and 3 percent of total costs for secondary outpatient care (Table 3). Likewise, health expenditures in Hungary are dominated by expenditures on inpatient care, and on subsidies to pharmaceuticals and medical equipment. Expenditures on inpatient care have fallen marginally from 41.9 percent

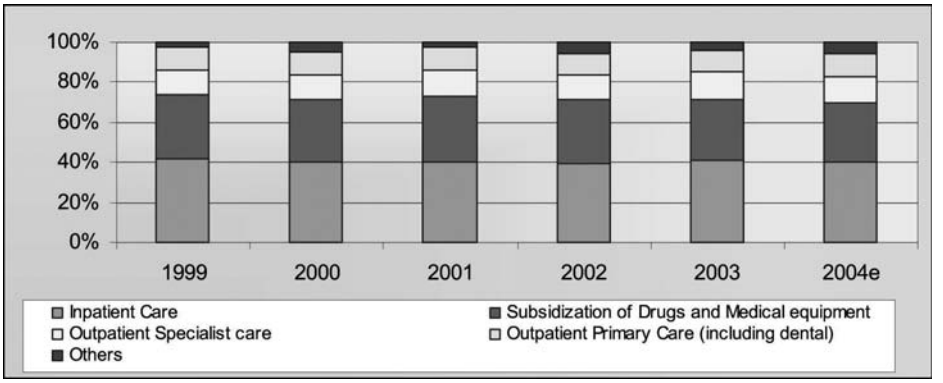
Table 3. Health Sector Costs in Slovakia (1998–2003) (percent of total)

	1998	1999	2000	2001	2002	2003
Primary outpatient care	7.4	7.5	7.3	7.0	6.8	6.6
Secondary outpatient care	2.6	3.1	2.9	3.0	2.9	2.9
Inpatient care	44.8	42.7	40.2	39.9	40.3	38.9
Drugs and medical devices	28.2	32.1	31.9	32.3	32.3	32.5
Others	8.8	7.0	10.7	10.9	11.1	13.0
MOH Expenditure	8.2	7.5	7.0	7.0	6.4	6.1
Total costs (Sk billion)	**57.1**	**58.5**	**64.6**	**70.5**	**74.6**	**78.5**

Note: Figures for 2002 and 2003 are estimates.

Source: Zajac and Pažitný (2002).

Figure 6. Structure of Public Expenditures on Health in Hungary

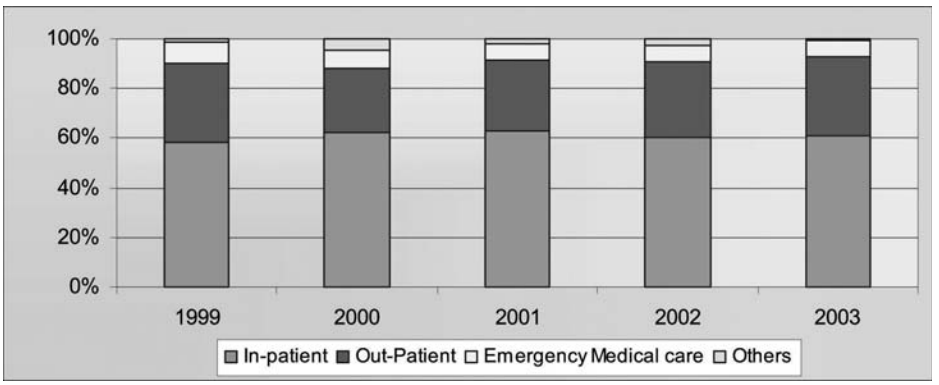


Source: Country Background Papers.

of total public expenditures on health in 1999 to 41 percent in 2003, and are expected to be around 40 percent in 2004. Likewise, expenditures on pharmaceuticals have fallen marginally from 31.8 percent of total public expenditures on health to 30.4 percent in 2003, and are expected to be 29.3 percent in 2004 (Figure 6). In Latvia, detailed information is available only for statutory healthcare resources. Including related pharmaceutical costs, inpatient services account for 59.4 percent of the total statutory healthcare resources, outpatient care for 39.6 percent, and emergency medical care for 6.7 percent.

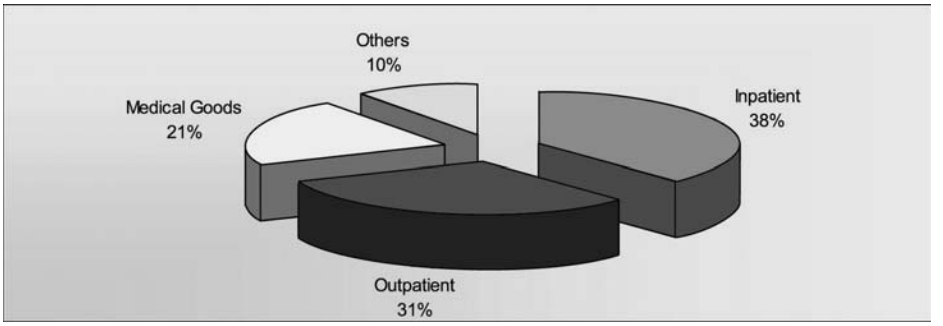
This structure of spending is not very different from the structure of health spending in OECD countries (Figure 8). On average, OECD countries allocated most of their health funds for inpatient care (38 percent), followed by outpatient services, including ancillary

Figure 7. Structure of Public Expenditures on Health in Latvia



Source: Country Background Papers.

Figure 8. Structure of Health Expenditures, OECD average (2001)



Source: Orosz and Morgan (2004).

services and home care (31 percent), medical goods, including pharmaceuticals and medical appliances (21 percent), and administration and prevention programs (10 percent). Pharmaceutical expenditures in Canada, Spain, and the UK (countries with tax-financed systems) as well as in Austria and Germany (social health insurance system), are less than the OECD average, whereas they reflect the average in France, the Netherlands, and Switzerland. Inpatient expenditures are above the OECD average of 38 percent in the UK, Switzerland, France, and Austria, all of which have different institutional arrangements and total health spending levels. In the UK and France, a larger part of inpatient care expenditures is allocated to curative care and rehabilitation than in Switzerland. Switzerland, with the highest health expenditures, also reports the highest proportions of spending on long term care in nursing homes and homecare organizations (Rossel and Gerber, 2004).

CHAPTER 3

Health Sector Deficits and Debts

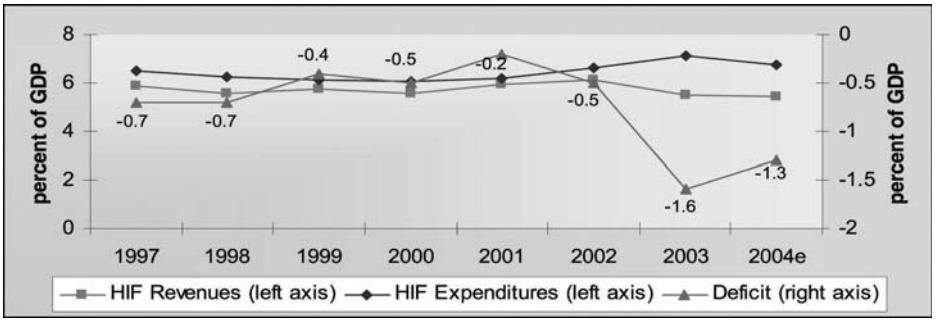
A defining feature of the health sector in almost all the EU8 countries is the widespread and growing indebtedness, which has assumed alarming proportions in recent years.[6] Buoyed by generous benefit packages (offering ineffective and non-essential services), and extensive infrastructures handed down as legacies from the pre-independence era, and pressured in recent years by increasing pharmaceutical costs and expectations of higher salaries, expenditures on health in country after country have consistently surpassed the available resources, leaving huge unpaid bills for services already delivered. This situation is particularly severe in the V4 countries, though some of the Baltic countries are also beginning to feel the impact of rapidly rising expenditures in the health sector.

Hungary

Public funding of health expenditures in Hungary is channeled through the Health Insurance Fund, which is responsible not only for benefits in kind in healthcare, but also for cash benefits for sick-pay and some types of pensions (like disability). In 2004, the Health Insurance Fund spent Ft946 billion on healthcare benefits in kind, and paid Ft422 million on benefits in cash. Revenues of the Health Insurance Fund (HIF) have consistently been below expenditures, but the gap has grown considerably in the last two years. In 2003,

6. Debts refer to payments outstanding and past due, not liabilities which are natural consequences of the financial management of health facilities.

Figure 9. Fiscal Position of the Health System, Hungary



Source: Country Background Papers.

expenditures exceeded revenues by over Ft300 billion, equivalent to 1.6 percent of GDP (Figure 9). There was a marginal improvement in 2004, with expenditures exceeding revenues by around Ft277 billion, or 1.3 percent of GDP.

Slovakia

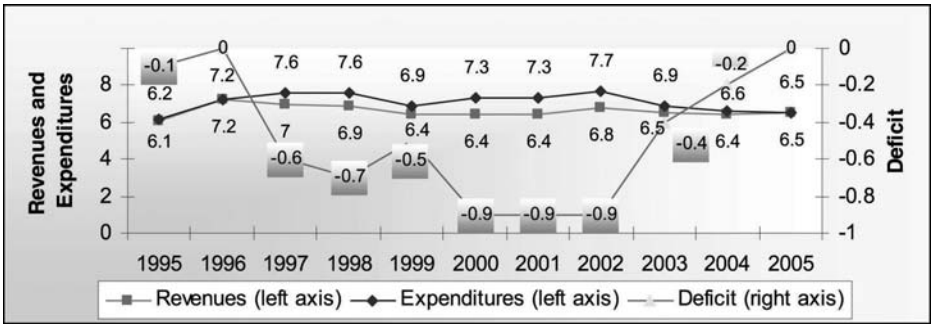
Health expenditures in Slovakia have exceeded revenues year after year since 1997. Total expenditures on healthcare in 2003 were Sk72.9 billion, representing 6.9 percent of the GDP, while health revenues were less than Sk69 billion, equivalent to 6.5 percent of GDP taking the stock of debts to Sk31.2 billion, equivalent to over 2 percent of the GDP (Figure 10).[7] The gap between revenues and expenditures is expected to be closed by 2006, however, as the government's ambitious health sector reform program begins to yield results.

Poland

The health sector in Poland has been generating deficits for over a decade now, and despite a major bail-out by the state just before the implementation of health reforms in 1999, the level of matured debts stood at Zl 5,930 million as of March 31, 2005. This figure includes debts created by autonomous units of both local and central governments. A peculiar feature of the health sector debts in Poland is that about 80 percent of the matured debts originate from only 15 percent of establishments (and about one-half from 6 percent of the total number of establishments).[8] The most indebted facilities are located in the Wroclaw region (Dolnoslaskie Voivodship, a region that also has the largest healthcare infrastructure in

7. Debts are generally less than accumulated deficits owing to past bail-outs of the health sector.
8. These figures refer to end-June, 2003.

Figure 10. Fiscal Position of the Slovak Health System (percent of GDP)



Notes: (1) Figures for 2004 are estimates; for 2005 are forecast; (2) Revenues and expenditures in 2004 and 2005 reach relatively lower shares of GDP because of the high growth rate of the Slovak economy; (3) Revenues in years 2003 and 2004 do not include the bailing out of hospitals and HIC (approx. Sk15 billion) via the state-owned company Creditor.

Source: Ministry of Health of the Slovak Republic.

Poland), which generates almost 20 percent of all debts. Other regions with debts above the average are Lodz, Warsaw, and Gdansk. The largest share of hospital-based debts (31%) is towards the public sector, mostly for local taxes, real estate tax, and social insurance on behalf of the employees, the second largest debts are towards the suppliers of drugs and medical consumables (20%), and the third largest debts are towards the employees (19%) resulting mostly from the Act of 22 December 2000 (also known as the "203 Act") which required all healthcare establishments to pay employees wage increases in 2001 of not less than Zl 203 per month and in 2002 at a level not lower than the average wage growth in the national economy (Figure 11).[9]

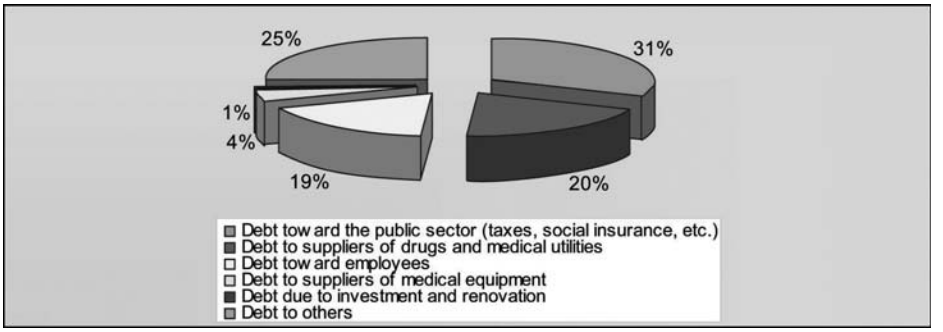
Czech Republic

The current level of debt in the health sector in the Czech Republic is not high, but rising rapidly. The stock of debt as of December 31, 2004 was approximately CZK 9 billion (less than 0.1 percent of GDP), all on behalf of one health insurance company, VZP). Projections suggest that debt could reach CZK 24 billion in 2006 (this data is only for VZP, since no other insurer has had any overdue payables, though some are expecting to get into debt within a year or so).[10]

9. Recently, there has also been an intensification of debt collection from defaulting providers by way of seizure by court order, directly from assets of public providers, as well as through the National Health Fund (NFZ). The total value of debt collection through seizures.

10. Officially, none of the providers has any debts, but this may well be an accounting machination tacitly supported by MOF and MOH.

Figure 11. Structure of Hospital Debts in Poland



Source: Poland Ministry of Health (2004).

Lithuania

Expenditure of healthcare institutions for services and reimbursable medicines are covered from the budget of the Central Health Insurance Fund (CHIF). However, healthcare services and medicines drive up the actual expenditures to levels higher than planned. Actual expenditures exceeded planned expenditures by Litas 33 billion in 2003, leaving the CHIF in debt to healthcare institutions to the tune of Litas 263 billion in 2003 (0.47 percent of GDP). The largest debt of the CHIF is to personal healthcare providers (about 50 percent) and pharmacies (about 40 percent). The indebtedness of the CHIF to personal healthcare providers, pharmacies and other healthcare institutions grew during the period of 1997–2004, particularly during 2000–01. As a result of the CHIF's indebtedness to healthcare institutions for provided services and reimbursable medicines, healthcare institutions are indebted to their staff and to the State Social Insurance Fund.

Table 4. Lithuania: Debt of Health Insurance Fund to Providers (billion Litas)

	2000	2001	2002	2003
Indebtedness at the beginning of the period	226.603	271.915	363.025	317.445
Targeted expenditure	1,847.170	1,833.456	1,811.585	1,868.722
Actual expenditure	1,836.929	1,936.643	1,847.835	1,901.965
Reimbursed expenditure	1,789.256	1,845.978	1,893.474	1,956.963
Indebtedness at the end of the period	271.915	363.025	317.445	262.875

Source: State Patient Fund, Lithuania.

CHAPTER 4

Key Expenditure Areas in the Health Sector

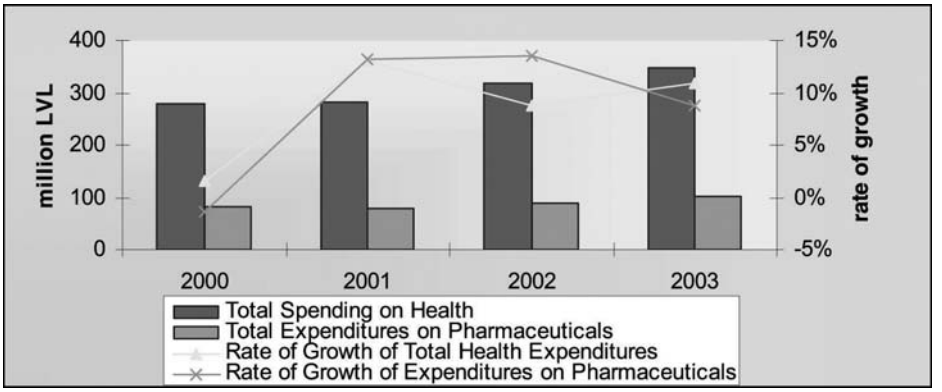
Pharmaceutical Costs

Drugs are the single largest cost driver in almost all healthcare systems in the EU8, and have been the most dynamically growing element in overall costs of healthcare services in recent years. This is not a situation unique to EU8 countries—according to new data released by the OECD, spending on pharmaceuticals across OECD countries has increased by an average of 32 percent in real terms since 1998, reaching more than US$450 billion in 2003. Growth in drug spending has outpaced total health expenditure in the EU8 countries in the last five years, as well as in most OECD countries. In some OECD countries, like the United States and Australia, spending on drugs grew more than twice as fast as total health expenditures between 1998 and 2003, while in others, like Japan, Italy and Switzerland, the growth was more moderate.

In Slovakia, expenditure on pharmaceuticals increased dramatically during 1995–2002, accounting for 32 percent of total health expenditures in 2002. The increase was fueled by both increasing consumption of pharmaceuticals—each year an estimated 52 million prescriptions are made out for a population of 5 million, and which until recently were fully or partly reimbursed by health insurance companies—and by increasing prices, driven up by non-transparent procurement and price-setting policies, as well as by increases in international prices of pharmaceuticals.

In Poland, expenditures on drugs constitute over 30 percent of total healthcare expenditures. The Polish market is dominated by imported drugs, which account for 63 percent of the market share, most of which are still in the patent period. The total value of imported drugs has grown at a rate of over 15 percent per annum during 2001–2003, while the value of domestically produced drugs grew at a rate of 10 percent per annum. Both retail prices

Figure 12. Total Pharmaceutical Expenditure in Latvia (2003 prices)



Source: Country Background Papers.

and the quantity of drugs consumed (especially expensive drugs) have grown during this period.

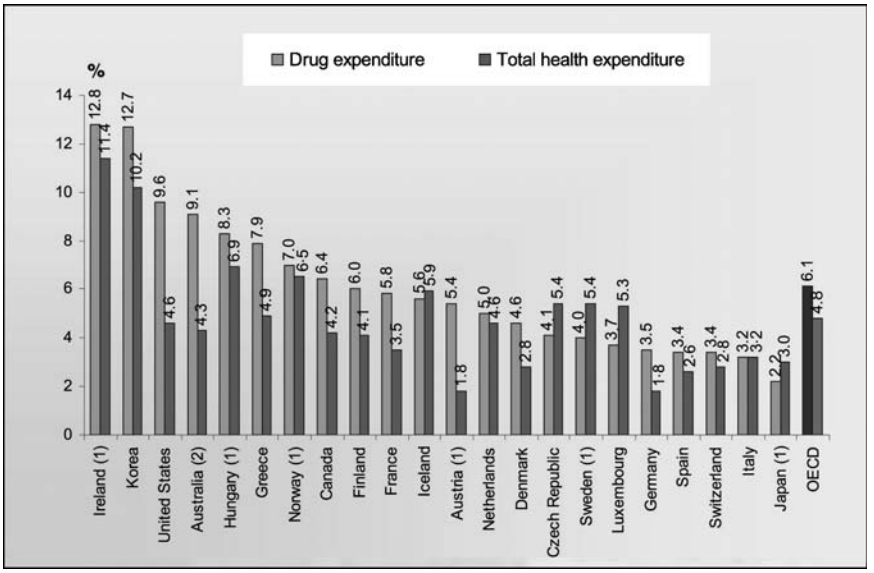
In Latvia, pharmaceuticals accounted for about 29 percent of total expenditures on health during 1999–2003. Expenditure on pharmaceuticals increased by about 38 percent during this period (2003 prices), in line with the increase in total spending on health (Figure 12). The consumption of reimbursable medicines in Latvia has been higher than allocated resources, and has increased in recent years. The share of reimbursable medicines in total expenditure on pharmaceuticals is small, but has increased from 11.3 percent in 1999 to 16.7 percent in 2003.

Hungary spends $280 per person per year on drugs, more than the UK and the Czech Republic (both around $240). In fact, drug policy is one of the weakest links of the Hungarian healthcare system, and the sub-budget for drugs is the only sub-budget of the Health Insurance Fund without even an indicative macro limit. The other sub-budgets for primary care, secondary care, and hospitals have limits and are obliged to create reserves throughout the accounting period. When the reserves are not sufficient, and this happens every year, the ministry responds by decreasing the value of the point system used to reimburse outpatient care and decreasing the base rate for the Diagnosis Related Group (DRG) used to reimburse inpatient care, so that the target of the sub-budget is met. Pharmaceutical expenditures regularly cause deficits that the government then pays from the state budget. The second reason for a permanent deficit of the drugs "treasury" is the introduction of new products and drugs to the market. Every drug released on the internal market is registered with the National Institute of Pharmacy, with minimal checks and balances as regards efficacy and use. New drugs are typically priced high, and where refunds are percentage-based, the financial burden for health insurance increases.

Box 1: Expenditure on Drugs (OECD countries; 1998–2003)

Spending on drugs represented, on average, 18 percent of total health spending in OECD countries in 2003. The share ranged from highs of around 30 percent in Slovakia, Korea, and Hungary, to lows of around 10 percent in Denmark and Norway. In 2003, total drug expenditure per person was highest in the United States (more than US$700 per person), followed by France (just over US$600), Canada and Italy (about US$500); the lowest spending of just over US$100 was in Mexico and Turkey. Variations in drug spending across countries reflect differences in prices and consumption, as well as the pace of the introduction of new and often more expensive drugs. Differences in income levels across countries is also a significant factor affecting spending on pharmaceuticals.

Figure 13. Annual Growth in Drug Expenditure and in Total Health Expenditure, 1998 to 2003



Around 60 percent of drug spending is publicly financed on average across OECD countries, with the remainder paid by private sources, mainly out-of-pocket payments and private health insurance. By comparison, almost three-fourth of total health spending is funded through public sources on average in OECD countries. Most countries have seen the public share of pharmaceutical spending increase in recent years, including in the United States, although at around 20 percent in 2003, it is still the second lowest public share among OECD countries.

Notes: Countries are ranked from left to right by annual growth of per capita pharmaceutical expenditure; (1) 1998–2002; (2) 1997–2001.

Source: OECD Health Data 2005 (June).

Hospital Infrastructure

The current oversupply of hospital infrastructure in the EU8 countries is a legacy of the Soviet influence. The focus of healthcare in the Warsaw Pact countries was the treatment of diseases, and the establishment of a huge infrastructure of hospitals was a natural process in the fulfillment of the deemed priorities of the health sector. At the same time, geopolitical and strategic preparations for potential wartime eventualities also dictated the development of a vast hospital network in the front line cities of the extended Soviet influence. Expectedly, therefore, the EU8 countries inherited a disproportionately large number of hospitals and hospital beds, which soon started to become a drain on public resources in the health sector.

Almost all countries have taken many bold steps to reduce the number of hospitals and acutecare hospital beds, but very few have done nearby enough. On average, the number of beds per 100,000 population in EU8 countries declined from 987 beds in 1993 to 765 in 2002, but is still 30 percent more than the average of 611 for EU15 countries (Table 5). The Czech Republic has 80 percent more hospital beds per 100,000 inhabitants compared to EU15, followed by Lithuania (50 percent) and Hungary and Latvia (30 percent). The large number of hospital beds, combined with longer lengths of hospital stay and low occupancy rates (for example, the occupancy rate in Slovakia is only 62 percent), generates enormous fixed costs for the system and locks-up scarce financial resources. Of all the EU8 countries, only Estonia and Slovenia have a hospital infrastructure comparable with the EU15 standards in terms of capacity.

Regions with an excessive concentration of public hospitals and hospital beds expectedly also generate the largest debts in the health sector. Hospital contracts with health insurance companies do not cover the full costs of maintaining the huge hospital infrastructure and associated fixed costs, and the resources allocated by the central and local governments (who own most public hospitals in most EU8 countries), are not sufficient to pay for all the expenses. In addition, public hospitals tend to provide services irrespective of the value of contracts concluded with the sickness funds, and bear costs that are refunded neither from health insurance nor from the state budget. In short, maintaining the large number of hospitals and hospital beds causes a huge drain on available resources and is one of the largest cost-drivers in the health system. A 30 percent reduction in hospital beds in the region will surely free up significant resources, particularly if they are accompanied by the closure of hospitals.

Salaries of Medical Personnel

Salaries in the health sector in the EU8 countries are rising faster than the average salaries in the economy, and as salaries account for more than 60 percent of health expenditures in these countries, this trend is increasing the pressure on overall health spending. Encouraged in part by the greater availability of outside opportunities following EU accession, and in part by the push to bring the ratios of salaries in the health sector to average salaries in the economy in line with EU15 proportions, physicians and nurses have been able to successfully negotiate demands for higher salaries. This has been and continues to be a big issue in most countries, as the examples below from Latvia, Estonia, Slovenia and Poland indicate.

Table 5. Beds per 100,000 Inhabitants (EU8; 1993–2002)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Compared to EU15
EU (15 countries)	711.6	705.7	692.0	686.2	664.1	648.9	625.0	622.9	612.8	611.3	1.0
EU 8	987.4	955.0	910.3	877.8	846.6	832.4	820.7	804.5	783.0	765.0	1.3
Czech Republic	1218.5	1209.7	1134.5	1107.4	1125.2	1113.6	1104.1	1092.6	1095.8	1107.1	1.8
Lithuania	1173.9	1108.1	1083.0	1055.6	983.0	961.5	938.0	923.2	869.4	892.8	1.5
Hungary	1004.1	990.6	909.1	910.9	826.4	831.1	836.8	839.1	806.3	806.3	1.3
Latvia	1203.0	1184.3	1099.3	1025.0	961.3	922.2	885.2	855.1	809.5	773.4	1.3
Slovakia				832.7	815.2	804.6	795.7	784.1	766.9	756.9	1.2
Poland	791.7	784.0	768.7	766.9	757.8	744.0	735.1	718.7	717.5	709.9	1.2
Estonia	941.8	830.9	804.1	757.6	738.2	722.8	716.5	682.9	681.8	605.9	1.0
Slovenia	578.7	577.7	573.6	566.6	565.3	559.1	554.0	540.6	516.9	508.9	0.8

Source: Eurostat, 2003.

In Latvia, the financing of regional sickness funds for healthcare services increased by 18 percent in 2002 in nominal terms, driven largely by an increase in the minimum salary. Most of the additional funding came from the Reserve Fund and was paid out as additional money (in addition to the regular salaries), on the basis of workload of medical personnel in medical institutions. The additional salary component was settled between the salary levels included in the price of contracted services and salary demanded by medical personal during strikes, and translated to LVL 53 per month for physicians, LVL 9 for paramedical staff, and LVL 7 for junior paramedical staff. In 2003, the financing by sickness funds for healthcare services increased by 17 percent compared to 2002, and like in the previous year, was also connected with an increase in minimum wages. Overall, average monthly salaries in the health sector in Latvia have increased from LVL 141 in 2002 to LVL 190 in 2003, and of doctors from LVL 214 in 2002 to LVL 291 in 2003.

Even though the average remuneration of medical personnel employed in the healthcare system has increased considerably in recent years, the low levels of remuneration are considered to be one of the main obstacles in the development of human resources in the healthcare system in Latvia. In order to increase the number of medical personnel in the age group 25-40 years by at least 5 percent, and to decrease the number of patients per physician, the Ministry of Health recently suggested increasing physician remuneration to levels twice the average salary in the economy. Five variants are suggested, which essentially vary only with the speed at which the ratio of 2:1 is achieved. The average salaries in the economy are expected to rise to LVL 265 by 2010, implying that doctors' remuneration will be set at LVL 430. Whichever variant is finally adopted, it will increase total spending on health by between 5 percent and 7 percent, equivalent to around 0.2 percent of GDP.

In Estonia, the recent increase in salaries announced by the previous government has resulted in a huge financing gap of EEK 400 million in the Health Insurance Fund, equivalent to almost 10 percent of total expenditure on health services by the Fund in 2004. The new government is now actively discussing ways to close the financing gap, and while there seems to be still no agreement on the exact course of action, alternatives that are being discussed include increasing the out-of-pocket payments of patients, reducing the benefits paid to insured individuals during sick days or starting the payments a day or two later.

In Slovenia, the fiscal balance in the health system received a jolt in 1996 when doctors went on strike demanding increased compensation. The strike was resolved with the government committing to link physician salaries to the salaries of judges, a move that has since been completed. The doctors again went on strike in 2002, but while there was broad agreement that doctors were generally overworked, the government did not agree to yet another pay increase, fearing that it would trigger demands and pressures from other streams of professionals as well, and threaten the government's efforts to maintain balance in public finances. This strike was resolved with the government agreeing to correct the imbalance between the different professions and prepare a law on public sector pay to this effect.

In Poland, average remuneration in the health sector has been lower compared to other sectors. This gap has only been increasing in recent years, and in 2002 average remuneration in the health sector was about 23 percent below average wages in the public sector. This differential persists despite the government decision in 2000 to increase health sector wages in 2001 by no less than Zl 203 per month, and maintain the average growth rate in health sector wages at levels comparable to the national average. However, only

Table 6. Physician Salaries (selected EU8 countries; average monthly in local currency)

Year		1999	2000	2001	2002	2003
Czech Republic	AMS of physician (CZK)	23 101	25 094	28 139	31 654	33 961
	AMS in Czech Republic (CZK)	12 797	13 614	14 793	15 866	16 920
	Ratio of Physician Salaries to National Average	1.81	1.84	1.90	2.00	2.01
Slovakia	AMS of physician (SKK)	20 050	23 837	27 879	28 973	29 862
	AMS in Slovakia (SKK)	11 430	12 365	13 511	14 365	15 825
	Ratio of Physician Salaries to National Average	1.75	1.93	2.06	2.02	1.89
Slovenia	AMS of health workers (SIT)	173 245	191 669	214 561	235 436	253 200
	AMS in Slovenia (SIT)	203 098	224 575	253 131	295 319	308 013
	Ratio of Physician Salaries to National Average	1.17	1.17	1.18	1.25	1.22
Hungary	AMS of a specialist (HUF)	112 248	127 074	148 348	162 754	
	AMS in Hungary (HUF)	70 211	79 820	103 254	122 482	
	Ratio of Physician Salaries to National Average	1.60	1.59	1.44	1.33	

Source: Ministry of Health, the Czech Republic; Ministry of Health, Hungary; Statistical Office of the Slovak Republic and Institute of Health Information and Statistics of the Slovak Republic; International Labor Organization, 2005 (Slovenia).

about 55 percent of all healthcare establishments raised wages in 2001, with less than half covering the full amount of Zl 203 per month. The situation did not improve much in 2002, and healthcare establishments—citing limited financial resources—continued to be unable to implement the statutorily imposed obligations. Most healthcare establishments implementing the government decision ran up huge debts, estimated to be over Zl 1.9 billion, while more than Zl 2.2 billion (principal only) remains unpaid to employees in establishments that have not implemented the government order.[11]

It is illustrative to compare average physician remuneration in the health sector with average salaries in the country at equivalent levels of educational qualification and experience. This data is not readily available and there are many problems in determining average salaries in the health sector, particularly because of the many different combinations of qualifications, training, specialization and experience. Average salaries at equivalent levels in the Czech Republic, Slovakia, Slovenia and Hungary (Table 6). The ratio of physician salaries to the national average is more than 2 in the Czech Republic, but only 1.2 in Slovenia. In a very rough way, this also suggests that salaries are likely to become significant cost drivers in many EU8 countries if the ratio of physician salaries compared to national averages in these countries converges to prevailing levels of about 2 in EU15 countries.

11. GUS communication 19 August 2004, ref DUI-06-3089/04 in Government of Poland (2004).

CHAPTER 5

Spending on Aging Populations and Medical Technology

Aging Populations

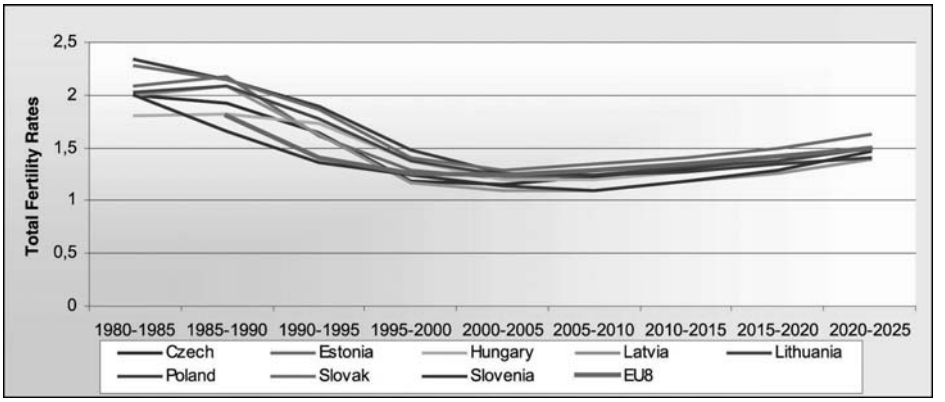
Financing and delivering healthcare for the growing population of the elderly is likely going to be the largest new cost-driver in the health systems of the EU8 in the near future. All EU8 countries face the consequences of population ageing caused by reduced fertility and mortality rates on the one hand, and increasing life expectancies on the other. Total Fertility Rates (TFR) in the EU8 fell from 1.8 in 1990–95 to 1.2 in 2000–05, and is projected to increase only marginally to 1.5 by 2020–25 (Figure 14).[12] Hungary will experience the lowest decline in TFR (0.3), while Lithuania will see the largest decline (0.9).

Life expectancy at birth in the EU8 countries has been steadily rising and is expected to continue rising. Overall for the EU8 countries, life expectancy at birth for females increased from 75.8 years in 1990–95 to 78.1 years in 2000–05, and is projected to rise to 81.1 years in 2020–25. Likewise, life expectancy at birth for males increased from 67.7 years in 1990–95 to 70.9 years in 2000–05, and is projected to rise to 74.5 in 2020–25 (Figure 15).

The net result of decreasing TFR and increasing life expectancies is that the share of people aged 60 years and older in the total population in all EU8 countries, which was 16 percent in 1995, is projected to increase to 27 percent in 2025 (Figure 16). As a result of these movements, there will be 60 million inhabitants in the EU8 by 2050, almost 13 million less than today. Latvia and Lithuania face the largest declines, losing over a quarter of their population by 2050. At the same time, the old age dependency ratio and total dependency ratio are also expected to rise sharply.

12. TFR is the average number of children a woman is expected to have by the end of her reproductive period. Since it is measured using information on births of women aged 15–49 in a certain period, it is the average number of children a woman is expected to have between the ages 15–49.

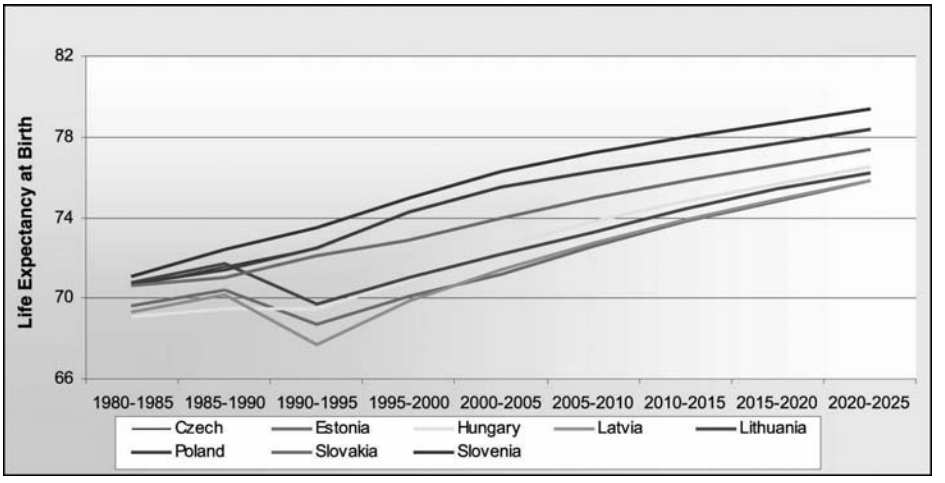
Figure 14. EU8 Actual and Projected Total Fertility Rate (TFR)



Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects (2004 Revision) and World Urbanization Prospects (2003 Revision).

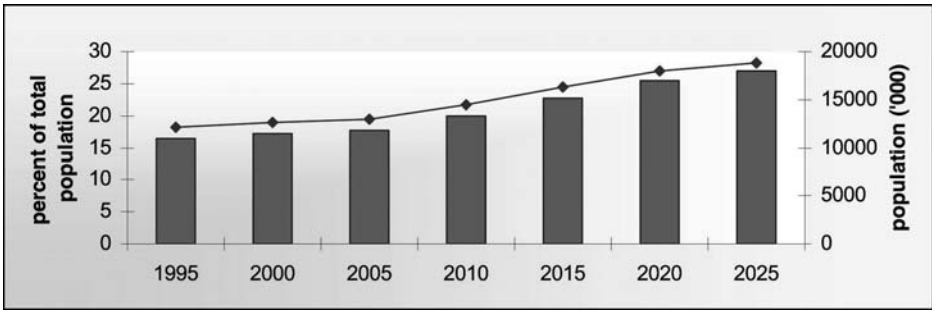
Older persons are more likely to have greater health needs and are more likely to consume more expensive healthcare services, particularly during the last years of life. Without a doubt, the extent to which ageing affects overall health spending will depend on the utilization of services, forms of elderly care offered, changes in technology and the way elderly care is

Figure 15. EU8 Actual and Projected Life Expectancy at Birth



Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects (2004 Revision) and World Urbanization Prospects (2003 Revision).

Figure 16. EU8 Countries: Population over 60, 1995–2025



Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects (2004 Revision) and World Urbanization Prospects (2003 Revision).

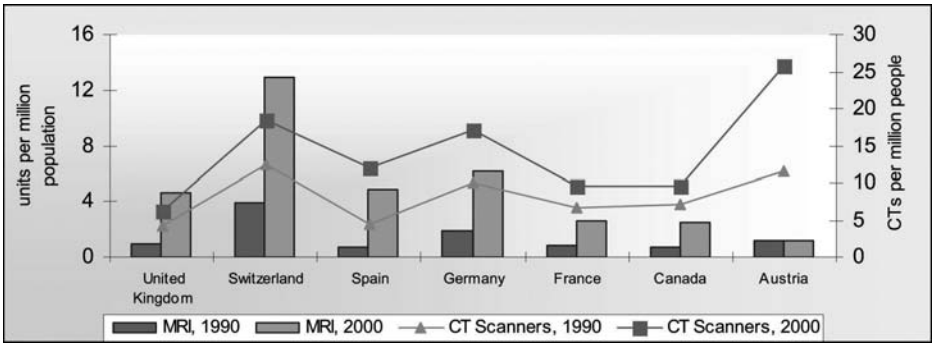
paid for, but a rapidly ageing population will bring significantly higher needs, simply because the elderly (above 65) have a higher average demand for medical care in their later years in terms of ambulatory, inpatient, and chronic care (Oxley and MacFarlan, 1995). In a study based on Swiss health data, Felder (2005) projects an increase in health expenditures of 24 percent by 2025 in the absence of time-to-death adjustments, and 19 percent if time-to-death adjustments are made (Felder, 2005). The impact on health expenditures of ageing populations is lower, however, if the health status of the elderly improves over time; in other words, if those aged 65 years in 2025 are as healthy on average as those aged 60 years today, then ageing simply shifts rightwards the flatter part of the age-expenditure curve instead of increasing its slope. It is, therefore, difficult to quantify the impact that an ageing population will have on health expenditures, though there is little doubt that an increasing proportion of people over 65 will exert some upward pressures on healthcare costs.

A critical issue is long-term care for the very old, which can become a huge financial burden as informal family-based care begins to decline. However, total healthcare costs may decrease if the elderly are placed in less-expensive nursing home beds, which reduce the use of higher-cost acute care beds; or if the use of technical advances, such as modern anesthetics, reduces surgery-related risks for older patients (Cutler 1994). But increasing long-term bed capacity does not necessarily translate into inpatient cost-savings through less acute care beds. In Switzerland, for instance, the declining number of acute care beds has been accompanied by a steep increase in long-term care beds. Likewise, to respond to the needs of an increasing share of the elderly, Austria anticipates an increase of about 13,000 beds in nursing and residential homes by 2010 and a growing demand for health and nursing staff with advanced training. As a result, health expenditures for long-term care are expected to rise (HIT Austria 2001).

Medical Technology

Widespread and extensive use of new and expensive medical technology has already made it a major cost-driver in the health systems in many EU15 countries, and the

Figure 17. Diffusion of MRI Units and CT Scanners, Selected Countries



Source: OECD Health Data 2004.

rapidly growing EU8 countries are poised to witness this proliferation in the near future. This is not to imply in any form or manner that the use of medical technology is necessarily or always wasteful (indeed, medical technology is often the only effective solution and has led to significant improvements in health outcomes); it is simply that the trend of consumption of expensive medical technology is a rising one, and will rapidly become a major cost driver in the health sector in EU8 countries. Felder (2005), in a study using Swiss health expenditures data, assumes that health technology will increase expenditures by as little as 1 percent per year, and projects an increase of over 100 percent in total healthcare expenditures by 2025.

The last 15 years have seen particularly dynamic growth in the adoption of new technology in the health sector in many OECD countries. The number of Magnetic Resonance Imaging units, for instance, increased three-fold from 1.7 per million population in 1990 to 6.5 per million population in 2000 (with Switzerland and Austria seeing particularly high increases during this period), and the number of CT scanners increased from 10.1 per million population in 1990 to 17.7 per million in 2000 (OECD, 2003), led again by Austria and Switzerland. From 1989 to 1996, the number of CT scanners increased more than 400 percent and MRIs by 1,000 percent in Austria; by 1996 there were 112 CT scanners in hospitals and 81 CT scanners in private practice, and 32 MRIs in hospitals and 28 MRIs in private practice (Wild, 2004) (Figure 17).[13]

There is no doubt that many technical innovations contribute to cost-saving (for example, when drugs reduce the need for surgery), but concerns about the impact of technology on increased healthcare costs have led to regulations in the use of high-end

13. The tax-funded health systems of Spain and the UK have the lowest density of MRI units and CT Scanners, and also report the lowest hospital capacities and inpatient expenditure shares, as well as the lowest total health expenditures. On the other hand, Switzerland, with the highest hospital numbers, inpatient cost shares and total expenditures, is also among the countries with a large number of MRI and CT units. Interestingly, high technology diffusion does not correlate with increasing health expenditures in Austria.

technologies in most EU15 countries.[14] In the 1960s and 1970s, the Dutch government attributed the main cause of rising costs to the construction of new hospitals and the steady expansion of health technology. The Netherlands has highly-developed policies to regulate technology in its health system with multiple payers and private providers. Dutch hospitals can be denied the purchase and use of new technology through a formal decision made by the health minister, after advice from the HealthCare Insurance Board and the Health Council. This measure has prevented oversupply and stimulates effective use of technologies. Hospitals that ignore the regulations are subject to sanctions and are not reimbursed by the sickness funds (HIT Netherlands 2004).

Countries with tax-based systems such as the UK (National Screening Committee) and Spain have national agencies for high technology and technology control measures in their national health policies (Banta and others 2001). In Germany, the multiple social health insurance funds and hospitals are free to develop services and purchase technologies; however, cost concerns have led to regulation proposals. Switzerland does not have a coherent policy towards technology; although coverage of services is restricted under social health insurance. Market entry for high-cost technology is regulated in Austria, where the purchase of high-technology medical equipment by public hospitals has to be justified on the basis of "medical needs" (HIT Austria 2001). In France, the distribution of high-cost technologies is based on norms described in the national medical map (HIT France 2004).

14. Also see Weisbrod (1991) and Katz et al., 1996. Weisbrod found that the use of new technology was the main reason behind the

CHAPTER 6

Directions for Further Reform

The systemic debts in the health sector in the EU8 countries are indicative of a broad range of underlying issues that threaten the sustainability and effectiveness of the health sectors in these countries, and which will have to be addressed if costs in the health sector are to be managed. These issues are well-understood and have been extensively discussed in most EU8 countries. Likewise, the solutions to the proximate problems facing the health systems in the EU8 countries are also known, and the problem is much more of taking cognizance of the urgency of the situation, and mustering the necessary political will to stand up to those who are likely to be adversely affected in the changing environment. Three examples will illustrate these points.

Consider first the generous benefit package that most EU8 countries provide. The constitutional guarantee of free healthcare in most EU8 countries not only creates a very strong sense of entitlement, it also provides the political basis for the strong resistance frequently observed in many countries to co-payments or to health insurance and provision schemes that differentiate or explicitly ration access to health services. It is not surprising, therefore, that most EU8 countries chose to maintain universal coverage and free access to health services, even as large-scale structural reforms were being initiated in other facets of healthcare. While the presence of informal payments in many countries has compromised the theoretical 'free access' to health services, few countries have taken the politically difficult step of formalizing the existing flow of informal payments. Facing little or no direct costs at the point of utilization of health services, patients have few incentives to rationally determine their health consumption basket, an unsurprising result of which is the high level of consumption of health services in many EU8 countries.

Second, despite a decade of reforms, the underlying supply-side incentives in the health system continue to be weak and generally ineffective, almost matching the near-absence of demand-side incentives which promote cost-consciousness. While most countries have

introduced risk-sharing at the primary care level by paying the providers on the basis of capitation, similar incentives are by and large absent at the secondary and tertiary levels. Most hospitals in the EU8 countries are owned by the local or central governments and most hospital managers have no claim to any residual balances that may result from good management of the facilities. Prices for health services are typically set at the level of the central government, usually at levels very close to the costs of production and delivery of these services, and with few rewards and penalties for staying within/breaching the budget, health providers pay scant attention to the cost side of the equation.

Third, expected gains from shifting to a social health insurance system have not fully materialized, with insurance companies in many countries behaving simply as collection and forwarding agencies, instead of as rational purchasers of health services on behalf of the insuree. In most countries, insurance companies face very few cost-saving incentives and contract with all hospitals at pre-determined prices for a centrally-defined basket of services.

The solutions to these three problems are obvious and include some combination of: (i) rationalization of the benefit package; (ii) introduction of co-payments or other mechanisms to make people take greater responsibility of their health and healthcare-seeking behavior; (iii) creating competition among healthcare providers; (iv) consolidating and closing public hospitals and reducing hospital beds; (v) risk-pooling and rational purchasing of health services; and (vi) introducing provider payment mechanisms that promote incentives for cost management and quality enhancement.

The fact that the health systems in three of the eight countries of the region seem to have found some working solutions and do not have any debts is remarkable, and it is worth exploring why the same set of issues that have been the bane of fiscal balance in some countries have not been a problem for others. Unsurprisingly, Estonia, Slovenia and Latvia faced-and continue to face-the same financial pressures from increasing pharmaceutical costs, extensive hospital infrastructure, and increasing demand for higher salaries, but have found simple and yet effective ways to address these problems. Slovenia found the answer in good governance, close scrutiny, and informed oversight. Estonia found the solution in strict adherence to financial rules and in maintaining financial reserves to meet unforeseen expenditures. Latvia contained its expenditures to the resource envelope, and simply did not spend what it did not have. To be sure, all three countries also carried out a host of reforms to control pharmaceutical spending, reduce hospital infrastructure, improve hospital management and so on, but the underlying difference between these three countries and the others is that of sheer fiscal discipline.

The most important message from the experience of Estonia, Slovenia and Latvia is that there is no substitute for fiscal discipline, and that the best way of not running up arrears is to stay within the available resource envelope. The resource envelope available for the health sector is usually sufficiently elastic-definitely so in the middle-income EU8 countries-to accommodate the needed expenditures in a way that fiscal balance is maintained and quality health services are produced to meet the healthcare demand. However, such accommodation is possible and sustainable only if backed by a fundamental adherence to good budgetary practices and fiscal prudence.

In addition to the continuing financial pressures from rising pharmaceutical expenditures, rising salaries of health personnel, expenditures associated with maintaining the existing hospital infrastructure, aging populations and proliferation of expensive medical technology are bound to place a greater burden on the already fiscally-stretched health systems in the EU8 countries. In many countries, the challenge of containing costs will

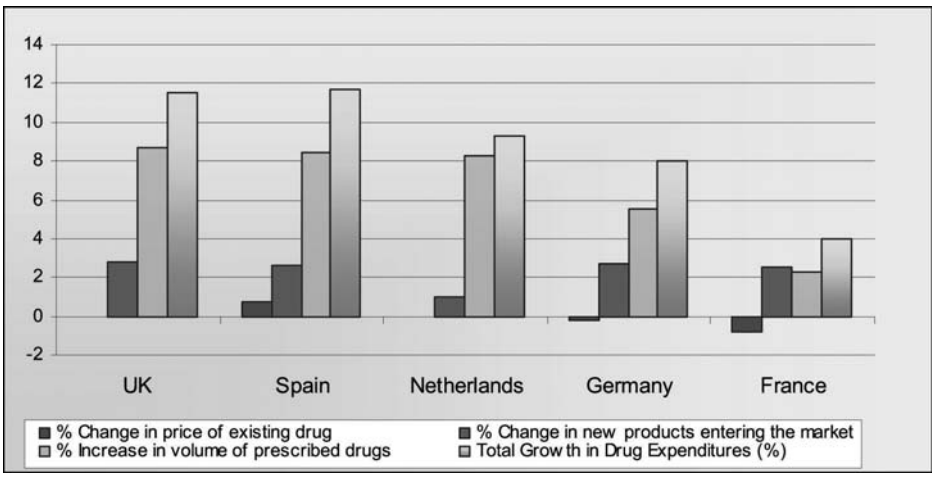
require systemic changes in the way healthcare is produced, financed and delivered, as well as institutional changes in the way that the health sector is organized and managed. This was the case, for example, in Slovakia, where a set of comprehensive reforms was put in place to meet the fiscal crisis head-on and find a sustainable solution (Boxes 2 and 3).

Looking forward, the social health insurance system in the EU8 countries will come under even greater pressure unless urgent action is taken to address at least the proximate causes of rising health expenditures. At the very least, the health reform package would have to consist of a combination of stricter supply-side measures, such as management of pharmaceutical expenditures and hospital restructuring, and demandside measures, such as greater patient responsibility for their own health and greater patient contributions, including cost-sharing for pharmaceuticals. The ultimate objective of these solution-measures in the shortrun has to be the stabilization of the fiscal situation so that no new debts are created in the health system. Likewise, the emphasis in the medium term would necessarily have to be on improving efficiency and effectiveness, ensuring access to healthcare, enhancing quality of care, sustaining cost-containment, and ensuring that adequate legislative support is available to sustain the short-term measures and medium term reforms.

Managing Pharmaceutical Expenditures

The single biggest reason for rising pharmaceutical costs is the increase in volume of drug use, and substantial savings in pharmaceutical expenditures are possible by controlling the prescriptions and use of drugs. The changes in drug expenditures relate to changes in the volume of drug use and prices for new drugs entering the market. The experience of OECD countries has shown that increases in the volume of drugs and the introduction of new products, rather than increases in prices, contributed to the growth of pharmaceutical expenditures (Figure 18). The UK, Spain and the Netherlands experienced high percentage

Figure 18. Price and Volume of Pharmaceuticals, Selected Countries, 2002



Source: Nefarma (2002).

Box 2: Health Reforms in Slovakia

The Stabilization Phase of the health reforms in Slovakia consisted of three measures: the introduction of user fees; changing the methods of purchasing pharmaceuticals; and hospital restructuring. As a result of these measures, the annual recurring health sector deficit has been eliminated, though the stock of debt remains high.

Measure	Description	Result
Introduction of copayments	Modest fees (SK 20 per visit, SK50 per hospital bed day, SK20 per prescription); provides allowed to retain co-payments.	–10% reduction in outpatient visits –Minimal adverse impact: only 1.5% of those surveyed stopped physician visits –Physicians official earning increased –Drop in corruption (% of repondents associating health care with corruption dropped from 32% in Nov 2002 to 10% in Jan 2004)
Changes in pharmaceutical procurement procedures	Increased tranparency in procurement; price negotiations over internet; change in the process of setting max prices.	–Reduction in drug prices and prescription volumes (e.g., price of Risperidone, an antipsychotic agent, fell by 76% between Nov 2003 and Oct 2004) –Substantial slowdown in growth of expenditures, from 16.5% annually in 2001 to 8.9% in 2003 and –11.7% in 2004
Pilot project of hospital restruturing	Decentralization; consolidation of hospitals in Bratislava and BanskaBystrica.	–Reduction in hospital beds –Reduction in hospital employement –Sale of hospital building

Systemic reforms were started under Phase 2, and include the passage of supporting laws. Six health-related Acts were passed by the Parliament in Nov 2004: (i) the Act on Health Insurance, to regulate social and private health insurance; (ii) the Act on Health Insurance Companies and Healthcare Surveillance Authority, to introduce budget constraints, transparent financial relationships, accounting, and auditing; (iii) the Act on Providers, to introduce increased decision-making independence and autonomy of individual healthcare providers, and their responsibility for consequences of their decisions; (iv) the Act on Ambulance Services, to organize and integrate emergency service; and (v) the Act on Healthcare, to unambiguously define healthcare and the forms of its provision, rights and duties, handling of health documentation, and regulation of provision of health-related services; and (vi) the Treatment Act, to define and develop the scope of services covered under social health insurance.

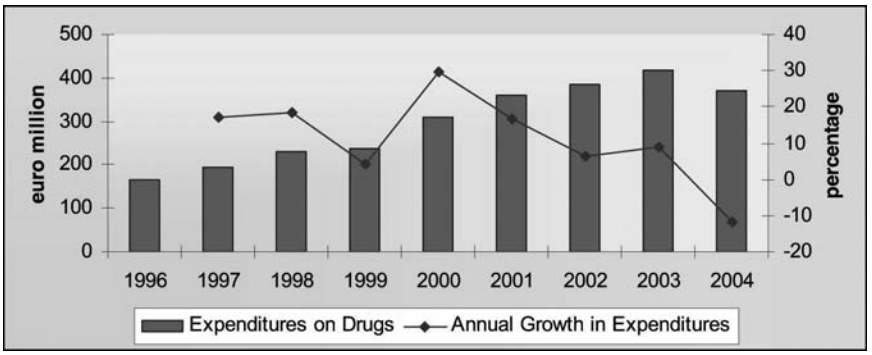
increases in both volume of prescribed drugs and in pharmaceutical expenditures. In Canada, the Patented Medicine Quantity Index, a measure of patented drug volume, increased annually by 12.4 percent between 1988 and 2001, considerably more than the average annual drug price increase of 0.8 percent.

Drug price regulation is important and necessary, but the experience of many countries shows that it is not enough by itself to control drug expenditures. Many OECD countries

Box 3: Managing Expenditure on Drugs: The Experience of Slovakia

In order to control pharmaceutical expenditures, the government of Slovakia launched an ambitious drug policy in 2003, employing a series of measures aimed at controlling both the price and the quantity of drugs. These included: (i) the introduction of a flat prescription fee (Sk20); (ii) the introduction of a fixed ratio after the categorization has taken place; i.e., if the pharmaceutical company decreases the price of a drug after the positive list is published, then the ratio between the reimbursement, paid by the health insurance company, and the co-payment, paid by the patient, remains the same; (iii) the introduction of a mechanism where insurance companies reimburse patients on the basis of the lowest price in every therapeutic category. The lowest price, in turn, is determined on the basis of daily dose requirement and published in a handbook that is widely circulated among pharmacies. The pharmacies are required under the law to explain to the patient the substitutability and availability of drugs, and the different co-payments associated with them. Patients choosing the higher-priced drug make the higher co-payment as determined in the handbook; (iv) open competition among pharmaceutical providers, which is conducted on-line so that all bidders have complete information about the bids of their competitors as well; (v) the introduction of the "fast track" process, whereby—if a pharmaceutical company decreases the price of a product by 10 percent or more, compared to the cheapest drug in the cluster—one step in the registration procedure (evaluation by the Categorizing Committee) is dropped.

Figure 19. Expenditures on Drugs in Slovakia



Data supplied by health insurance companies show a substantial slowdown in the growth of expenditures allocated to drugs. While in previous years that growth was regularly in the double digits, in 2002 and 2003 it dropped to single digits. Figures for the first half of 2004 were also encouraging, with drug expenditures falling by 11 percent year-on-year (Figure 19). However, preliminary expenditure numbers reported by one insurance company (VsZP) for the first four months of 2005 seem to suggest that pharmaceutical expenditures are on the rise again, and could even surpass the 2003 levels.

have indeed successfully implemented reform measures aimed at price control. In the Netherlands, the pharmaceutical price index declined at an annual average of −1.3 percent from 1996 to 2000, mainly due to price regulation that led to a fall in prices for "old" drugs, and has remained more or less unchanged since. Prices of old drugs fell in Switzerland as well, though the decline was almost fully compensated by higher prices for new drugs at market entry. In the UK, pharmaceutical prices are highly regulated and prices for existing

drugs cannot be increased (however, the UK also has the highest pharmaceutical prices in Europe).

However, most of these measures have not been successful in controlling the high growth of pharmaceutical expenditures. In Austria, for instance, spending on pharmaceuticals grew 1 percent faster since 1990 than the average annual growth rate of total health spending, mainly driven by the increased use of innovative and more expensive drugs. To create competition between pharmacies, Austria relaxed the conditions for establishment of pharmacies based on needs assessments in 1998, which was expected to create an increasing number of pharmacies leading to lower prices (HIT Austria 2001). However, pharmaceutical expenditure as a percent of total expenditure has continued to increase.

In addition to price controls, the regulation of the consumption of pharmaceuticals is critical in order to contain expenditures on drugs. Most countries have adopted demand-side measures for controlling consumption, and cost-sharing has proven to be the most effective measure. In the Netherlands, for example, the introduction of copayments on prescribed pharmaceuticals (a fixed amount per prescription), led to a substantial decrease in the total number of prescriptions. When this was compensated by an increase in the prescription size (pharmaceuticals per prescription), and in quantities prescribed, the government responded by limiting the number of drugs per prescription and allowing virtually unlimited cheaper prescriptions (HIT Netherlands 2004). Reference price systems have been introduced in Germany, the Netherlands, Spain, and France to increase cost-sharing for individuals using branded or higher cost products while assuring access to less costly generic drugs (OECD 2003). In Germany and France, cost-sharing to control pharmaceutical expenditure has led to an increase in the number of drugs excluded from insurance coverage (for example, "comfort" drugs or those without proven therapeutic value). In Germany, drug cost-containment measures take the form of cost-sharing, prescription limitations, reference prices, and the pharmaceutical spending cap that makes physicians' associations liable for any overspending with no upper limit. These measures led to substantive decreases in pharmaceutical expenditures for social health insurance, mainly attributable to price reductions, changes in physicians' prescribing behavior (resulting in a reduced number of prescriptions by 11.2 percent), and increased prescriptions for generics (HIT Germany 2005). The French government imposes a fine on pharmaceutical companies if pharmaceutical expenditures surpass budget ceilings, either due to price or quantity increases (HIT France). Spain introduced negative lists, generic drugs list and global reference prices, and reduced wholesaler profit margins from 11 percent to 9.6 percent (HIT Spain 2000).

Lowering drug costs requires a multi-faceted approach, necessarily involving the policy-makers working together with payers, doctors, pharmacists, and patients, and involving a package of measures aimed at pricing, prescription, and safety of drug use. As the experience of many countries shows, price controls are necessary but by no means sufficient to contain pharmaceutical costs. Controlling consumption is critical, either by demand-side measures such as cost-sharing, or through supply-side interventions, such as managing physician prescription practices. The latter is clearly more difficult, but is becoming more important as the cost-sharing limits are being reached.

Rationalizing the Benefit Package

The move from general tax financing to health insurance financing in the EU8 countries did not significantly reduce the scope of services provided free of charge to the patients. It remains important to clearly and unambiguously define which services would be covered by the health insurance, and which services would not. In order to ascertain the appropriate use of available and mobilized resources for the health sector—including non-public sources such as private out-of-pocket payments and private insurance premiums—and in order to structure the system to effectively use these resources, it is necessary for the health system to provide more specificity with respect to the scope of publicly covered services. Without such specificity, it is also difficult to ascertain the role that might be played by private supplemental insurance and other non-public resources. The absence of clarity of services covered also contributes to the pervasiveness of informal payments. If people are not aware of the precise benefits to which they are entitled, they will be more susceptible to requests for additional payments. Clarification of what is covered will also help strengthen the budgeting process, as it will enable the government and healthcare providers to make accurate estimates of future expenditure needs.

Creating a universally acceptable benefit package to be funded from public sources is an attractive, but in some sense impossible mission. Therefore, health insurance funds (or governments) tend to exclude some treatments or entitlements, which do not solve the problem. For the fiscal sustainability of health systems, a flexible mechanism needs to be in place that allows for a benefit package that responds to a population's needs and can be serviced within the given budget constraints.[15]

Introducing Private Insurance[16]

Private health insurance can play several roles within the health care systems of the EU8 countries.[17] Under one common option, private health insurance supplements coverage provided by the government or social insurance fund(s). Examples of countries with

15. In Slovakia, the Scope of Benefits is derived from the principle that an insured person has the right to equal treatment in case of an equal need. Due to the infinite nature of needs, it is however necessary to define a certain maximum extent of care, based on the list of priorities that are in line with the fiscal capacity of the Slovak economy. The priority list is a positive list of diagnoses where there is zero co-payment of insured patients. The list of priority diseases contains approximately 6,700 diagnoses, which is almost two thirds of the total list of diagnoses (11,000) listed in ICD-10. The list of priority diagnoses is adopted by the Parliament on government proposal. All diseases are subject to the process of cataloguing, where they would be assigned a list of interventions fully reimbursed from public healthcare insurance. Standard diagnostic and therapeutic procedures are thus created. For diseases not listed on the priority list, the extent of patient co-payment is determined for all interventions.

16. This section draws heavily from a background note on the subject prepared for the author by Tapay, Nicole (2001). Also see Colombo and Tapay (2005).

17. Experts have developed somewhat different categorizations of private insurance products but these often seem to encompass a similar range of functions as the categories described herein.

supplemental private health insurance include Australia, Canada, France, Spain and the United Kingdom.[18] This supplementation can take several forms. If a benefit package does not include certain commonly desired coverage, the insurance coverage can complement the government benefits. For example, the insurance contract may guarantee reimbursement for the cost of specific health services omitted by the public benefit package. Alternatively, or together with this type of supplementation, the insurance can provide reimbursement for any costs associated with receiving services covered by the public system.[19]

Another option for private health insurance is to cover a range of benefits, including comprehensive coverage. The scope of benefits is determined by the coverage contract, as well as by the applicable laws and regulations. There may be circumstances in which this coverage serves as an individual or family's only protection against the cost of expected and unexpected health services. This can occur if there is no social insurance system, individuals are not eligible for coverage under such a system, or they are permitted to opt out of the social insurance system if they purchase private coverage. The latter type of coverage, referred to as "substitutive coverage," is an option in the Netherlands, Switzerland, Germany, and Chile. These comprehensive packages may have significant or minimal cost-sharing. The consideration of a "substitutive" option raises several issues and must be approached carefully. This type of system can greatly impact the distribution of risk between the public and private system, and once created, it may be difficult to alter at a later date.[20]

Another coverage option is parallel coverage. Such coverage may or may not offer a comprehensive benefit package. Rather than focusing on filling particular gaps in a social insurance system—as is the case with supplemental coverage—this coverage may offer access to higher quality or more comfortable accommodations in connection with the same health care services also covered by the social insurance system. It also may enable individuals to bypass any waiting lists that develop. Examples of such "alternative" private insurance can be found in Ireland, Great Britain and Spain. Since this type of coverage also

18. In Australia, private insurance plays a dual role. It can supplement the coverage under their social insurance fund, by covering services not covered by the public system, but it can also provide coverage that is "parallel" to the publicly available coverage, replacing the public funding. As an example of its supplemental role, this coverage can pay up to 25% of the fee to cover the gap in social insurance coverage for medical services provided in hospitals.

19. Note that private supplemental coverage of the same benefits otherwise covered by the public or social insurance system, particularly private coverage of cost-sharing expenses associated with the receipt of certain publicly covered services, may impact utilization.

In the U.S., for example, researchers have found that private Medicare supplemental coverage of cost-sharing expenses related to the receipt of benefits otherwise covered under Medicare, may have resulted in increased utilization by those holding these private policies, except in the case of coverage offered through managed care HMO plans (see Christensen and Shinogle, 1997).

20. For example, Chile provided its employed population with the option to obtain coverage through the private funds (ISAPREs) in lieu of coverage through the public social insurance fund (FONASA). The regulations focused on contract compliance rather than content. This system has resulted in a higher proportion of the younger and wealthier population receiving coverage under the private funds. This fragmentation occurs despite the fact that there are significant additional revenue streams (in addition to the payroll tax) for both the public and private aspects of the health care system. FONASA receives 60% of its revenues from general taxes, and the ISAPREs are able to charge additional premia with few limits.

complements social insurance systems, it is sometimes also referred to as a type of supplemental coverage.[21]

A report of the European Parliament's Committee on Employment and Social Affairs argued for some minimum rules for the supplementary (or complementary) health insurance marketplace in order to reduce certain inequities in access to this type of private coverage. The report noted that that "[i]t is both necessary and sensible to oppose a trend which, supposedly on the grounds of economy, good management and making people more responsible for their own welfare, has the effect of reducing high-quality health cover and transferring certain risks . . . to the supplementary schemes . . . The proportion of the cost which has to be met by the consumer . . . . is becoming too high for people on low incomes . . . if supplementary health insurance organisations are to play an increasingly important role in providing health care, goods and services for the public, the sector must be subject to rules to ensure nobody is excluded and everyone has access to high-quality necessary treatment."[22] Also, the ability of certain segments of society to receive services through private coverage may impact the political will to improve elements of the social insurance system.

A private health insurance market has the potential to offer certain advantages over solely public sources of health care financing. If a government chooses to target public coverage to certain population groups, rather than provide universal coverage, the availability of a private insurance option becomes a critical component of a nation's health financing scheme. Where the government assures broad coverage, private insurers may relieve some portion of the burden from the public system of financing (and depending upon the delivery system, it also may relieve the public delivery system). The extent to which the private system is able to relieve a burden from the government depends on many structural aspects of the system, such as whether the privately insured are still covered through some governmental funds (whether from general revenue or payroll taxes) as well as whether private insurers are paid an additional amount that is separate from the funding stream for public coverage. The potential for relief of the governmental burden also depends upon the incentives and regulation that can impact the division of the population between the public and private systems. If the private system is permitted to cover a disproportionately younger, wealthier or healthier population, with little regulation, it may raise significant issues for the public system.[23]

Another potential advantage of private health insurance is that it may help providers rebuild infrastructure and amortize needed investments. The combination of many factors may impact whether private financing can positively and broadly impact providers' funding and access to high quality care. Relevant issues include the risk composition of the insurers'

21. See e.g. the discussion of two types of voluntary health insurance (VHI) in the European Union (EU) in Rocard, M., "Report on supplementary health insurance," European Parliament, 4 October 2000, Committee on Employment and Social Affairs. This report divides voluntary health insurance in the EU into two categories, that which is supplementary to public entitlement, and that which substitutes for, and is mutually exclusive from, the statutory health insurance scheme (as in Germany and the Netherlands).

22. See Rocard (2000), at 16-17.

23. For example, in Ireland, a survey of the Organization for Economic Co-operation and Development (OECD) found that "private health insurance has operated in a way that tries to ensure that a significant number of people stay in the private system, relieving the cost of hospital care to the public finances." Department of Health and Children, Ireland, "White Paper: Private Health Insurance" (Dublin, 1999) at 14, citing OECD, "Economic Survey of Ireland 1997."

covered populations, the presence or absence of a risk adjustment or cross-subsidization mechanism among insurers and between the public and private system, and the extent to which there are existing inefficiencies in the system that private insurance could address (and that could not otherwise be addressed through public financing).

Finally, private insurers may promote innovation in financing and delivery, help offer consumers a broader choice of providers and create incentives for more efficiency in aspects of the system. Innovative methods of provider payment may emanate from the private system. If the public system does not assure consumers true access to the providers of their choice, there also may be a demand for a system of financing that does a better job of assuring consumers access to high quality providers of their choice. This might occur if some providers selectively contract with private insurers.[24]

Yet, despite the possible advantages of private insurance, there are several problems that can arise from its introduction. Adverse selection—the migration of high risk cases to certain insurers or insurance products—represents a significant risk in the sale of private insurance, particularly when the purchase of health insurance is voluntary. Even if predictably high cost cases are spread somewhat evenly among products and insurers, if the risk is segmented among a significant number of insurers and products proportional to the population, the occurrence of a few unanticipated high cost cases can cause an unstable situation for a particular product pool or insurance company. There also are significant incentives for private health insurers to engage in "cream-skimming," the practice of covering low-risk persons and not serving a broad range of risk profiles. This can be done by refusing to offer or renew coverage to high-risk individuals or charging significantly higher rates to such individuals (thereby reducing the likelihood that they will purchase coverage and making them pay a higher premium if they do). Another common method of reducing the risk they cover is to exclude coverage of certain "preexisting conditions." This practice can serve the important purpose of protecting insurers against adverse selection. If misused, however, it can enable insurers to reduce the extent to which they cover medium and higher risk individuals' health needs.

Further, rising medical costs can make it challenging for any private financing sector to maintain affordable rates, just as it poses challenges to a publicly financed system. If rates are permitted to vary based upon risk, affordability can become an acute issue for those with health concerns. Depending on the level of market fragmentation and the size and diversity of risk pools, there is also a risk of "rate spirals." These spirals occur when premiums increase substantially on an annual basis due to an increasingly high risk case load within an insurer's or a product's pool of covered individuals. This risk may be especially high in relatively small marketplaces or in the case of smaller insurers.

Another concern with private insurance relates to the extent to which private insurers use the funds they receive for administrative purposes. Private insurers' expenditures on administrative and non-benefitsrelated costs, such as marketing, sales, agent commissions and profits (in the case of for-profit entities) may be in stark contrast to the percent of premiums paid on administrative costs by social insurance funds.[25]

24. Chollet and Lewis (1997).

25. For example, in the U.S., administrative costs for the Medicare program (a program for the elderly and certain disabled individuals), as a proportion of overall expenditures, was 2.66% in 1997. In contrast, the administrative and non-benefits related costs associated with private policies in the U.S. are reported to be much higher (Braden et al., 1998).

Informing consumers can also be a challenging process, particularly within a complex private health care insurance marketplace.[26] The ability of insurers to offer many different products may increase choice and benefit competition. However, in the absence of standardization of policies, and even in its presence in some cases, consumers may purchase duplicative coverage.[27] Meaningful information disclosure and dissemination can be a challenging but important piece of a successful private health coverage marketplace.

Many of the risks and disadvantage of private insurance can be addressed, at least to some extent, through the imposition of appropriate, enforceable and enforced regulatory requirements. While a detailed and exhaustive discussion of regulatory structures and options are beyond the scope of this paper, it is useful to list some of the essential elements of such a regulatory system.

Policymakers should encourage the largest possible pooling arrangements, bringing together individuals of diverse risks.[28] Requiring insurers to accept all applicants can be an important way to help address risk fragmentation. On the other hand, in order to help prevent adverse selection against insurers, particularly in a voluntary market, policymakers may want to consider limiting the timeframe during which insurers must accept applicants, such as through the use of an "open enrollment" period. Furthermore, limits on exclusions based on preexisting conditions, particularly if coupled with incentives for people to maintain continuous coverage, can help promote the appropriate use of exclusions to prevent adverse selection, while at the same time preventing their abuse. It also can help promote portability among insurance products. Requirements relating to the renewability of coverage can also help assure that consumers are afforded the ability to continue coverage after they become sick.

Affordability of coverage is one of the more challenging issues for both public and private financing mechanisms. Rating restrictions that prohibit or restrict the use of risk factors in the calculation of premium charges can help equalize the costs across the system. However, these mechanisms may result in premiums that discourage purchases by the young and healthy, in which case the governments may need to examine creative methods of risk equalization or other ways to encourage risk distribution. If policymakers wish to address some of the inequities that arise between high and low-income individuals, they may want to consider some method of cross-subsidization based on income. This could include direct subsidies to help lower income individuals and families pay for coverage. Alternatively, the use of a percentage payroll tax may also help cross-subsidization, as may the use of general revenues.[29]

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26. The Rocard report noted that medical insurance products are complicated and, notwithstanding the regulations covering contract terms, individual consumers are unlikely to find health insurance policies easy to grasp. It also noted that coverage under policies are not identical and therefore make it difficult for those outside the industry to compare policies in terms of value for money.

27. This was the case in the U.S. even after standard packages for certain Medicare supplemental coverage was developed.

28. World Health Report (2000): Health Systems: Improving Performance (Geneva, Switzerland: 2000).

29. Chile uses a payroll tax to help promote cross-subsidization among incomes and also includes significant resources from general taxation in funding its social insurance fund. However, membership in the private funds is still skewed towards those with higher incomes.

As noted above, the extent to which consumers can compare plans is an important piece of a competitive market. If they are unable to compare the value of packages by readily comparing benefits and costs, it may undermine market forces and also result in the purchase of inappropriate coverage. Policymakers may want to ensure that certain aspects of the plan and its operation are disclosed in the coverage contract. They also may want to help ensure that the information is presented in a readily understood, and if possible, comparable fashion.

Requirements relating to the expertise required of those who make decisions about access to care on behalf of a private plan may help address some concerns that arise from plan access restrictions. Additional protections may include requirements that certain decisions relating to access to appropriate care ("utilization review" decisions) are made within a certain time period and that this time period is escalated in the case of emergencies.

The establishment of mechanisms for consumers to complain about and appeal insurer decisions—both regarding claims payment and access to care—can help promote confidence in the private system. The establishment of such procedures internal to the plan can be very useful and regulatory standards for such procedures may help assure that issues are resolved within a reasonable timeframe.

Ideally, the government should devote resources and technical expertise to assuring that insurance companies are in a financial position to deliver on their promises. In the absence of these requirements, there is significant risk of financial trouble, resulting in insurers' or providers failing to receive the reimbursement they were guaranteed in their coverage contract. A government also may want to develop a safety net mechanism to protect insurers in such a case, yet this might require the allocation of significant resources to a backup or "guaranty" fund. Governments should examine the financial standards applicable to other types of insurance and ascertain when these might appropriately be applied to health insurance products. It likely would make sense for the relevant government agency to coordinate or utilize existing regulatory expertise in the area of financial standards. Regular reporting requirements, and systems to analyze company financial data and indicate when companies are in trouble, can help avert the hardship of insolvencies. However, these types of reporting requirements can require the development and maintenance of significant expertise at the regulatory level and should not be underestimated.

While an extensive treatment of private health insurance is beyond the scope of this paper, it is important to emphasize that private insurance can have a significant impact on an overall national system of health financing and delivery. The potential for significant impact—both good and bad—underscores the need for coordinated rules and structures governing both public and private financing.[30] It is also important to keep in mind the potential impact of private financing on the overall costs of a country's health care system.

30. The World Health Report (2000) noted the contradictory incentives of private insurance and social insurance. "The social security and risk-related private insurance approaches are contradictory, and their coexistence creates different incentives for consumers. All consumers whose risk category is such that private insurance would charge them less than the amount they would have to pay under social insurance have the incentive to avoid contributing to social insurance and use private insurance if they are allowed to. High-risk people, however, have the incentive to contribute to social security, loading it with high-risk members and increasing the per capita cost of services for members of the pool." World Health Report 2000 (Geneva, Switzerland: World Health Organization) at 109.

If the private insurers' payment structures and arrangements with providers (or absence thereof) result in payment for medical charges with little control over the amount of spending, it can result in runaway spending and impact nationwide spending patterns.[31] In addition, since private insurance is not inherently accountable to government and national objectives, "external incentives and regulation are needed to make sure that benefit packages and insurance practices are coherent with national priorities and policies regarding health, financial fairness and responsiveness."[32]

Greater Individual Responsibility in Managing Own Health

To a great extent, demand for healthcare is controlled by the individual consumer. The key to containing excessive and unnecessary demand for health services lies in making individuals and families sensitive to the costs of additional health spending, while still limiting each family's maximum outlays to affordable levels. This was the logic behind the introduction of patient co-payments in the health sector in Slovenia and Slovakia, a move that in both countries resulted in significant savings. Despite the logical appeal of such insurance, it has been politically difficult in countries like the Czech Republic and Poland to formally introduce co-payments as a means of sensitizing individuals and families to the costs of additional health spending.[33]

One real concern with co-payments is that it may impose an additional financial burden on the poor, and dissuade them from seeking healthcare when ill. In Slovakia, for instance, out-of-pocket payments have increased by Sk2.7 billion following the introduction of co-payments, and some of this undoubtedly has come from the pockets of the poor (though survey results show that only 1.5 percent of the population did not seek care because of the co-payments). The adverse equity effects of co-payments can be neutralized to a large extent by exempting the poor and vulnerable from making official co-payments, though it is not easy to set up a system by which the poor and the vulnerable are appropriately identified. The Slovak system managed these equity concerns by giving a monthly grant of Sk50 to individuals (listed by the government to be poor or vulnerable), in order to defray any additional health expenditures because of the co-payments.

In any case, it is important to note that in many countries, patients are already making huge out-ofpocket payments, most of which are of an informal nature (Box 4). These informal payments have had an adverse impact on equity and access, since the poor are unlikely to be able to match the informal payments by the non-poor, and thus would always find themselves at the farthest end of the queue of patients for healthcare. While estimates of informal payments vary tremendously across and within countries, and some countries have better estimates than others, there is a general consensus that widespread

31. Provider-driven cost escalation occurred in the U.S. prior to government regulation in the 1970's and the regulation of the doctorpatient relationship by market forces in the 1980's (Rosenblatt 1999).

32. World Health Report (2000), at 111.

33. Those opposing this move point toward the adverse effects of patient co-payments on the poor, for whom out-of-pocket payments would constitute a greater burden in terms of share of income, and go on to argue that even those who could otherwise afford to make the co-payments would tend to defer treatment until the problem becomes more acute, and perhaps more expensive to treat.

Box 4: Polish Health Service Goes Private

"The Polish healthcare system today is reminiscent of communist times, when commercial stores began to emerge: it appears to be public, but in fact it is private to a large extent," writes the author of an article in Wprost weekly. "The constitution of the Third Republic of Poland copies the communist provision concerning free healthcare. However, nearly all Poles are aware that free medical care in Poland is a fiction. Poles spend more than ZL 51bn on healthcare, over 6 percent of GDP. At least ZL 22bn of the total (43 percent) is spent in private medical centers, or in the form of bribes in public hospitals. Half of the remaining difference (held by the National Health Fund—NFZ) is also privatized in a number of ways. This means that in fact some 70 percent of Polish healthcare services have been privatized. If so, what prevents the Polish healthcare system from being fully privatized? In a poll conducted by the Stefan Batory Foundation, doctors were named the second most corrupt professional group, just after politicians. Thirty-six percent of respondents admitted having offered bribes to medical personnel. Bribes are a form of privatization of healthcare services in Poland. Fortunately, there are also other, more legal ways. Dentistry is nearly fully privatized. At the beginning of the 1990s, 12 percent of Poles had their teeth treated at private dentists; now it is 80 percent. More and more often it is hospitals that are being privatized, surprisingly mainly those situated in small towns. A hospital in Kwidzyn in Poland's northwestern Pomerania region used to be constantly up to its ears in debt. At present, it breaks even, as Zdrowie (health) company. The local authorities are satisfied with the privatization as they receive the hospital's financial statement every month and have control over the money spent. The local authorities managed to pay off a ZL 6m debt and the hospital opened four new wards. A number of other hospitals are planning to be privatized soon. The local authorities of the southern town of Kielce offered hospital personnel a lease on the hospital. Starting in January, they will manage the hospital, while the town will pay its debt. To date, 50 out of 700 Polish hospitals have been transformed into commercial companies. Hospital privatization is underway, though the Act on public support for healthcare services does not assume financial support for privatized medical centers. What is more, the provision granting them the possibility to become commercial companies was removed from the bill. Therefore, hospitals are privatized on the basis of the Healthcare Service Centers Act of 1991, which allows them to function as public or non-public institutions and as commercial companies. Opponents of healthcare privatization say that the process will lead to the closure of expensive, though essential, wards or will augment hospital fees. So far this grim scenario has not materialized though. Privatized medical centers offer a wider range of services to attract patients and increase revenue. The fees are regulated by the market. The hospital in Kwidzyn has opened an expensive emergency unit. In Ozimek in south-western Poland, where the hospital was purchased by EuroMediCare Company (EMC), 90 percent of revenue comes from the contract with NFZ, with 10 percent from diagnostic examinations that patients pay for. Healthcare service privatization has a large group of opponents because it reveals the way money is wasted in this sector. One of the reasons is excess personnel in hospital administration. A greater number of hospitals in Poland could be privatized and thus become more patient-friendly, were it not for a strong lobby of professors and heads of hospital wards, who earn in the shadow zone and block privatization. Hospitals more and more frequently tend to use outsourcing in order to reduce costs . . . In total, firms reduced costs by 20 percent thanks to outsourcing. The question is why Poland sticks to public healthcare, if private services seem beneficial to all?"

Source: Wprost, August 7, 2005.

informal payments in the health sector in many EU8 countries adversely affect utilization of services, and introduce an element of uncertainty in the transaction between the patient and the provider. The pervasiveness of informal payments in health in many EU8 countries has actually become a serious impediment to healthcare reform. Besides contributing to the general environment of corrupt practices and the growth of a parallel healthcare financing system, informal payments introduce perverse incentives in the health system,

and compromise government efforts to improve efficiency, accountability, and equity in the delivery of health services. The non-transparent and discretionary nature of informal payments adversely affect access to healthcare, particularly for the more vulnerable segments of the population who have to pay disproportionately large amounts for health services that are supposed to be available free of charge. The act of asking for and receiving informal payments cannot be entirely pleasant for all providers as well, many of whom are also concerned by the unethical nature of this practice.

In a novel approach to facilitate the inclusion of people into the decision-making process and make them assume greater responsibility for their own health, a group of reformers in the Czech Republic has proposed the integration of social health insurance with Personal Health Accounts, through which people are enabled to become respected partners to health insurers and healthcare providers in a system of social (or publicly funded) health insurance. The Czech proposal views such Personal Health Accounts as a means to include people in the decision process concerning the healthcare system while preserving high solidarity, general accessibility to healthcare, and respecting the limited information patients have concerning their disease and possible available treatments. According to the Czech proposal, the Personal Health Accounts represent a way in which personal preferences can be revealed and people can exercise their freedom of choice.[34]

Reducing Hospital Infrastructure

Almost all the EU8 countries have an excessive supply of health facilities, including hospitals and hospital beds, and almost all have made attempts to consolidate the many hospitals and reduce the number of hospital beds. The approach in most countries, however, has been half-hearted, and the problem of excessive infrastructure remains unsolved. At one level, rationalizing hospital beds is a straightforward exercise, made complicated only by the real and imagined political obstacles that may stand in the way of its execution. However, the fact that some countries have achieved remarkable success holds promise for others who have probably not taken this problem seriously enough.

The successful downsizing of the hospital infrastructure in Estonia is noteworthy, not only for the successful result of the exercise, but also for the scientific elegance and practical simplicity of the approach. In 2000, Estonia developed a Hospital Master Plan to reduce the excess capacity in healthcare supply by setting targets for reducing the number of hospital from 78 to 13 by 2015 (which, following political pressure, was subsequently increased to 21). Capacity requirements were established based on facility optimization and the type of facility (secondary and tertiary) was determined based on the catchment's population. Demographic and epidemiological models were used to

34. Personal Health Accounts, or Medical Savings Accounts as they are also known, are thus individual savings accounts that are restricted to spending on health or medical care. They have generally been introduced: (i) to encourage savings for the expected high costs of medical care in the future, because average income and capability to save for an average person are usually high through working years compared to retirement; (ii) to enlist consumers in controlling costs; and/or (iii) to mobilize additional funds for health systems (Hanvoravongchai 2002).

determine the demand for healthcare, with suitable assumptions about the development of medical technology. Simple criteria were used to determine the location of hospitals by defining a constraint that time taken to reach the hospital should be no more than one hour. And finally, separate estimates were made for elderly and nursing care needs. Based on these criteria, three regional hospitals (tertiary care catchment's populations of 600,000–800,000), four central hospitals (catchment's population of 100,000–150,000), 11 county hospitals (catchment's population of 30,000–50,000) and three local hospitals with smaller catchment areas were identified. By 2001, 41 hospitals and outpatient polyclinics had been merged into six networks, which then restructured service delivery. By 2003, 7 facilities in the network had been closed following managerial decisions. The total number of acute care hospitals was reduced to 50 by 2003, and over 1,500 beds had been closed down. At the same time, the average length of stay in hospitals was reduced from 15.4 days in 1993 to 8.5 in 2002, and is targeted to fall to 4.0 by 2015 for acute care.

In Slovakia, rationalizing the number of hospitals and hospital beds by consolidating hospitals and reconfiguring the mix of hospital beds is a priority item in the ongoing reform program of the Ministry of Health. A detailed assessment of all hospitals has been carried out and a master plan of hospitals is close to finalization. A network of essential hospitals is being determined and will be strengthened during the rationalization process. Hospitals and hospital beds identified as 'excess capacity' in the three big cities of Bratislava, Banska-Bystrica and Kosice are included in the first round of the consolidation process. The Ministry of Health has also established a Hospital Restructuring Fund to support specific capital investment in the hospital sector in the near future.[35] Since the hospital restructuring program is focusing on the three big cities of Bratislava, Banska-Bystrica and Kosice where over-capacity is most severe, the rationalization of hospital facilities is not likely to have a negative impact on access to healthcare services.

However, the Ministry of Health recognizes that the rationalization of hospital services in rural areas will need to be conducted with caution. This is particularly true for mountainous areas, where travel time to the nearest facility might be severely extended in case of a hospital closure. These facilities are proposed to be included in the network of essential hospitals and protected from closure.

35. In addition, steps are being taken to corporatize the public hospitals and make them fully autonomous in their functions. Corporate hospitals will not have an implicit government guarantee, which will send an important signal to suppliers that they cannot simply continue to lend to hospitals. This is expected to create hard budget constraints for hospitals and compel them to accord high priority to efficiency. Corporate hospitals will be allowed to retain savings and keep revenues, which they may then re-invest in the hospital operation, thus generating additional incentives for hospitals to change their input mix and align inputs more closely with outputs. For hospitals that continue to build arrears, there will be the prospect of bankruptcy or the possibility of selected bailouts by the government or commercial banks in exchange for a rationalization plan. Since the hospital restructuring program is focusing on the three big cities of Bratislava, Banska-Bystrica and Kosice where over-capacity is most severe, the rationalization of hospital facilities is not likely to have a negative impact on access to healthcare services. However, the Ministry of Health recognizes that the rationalization of hospital services in rural areas will need to be conducted with caution. This is particularly true for mountainous areas, where travel time to the nearest facility might be severely extended in case of a hospital closure. These facilities are proposed to be included in the network of essential hospitals and protected from closure.

CHAPTER 7

Conclusions

The continuing indebtedness in the health systems of the EU8 countries is symptomatic of the deeprooted structural problems involving all aspects of health production, delivery and finance, and indicative of the underlying faults in the ways that the incentive systems are organized in the health sector. Piecemeal solutions may provide temporary relief but are unlikely to resolve the more fundamental issues in the health sector, and will almost never be sustainable beyond the immediate short term. The challenge that the EU8 countries face, therefore, is that of carrying out comprehensive reforms, but in a way in which the proximate problems are prioritized to yield quick and immediate results.

Managing pharmaceutical expenditures will be the single-biggest challenge that the health reform measures would need to address. As discussed above, while it is no doubt important to closely monitor pharmaceutical prices, the key really is to manage consumption of pharmaceuticals. This would require a multi-faceted approach, one that involves the payers, doctors, pharmacists and patients, and harmonizes both demand-side measures—in the form of greater cost—sharing with patients—and supplyside measures—in the form of managing physician prescription behavior. Several countries have had good experience with demand-side measures, and there is increase evidence to suggest that measures that increase patient responsibility for own health would have to be at the forefront of any health system reform package whose objective is to ensure financial sustainability. Such measures would typically take the form of patient copayments at the point of service, which would have to be designed in way that make individuals and

families sensitive to the costs of health spending but limit each family's maximum to affordable levels.[36]

Another key area of health sector reform necessary in almost all the EU8 countries relates to the management of the excessive supply of health facilities. While many countries have started the process of consolidation of hospitals and reducing hospital beds, a lot remains to be done to address the problem of excessive infrastructure and free up the scarce fiscal space for quality-enhancing initiatives. There is little doubt that the introduction of patient copayments as well as rationalization of hospitals and hospital beds can be politically contentious issues; but there is even little doubt that the costs of inaction on these fronts are very heavy and perhaps unsustainable in any health system.

It is worth reiterating that at least three of the eight countries in the region found effective and sustainable solutions by successfully applying simple rules of governance and management to the complex set of problems in the health sector. These countries—Estonia, Slovenia, and Latvia-are exposed to the same set of financial pressures as the other countries in the region, namely the pressures from rising pharmaceutical costs, extensive hospital infrastructure, and perpetual demand for higher salaries in the health sector, but have responded strongly by maintaining equilibrium through good governance, strict adherence to the rules of financial discipline, and by simply not spending what they do not have. The single-biggest lesson from the experiences of these countries is that there is no substitute for fiscal discipline, and that irrespective of the nature and extent of the systemic reform measures, the best and certain way of not running up debts is to stay within the resource envelope.

The EU8 countries may gain some comfort from the fact that other countries were in a similar state when joining the European Union, but found ways of managing their budgets without bringing about huge destabilizing changes. Consider the example of Austria, which acceded to the European Union in 1995. Constrained by the SGP, Austria placed the reduction of public spending at the top of its political agenda and began focusing on reducing government consumption, controlling healthcare costs, reforming the public pension system, and controlling subsidies. Austria also embarked on a major social sector reform, which led to the freezing of public expenditures on personnel costs, and stabilization of operating costs, social spending and subsidies. In the health sector, spending decreased from 5.9 percent of GDP in 1994 to 5.4 percent in 2003. While total health expenditures also declined slightly during the same period, the share of public spending declined from 74.4 percent in 1993 to 69 percent in 2003.[37]

36. One result of the introduction of co-payments in Slovakia, for instance, is that in the two years since co-payments were introduced, Slovaks have paid Sk2.7 billion to physicians, pharmacies and hospitals, but survey results show that only about 1.5 percent of the population was affected adversely enough by the co-payments to not seek care when ill. Moreover, equity concerns following the introduction of co-payments in Slovakia have been managed by giving a monthly grant of Sk50 to individuals (listed by the government to be poor or vulnerable), in order to defray any additional health expenditures because of the co-payments.

37. To be sure, the Austrian reforms did have an impact on equity, particularly since the reforms were accompanied by an increasing share of private expenditures in financing total health spending. In a study of household survey data from Canada, Spain, the UK, Germany, Austria and the Netherlands, Van Doorslaer and Masseria (2004) found that the mean number for total physician visits (GPs and specialists) was distributed according to the need for such visits in all selected countries with the exception of Austria, where there was a significant pro-rich inequity in total physician visits. However, the findings reveal that the rich have a significantly higher number of specialist visits per year than the poor in all countries, with the exception of the UK and Netherlands, and to this extent these results of Austria are not so striking.

Fifteen years ago, the EU8 countries went through the first phase of their transition from centrallyplanned economies to market-based ones, and that process was undoubtedly painful for all countries, but rewarding overall. As far as the health sector was concerned, the reforms brought about fundamental changes in financing, delivery and organization, but maintained the legacy of state paternalism insofar as the comprehensiveness of the basic benefits package—which included, and continues to include, many nonessential and ineffective interventions—was concerned. A decade-and-a-half later, the EU8 countries find themselves yet again at the crossroads of difficult decision-making, but this time around they have to give back some of the gains in the interest of fiscal stability. As before, the process will be painful, but as before, the long-term rewards promise to be plentiful.

References

Australian Productivity Commission. 1996. "Private Health Insurance." December Discussion Draft.

BAG (Bundesamt fuer Gesundheit). 2005. "Statistik der obligatorischen Krankenversicherung." Bern, Switzerland. http://www.bag.admin.ch/kv/statistik/d/2005/KV_2003_DE_v030205.pdf

Banta, D., and others. 2001. "Health Policy, Health Technology Assessment, and Screening in Europe." *International Journal of Technology Assessment in Health Care* 17(3): 409–17.

Boccuti, C. and M. Moon. 2003. "Comparing Medicare and private insurers: growth rates in spending over three decades." *Health Affairs* 22(2):230–37.

Braden, B.R., C.A. Cowan, H.C. Lazenby, and A.B. Martin. 1998. "National Health Expenditures, 1997." *Health Care Financing Review* 20(1).

Cabe, Inga, and Mukesh Chawla. 2005. "Latvia: Fiscal Reform Options in the Health Sector." Background paper prepared for The World Bank, "Selected Issues in Fiscal Reform in Central Europe and the Baltic Countries 2005." Washington, D.C.

Chakraborty, Sarbani, and Jan Bultman. 2005. "Slovenia: Fiscal Reform Options in the Health Sector." Background paper prepared for The World Bank, "Selected Issues in Fiscal Reform in Central Europe and the Baltic Countries 2005." Washington, D.C.

Chalkley, M., and J. Malcolmson. 2000. "Government purchasing of health services." In A. Culyer and J. Newhouse, *Handbook of Health Economics*. Elsevier.

Chawla, Mukesh, and Marzena Kulis. 2005. "Poland: Fiscal Reform Options in the Health Sector." Background paper prepared for The World Bank, "Selected Issues in Fiscal Reform in Central Europe and the Baltic Countries 2005." Washington, D.C.

Chawla, Mukesh, and Peter Pazitny. 2005a. "Czech Republic: Fiscal Reform Options in the Health Sector." Background paper prepared for The World Bank, "Selected Issues in Fiscal Reform in Central Europe and the Baltic Countries 2005." Washington, D.C.

———. 2005b. "Hungary: Fiscal Reform Options in the Health Sector." Background paper prepared for The World Bank, "Selected Issues in Fiscal Reform in Central Europe and the Baltic Countries 2005." Washington, D.C.

Chollet, Deborah J., and Maureen Lewis. 1997. "Private Insurance: Principles and Practice." In "Innovations in Health Care Financing: Proceedings of a World Bank Conference, March 10–11, 1997." World Bank Discussion Paper No. 365.

Christensen, Sandra, and Judy Shinogle. 1997 "Effects of Supplemental Coverage on Use of Services by Medicare Enrollees." *Health Care Financing Review* 19(1).

Colombo, F. and N. Tapay. 2005. *Private Health Insurance in Countries: The Benefits and Costs for Individuals and Health Systems.* OECD Health Working Papers No. 15. http://www.oecd.org/dataoecd/34/56/33698043.pdf

Couffinhal, Agnes, and Joseph Kutzin. 2005. *Health Financing in Estonia: Challenges and Recommendations.* WHO Regional Office for Europe, Copenhagen.

Cutler D. 1994. "A Guide to Health Care Reform." *Journal of Economic Perspectives* 8(3)13–29.

Docteur E., and H. Oxley. 2003. *Health-Care Systems: Lessons from the Reform Experience.* OECD Health Working Papers No. 9.

Dor, A., and D.E. Farley. 1996. "Payment source and the cost of hospital care: Evidence from a multiproduct cost function with multiple payers." *Journal of Health Economics* 15:1–21.

Ellis, R. 1998. "Creaming, skimping and dumping: provider competition on the intensive and extensive margins." *Journal of Health Economics* 17:537–55.

European Observatory on Health Systems and Policies. 2000. *Health care systems in transition: Spain.* WHO European Centre for Health Policy, Belgium.

———. 2001. *Health care systems in transition: Austria*. WHO European Centre for Health Policy, Belgium.

———. 2004a. *Health care systems in transition: Estonia.* WHO European Centre for Health Policy, Belgium.

———. 2004b. *Health care systems in transition: France.* WHO European Centre for Health Policy, Belgium.

———. 2004c. *Health care systems in transition: Germany.* WHO European Centre for Health Policy, Belgium.

———. 2004d. *Health care systems in transition: Netherlands.* WHO European Centre for Health Policy, Belgium.

Felder, Stefan. 2005. "Increased Life Expectancy and Health Care Expenditures: A New Calculation Using the Costs of Dying." Paper presented at the 5th Congress of International Health Economics Association, Barcelona, July 13.

Fortin, G. 2004. "SHA-Based Health Accounts in Thirteen OECD Countries: Canada National Health Accounts 1999." OECD Health Technical Papers No. 2. http://www.oecd.org/dataoecd/33/19/33733723.pdf

Government of Poland. 2004. *Finansowanie ochrony zdrowia w Polsce—Zielona Księga.* Ministry of Health, Warsaw.

Graham, Martin. 2000. "Health Insurance Regulation in the UK." Lecture in Oxford Policy Institute (OPI) Seminar Series "Issues in Health Sector Regulation." Trinity Term 2000, Week 3.

Hanvoravongchai, Piya. 2002. *Medical Saving Accounts—Lessons Learned from International Experience.* World Health Organization Discussion Paper No. 52.

Hofmarcher, M., and others. 2005. "Die Reform des Gesundheitswesens in der Slowakei: Pflichtprogramm oder Kür?" In Health System Watch. Hauptverband der österreichischen Sozialversicherungsträger, http://www.ihs.ac.at/departments/fin/HealthEcon/watch/hsw05_1d.pdf

Ireland, Department of Health and Children. 1999. *White Paper: Private Health Insurance.* Dublin.

Jemiai, N., S. Thomson, and E. Mossialos. 2004. "An overview of cost sharing for health services in the European Union." *Euro Observer* 6(3).

Katz, S.J., L.F. McMahon, and W.G. Manning. 1996. "Comparing the Use of Diagnostic Tests in Canadian and U.S. Hospitals." *Medical Care* 34(2):117–25.

Kumpiene, Janine. 2005. "Lithuania: Fiscal Reform Options in the Health Sector." Background paper prepared for The World Bank, "Selected Issues in Fiscal Reform in Central Europe and the Baltic Countries 2005." Washington, D.C.

Leu, R., and M. Schellhorn. 2004. "The evolution of income-related inequalities in health care utilization in Switzerland over time." Diskussionsschriften. Universitaet Bern. www.vwi.unibe.ch

Manning, W.G., J.P. Newhouse, N. Duan, E.B. Keeler, A. Leibowitz, and M.S. Marquis. 1987. "Health insurance and the demand for medical care: evidence from a randomized experiment." *The American Review* 77(3):251–77.

Mossialos, E., A. Dixon, J. Figueras, and J. Kutzin, eds. 2002. "Funding health care: options for Europe." European Observatory on Health Care Systems Series. Buckingham, UK: Open University Press. http://www.euro.who.int/document/obs/Fhcpolbrief4.pdf

Mossialos, Elias. and J. Le Grand, eds. 1999. *Health Care and Cost Containment in the European Union.* Ashgate.

Mossialos, E., and S. Thomson. 2004. *Voluntary health insurance in the European Union.* The European Observatory on Health Systems and Policies. Copenhagen.

Newhouse, J.P. 1977. "Medical care expenditure: a cross-national survey." *Journal of Human Resources* 12:115–25.

———. 1992. "Medical care Cost Increases: How Much Welfare Loss?" *Journal of Economic Perspectives* 6(Summer):3–21.

———. 1996. "Reimbursing health plans and health providers: efficiency in production versus selection." *Journal of Economic Literature* 34:1236–63.

OBSAN. 2004. "Entwicklung der Gesundheitskosten in der Grundversicherung von 1999–2003. obsan fact sheet." Swiss Health Observatory. Nr. 1. www.obsan.ch

OECD. 1997. *Economic Survey of Ireland 1997.*

———. 1999. *Challenges for Fiscal and Monetary Policy in the Euro Area.* Economic Outlook No. 64.

———. 2000a. *Competition and Regulation Issues in the Pharmaceutical Industry.* DAFFE/CLP 29.

———. 2000b. "A System of Health Accounts" (SHA): www.oecd.org/EN/document/0,,EN-document-684-5-no-27-24508-0,00.html

———. 2003. "Health at a Glance." OECD Indicators 2003. Paris, France. http://www.oecd.org/searchResult/0,2665,en_2649_201185_1_1_1_1_1,00.html

———. 2004. "In Figures and Country HIT Reports." OECD Health Data 2004. http://www.oecd.org/document/16/0,2340,en_2825_495642_2085200_1_1_1_1,00.html

Orosz, E., and D. Morgan. 2004. *SHA-Based National Health Accounts in Thirteen OECD Countries: A Comparative Analysis.* OECD Health Working Papers No. 16.

Oxley H., M. MacFarlan. 1995. *How can OECD countries achieve their health-care goals while keeping rising expenditure under control?* OECD Economics Studies No. 24.

Panopoulou, Panagiota, and Mukesh Chawla. 2005. "Slovak Republic: Fiscal Reform Options in the Health Sector." Background paper prepared for The World Bank, "Selected Issues in Fiscal Reform in Central Europe and the Baltic Countries 2005." Washington, D.C.

Rocard, M. 2000. "Report on supplementary health insurance," European Parliament, Committee on Employment and Social Affairs, October 4th, (A5-0266/2000).

Rossel R., and Y. Gerber. 2004. *SHA-Based Health Accounts In Thirteen OECD Countries Country Studies: Switzerland National Health Accounts 2001.* OECD Health Technical Papers No. 12.

Rosenblatt, Law, and Rosenbaum. 1999. "Law and The American Health Care System." In *Professional Autonomy, Equality, and Market Competition With Respect to Health Care Financing.*

Saltman R., and H. Dubois. 2005. "Individual incentive schemes in social health insurance systems." *Eurohealth* 10(2):21–25.

Saltman R., and J. Figueras. 1998. "Analyzing the evidence on European health care reforms." *Health Affairs* 17(2):85–108.

Saltman, R., and others, eds. 2002. "Regulating entrepreneurial behaviour in European health care systems." http://www.euro.who.int/observatory

———. 2004. "Social health insurance systems in western Europe." http://www.euro.who.int/observatory

Statistik Austria. 2005. "Jahrbuch der Gesundheitsstatistik. Bundesanstalt Statistik Oesterreich." http://www.statistik.at/pub/neuerscheinungen/2005/gesundheit2003.pdf

Tapay, Nicole. 2001. "Issues Surrounding the Introduction of Private Health Insurance in Poland." Background paper prepared for The World Bank, "Evaluating the Impact of Health Care Reforms in Poland: The Challenges of Systemic Changes in a Transforing Environment." Washington, D.C.

The World Bank. 2000. "Chile: Health Insurance Issues, Old Age and Catastrophic Health Costs." Human and Social Development Group, Argentina, Chile and Uruguay Country Management Unit, Latin America and the Caribbean Region, Washington, D.C.

Thomson, S., and E. Mossialos. 2004 "Private health insurance and access to health care in the European Union." *Euro Observer* 6(1).

UK National Statistics. 2003. *Total Health Expenditures.*

United Nations. 2003. *World Urbanization Prospects (2003 Revision).* Population Division of the Department of Economic and Social Affairs.

———. 2004. *World Population Prospects (2004 Revision).* Population Division of the Department of Economic and Social Affairs.

Van Doorslaer E., and A.M. Jones. 2004. "Income-related inequality in health and health care in the European Union." *Health Economics* 13:605–8.

Van Doorslaer, E., X. Koolman, and A.M. Jones. 2003. "Explaining Income-related Inequalities in HealthCare Utilisation in Europe: a decomposition approach." Ecuity II Project Working Paper No. 5.

Van Doorslaer E., and C. Masseria. 2004. *Income-Related Inequality in the Use of Medical Care in 21 OECD Countries.* OECD Health Working Papers No. 14.

Van Doorslaer, E., and others. 1999. "The redistributive effect of health care finance in twelve OECD countries." *Journal of Health Economics* (18):291–313.

Wagstaff A., and E. van Doorslaer. 1993. "Equity in the delivery of health care: methods and findings" In Eddy Van Doorslaer, Adam Wagstaff, and Frans Rutten, eds. *Equity in the Financing and Delivery of Health Care: An International Perspective.* Oxford: Oxford University Press.

Wagstaff A., and others. 1999. "Equity in the finance of health care: some further international comparisons." *Journal of Health Economics*; (18):263–90.

Weisbrod, B.A. 1991. "The Health Care Quadrilemma: An Essay on Technological Change, Insurance, Quality of Care, and Cost Containment." *Journal of Economic Literature* 29(2):523–52.

Wild, C. 2004. "Health Technology Assessment in Austria." *International Journal of Technology Assessment in Health Care* 16(2):303.

World Health Report. 2000. *Health Systems: Improving Performance.* Geneva, Switzerland.

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