ADVANCING ECONOMIC GROWTH: INVESTING IN HEALTH

Rifat Atun and Susan Fitzpatrick



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ADVANCING ECONOMIC GROWTH: INVESTING IN HEALTH

A summary of the issues discussed at a Chatham House conference held on 22–23 June 2005

Rifat A. Atun and Susan Fitzpatrick



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ISBN 1 86203 171 1

Cover design and typesetting by Matt Link Printed by 4print

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Acknowledgments

Chatham House would like to thank its partner, the Tanaka Business School, Imperial College London, for its support and enthusiasm in the preparation of the conference. The conference would not have been possible without the generous support of the Pharmaceutical Research and Manufacturers of America (PhRMA).

Many people contributed to the success of the conference and this report. Rifat Atun, Zuzana Feachem, Benjamin Gannon, Shelagh Kerr, Margaret May, Susanne Ollmann and Georgina Wright steered the efforts of many towards a successful conclusion. The conference benefited greatly from ideas and substantive input from a broad range of individuals and particularly from:

Leszek Balcerowicz, National Bank of Poland; Vladimir Bezdek, Czech National Bank; Edward Bramley-Harker, NERA Economic Consulting; Gediminas Cerniauskas, Health Economics Centre, Lithuania; Marc Champion, Wall Street Journal; Niall Dickson, King's Fund, UK; Radu Dop, Romanian Medical Chamber; Nicholas Eberstadt, American Enterprise Institute; Istvan Eger, Hungarian Medical Chamber; Armin Fidler, The World Bank; Chris Giles, Financial Times; Peter Gonda, Conservative Institute of M R Stefanik, Slovak Republic; Vlad Iliescu, Ministry of Health, Romania; Duncan Innes, BUPA; Nicolae Ivan, Ministry of Public Finance, Romania; Panos Kanavos, London School of Economics and Political Science; Sandor Kerpel-Fronius, Semmelweis University, Hungary; Julian Le Grand, Office of the British Prime Minister; Jean Lemierre, European Bank for Reconstruction and Development; Bernard Merkel, European Commission; Pradeep Mitra, The World Bank; Boris Petrov, Ministry of Health, Republic of Bulgaria; David Rath, Czech Medical Chamber; Laila Ruskule, Ministry of Health, Latvia; Andrzej Rys, Jagiellonian University, Poland; Michael Seeley, PhRMA; Paola Subacchi, Chatham House; Pawel Sztwiertnia, Ministry of Health, Poland; Mihaly Varga, Parliament of Hungary; Cristian Vladescu, National Health Insurance Agency of Romania; Varujan Vosganian, Senate of Romania; Stefan Wagstyl, Financial Times; Stephen Wright, European **Investment Bank**

Thanks go to the Tanaka Business School's Centre for Health Management team, particularly to Ipek Gurol-Urganci, Namrata Syngal, Hyder Yusufzai and Sabin Masoud for their help with the group work and note-taking during the conference, and Anita Mohan for transcribing the proceedings.

Above all, appreciation goes to the participants at the conference who brought their expertise to the table and debated the possible solutions to the budgetary crises of the new EU member states' health sectors.

Executive Summary

The traditional view of the relationship between economic growth and health had emphasized the impact of economic growth on improved health. However, from the beginning of the 'human capital' revolution in economics,¹ there was a conceptual base that health is a core contributor to an individual's human capital, while health care is clearly a desired consumption good. Now, there is strong empirical evidence from both developing and developed countries which demonstrates the two-way relationship: that economic growth improves health but improved health also significantly enhances economic productivity and growth. In fact, it is not an exaggeration to say that no society has seen sustained economic progress when it has neglected investment in its people's education *and* health.

In their 2001 report, the World Health Organization Commission on Macroeconomics and Health² made this strong economic case for investing in health, which was seen as a necessary step to achieve sustained productivity and economic growth. In the European context, as part of its Lisbon Agenda, the European Union has set itself the objective of becoming the leading knowledge-based economy. To achieve this objective Europe will need to invest in human capital formation and innovation.

Thus, to develop and sustain human capital and with it economic progress, individuals and governments need to invest in health: the health sector is *not* just a cost centre. In particular, the new member states and other countries in Central and Eastern Europe (CEE) will need to substantially invest in health if they are to achieve sustained productivity and economic growth. These countries face a number of significant challenges related to health:

(i) The transition has adversely affected health outcomes, with striking falls in some of these countries in life expectancy, particularly of males, owing to the adverse effects of the transition and generally poor lifestyles.³

(ii) There has been a spectacular decline in the birth rate to below replacement level. As a result most of these countries now face negative population growth and a rapid ageing of the population, with the consequent epidemiological transition. If the chronic illnesses that accompany ageing are not diagnosed early and managed appropriately with innovative drugs and care delivery models, the health and economic burden will be at levels that cannot be supported by most of the CEE countries.

(iii) These countries are experiencing a collision of HIV and multiple-drug-resistant tuberculosis epidemics.⁴

(iv) The demand patterns are changing – with increasing expectations from better-informed citizens who insist on more personal and responsive services.

However, the supply side, namely, the health systems in the CEE countries, is not well positioned to meet the changes on the demand side. This is because of inappropriate and unwieldy infrastructure which needs restructuring and capital investment for renewal, a long history of inadequate investment in the health sector – especially in new and innovative technologies to improve health outcomes – and outdated resource allocation mechanisms, which are inefficient and lead to inappropriate use of scarce resources. Hence, in these countries, while there is a need in the first instance to stabilize expenditure on health systems – which in some cases is barely under control – this should not merely lead to suppression of spending but rather result in a focused new investment drive.

It is still a common view in CEE policy circles that health expenditure is a cost, bringing no economic benefits. This is in strong contrast to the view shared by many policy-makers in western Europe that health expenditure also constitutes an investment in a critical sector of the EU economy, bringing benefits in both the short and the long term through enhanced productivity, economic growth, trade expansion and increased competitiveness. In spite of the empirical evidence, which demonstrates that investment in health enhances productivity and sustainable economic growth, and the spectacular changes on the demand side, in most CEE countries health expenditures remain well below the EU average expenditure of 8–10 per cent of GDP. At best, government efforts to increase health expenditures from public sources remain weak. Further, there is limited exploration of alternative sources of investment from the private sector. Many of the new member states from CEE have missed the medium-term fiscal targets set as part of the pre-accession programmes. Like other CEE countries, these new member states face increasing social-sector expenditures, especially for pensions and disability payments, which pose a significant burden on the public-sector budgets. It is not clear whether some of the countries will be able to meet these long-term liabilities. Therefore, CEE countries face a difficult task of containing social-sector expenditures to achieve balanced public-sector budgets, while at the same time investing in health, to realize the benefits of enhanced economic productivity and growth.

This conference was held to enable policy-makers from CEE countries to share their experience on the challenges faced by health systems, to be better informed about the evidence which demonstrates the benefits of investing in health and to challenge traditionally held views in CEE countries that health expenditure is just a cost and an economic burden. The conference also explored options and mechanisms through which increased investment in health could be made and how existing resources could be better invested to produce the greatest benefit. A consensus emerged that governments are not doing enough to increase productive investment in health. In countries where there is willingness to invest, the tendency is for policies to be fragmented, execution poor, and interventions focused on addressing short-term problems rather than long-term challenges.

The conference concluded that governments in CEE, in particular the ministries of finance, economy and health, need to be more proactive and strategic in their approaches to investing in the health sector. There is a clear need to increase investment in health but also for better allocation of existing resources, which should be targeted to increase access to cost-effective and innovative technologies. There is also a need to explore novel mechanisms, such as public-private partnerships, to improve efficiency and enhance funding flows, and also to replace outmoded health services with care delivery models that are responsive to user needs. Evidence-based approaches are required to transform archaic health systems which are not equipped to meet changing needs and demands.

The time has come for a paradigm shift in our thinking: to consider health expenditures not as a cost but as an investment. But changes in thinking must be accompanied by action. Hence there is a need for a visible leadership role to transform health systems if CEE countries are to overcome health challenges to attain sustainable productivity and economic growth.

1 Introduction

As early as 1972, Michael Grossman, in his seminal work The Demand for Health: A Theoretical and Empirical Investigation, made the case for health as human capital. Theodore W. Schultz, the Nobel Laureate for economics in 1979 and another of the human capital pioneers, argued that population guality was the 'decisive factor' of production and emphasized the merits of investing in education and health.⁵ In 1993, more than a decade later, another Nobel Laureate for Economics, Robert W. Fogel, estimated that improvements in health and nutrition contributed to about one-third of income growth in Britain between 1790 and 1980.6 Although the impact of human capital formation on economic productivity has been well demonstrated, earlier empirical work attributed much of the human capital development to educational attainment. However, since the early 1990s health – as measured by life expectancy and adult survival rates - has been shown to be just as important as educational attainment in the development of human capital and hence economic productivity. Empirical studies which explored the relationship between cross-country growth estimations and health in almost all cases have demonstrated a positive and significant impact of improved health on economic growth.7

Prior to these seminal studies, the empirical and theoretical work which analysed the relationship between economic growth and health had emphasized the impact of economic growth on improved health. However, there is now strong empirical evidence from developing and developed countries which demonstrates a two-way relationship: that economic growth improves health but improved health also significantly enhances economic productivity and growth.

There are economic and welfare benefits of increased *investment* in health. This is guite apart from the fact that individuals invariably demand to consume improved healthcare services. Improved health supports labour productivity by augmenting life expectancy, and it encourages savings and private investment in education, as with better health there is a greater possibility of benefiting from these investments. Hence, through appropriate investment, health-led economic development is possible. And at the crudest level, sick people are unproductive and there are substantial costs related to sickness, which are burdensome to households and countries. The two-way relationship between economic growth and health is important, as increased life expectancy and adult survival rates exercise a positive impact on human capital formation and hence on economic growth. In turn, sustained growth rates allow for better health conditions. In fact, in their 2001 report, the World Health Organization Commission on Macroeconomics and Health⁸ made a strong economic case for investing in health. Although this has helped raise the profile of health in the eyes of governments, most countries still consider the funds allocated to health to be costs rather than investments that in the long run will lead to increased productivity and economic growth. This is of particular importance to knowledge-based economies, such as those in Europe, that rely on innovation, human and intellectual capital. In the EU context, the Lisbon Agenda, agreed by the member states, has identified the objective of becoming the most competitive knowledge-based economy in the world by 2010.9 This objective can only be achieved through investment in human capital and innovation.

Many European countries are boosting investment in health by increasing the proportion of gross domestic product (GDP) spent on their healthcare systems. This is especially true of the EU-15. However, despite the growing body of evidence on the benefits of investing in health, in most Central and Eastern European (CEE) countries expenditure on health care remains low – well below the average expenditure of 9–10 per cent of GDP in the EU-15. It is still a common view in policy circles in the CEE

countries, in particular within the ministries of finance (the budget holders) and among parliamentarians/legislators (the budget allocators) that health expenditure is a cost: increased expenditure on the health system tends to be seen as profligacy, bringing no economic benefits in return. This is in strong contrast to the view shared by many policy-makers in western Europe that health expenditure also constitutes an investment in a critical sector of the EU economy: an investment which brings benefits in both the short and the long term through enhanced productivity, economic growth, trade expansion (innovation, for example) and increased competitiveness.

In Europe, and especially in CEE countries, a paradigm shift is needed in thinking with regard to health and health expenditures. Considering the significant contribution improved health makes to economic productivity and growth, governments should adopt a long-term perspective and think of health expenditures as an investment and not as a cost, but also consider how these investments can be better focused.

This conference was held to enable policy-makers from CEE countries to share experience on the challenges faced by health systems and to challenge the traditional view that health expenditure is just a cost and an economic burden. It also explored options and mechanisms through which increased investment in health could be made and how existing resources could be better invested to produce the greatest benefit.

2 Overview of the Conference

The growth of the Central and East European economies hinges on many factors and is influenced by, among others, political, economic, demographic and social changes. In particular sustained economic growth will depend on effective management of public-sector budgets and investments in the social sectors to develop a healthy and productive workforce. However, the health status of Central and Eastern Europeans is worse than that for the EU-15 and improving the health of the population, especially that of males, will be challenging (see Table 1).

Table 1: Health outcomes in EU-15 and new member states in central and eastern Europe

		Life expectancy at birth (male)	Life expectancy at birth (female)	Life expectancy at 45 (male)	Life expectancy at 45 (female)	Under-5 mortality rate	Infant mortality rate
	Worst	72.6	78.9	31.0	35.2	7.2	9.3
EU-15	Average	75.3	81.2	32.6	37.6	5.6	7.2
	Best	77.5	83.0	34.1	39.3	3.8	3.0
	Worst	64.9	76.1	25.2	33.3	12.4	10.4
CE-8	Average	68.5	77.6	27.2	34.5	9.4	7.8
	Best	72.3	80.1	29.8	36.4	5.2	4.1

Source: WHO/EURO (2004) Health for All Database.

As in other European countries, one of the other problems faced by the CEE countries is a rapidly ageing population due to the decline in birth rates. This ageing will bring with it an epidemiological transition with the emergence of chronic illness, the management of which requires significant investment in the health sector. CEE countries also face an added burden: the dramatic adverse health consequences of the transition owing to poor lifestyles, stress, financial hardship and excess alcohol intake, which have led to substantial declines in life expectancy and dislocated many countries from their trajectories of improving life expectancies.

A two-day conference, entitled 'Advancing Economic Growth: Investing in Health', was held at Chatham House on 22–23 June 2005 to identify challenges faced by countries in Central and Eastern Europe, review reform experience in the health sector, explore investment opportunities for governments and share information among policy-makers and other key stakeholders.

The conference was attended by over 100 delegates – including a senior group of policymakers, ministers, heads of Central Banks, government officials, representatives of multilateral institutions such as the European Investment Bank and the World Bank, healthcare organizations, pharmaceutical company representatives, non-governmental agencies, academics and journalists.

The structure of the conference

The consultation consisted of plenary sessions on the first day with presentations which explored for different countries, as well as for the CEE region, key factors that threatened the sustainability of economic growth and healthcare financing. The presentations also highlighted investment levels in health in CEE countries and the EU. The existing investment gap in health between the new EU member states (and those engaged in accession talks) and the rest of Europe was noted. A number of country case studies were presented, highlighting the country-level health issues, policy initiatives and varying approaches adopted to address these challenges.

The conference on the first day adopted a regional and cross-country approach to identify problems that were common to each of the countries in the region as well as those that were country-specific. The plenary and discussion sessions examined the experiences and lessons learnt from EU member states which had begun implementation of health and pension reforms. The plenary session also provided an opportunity for countries contemplating such reforms to share their experiences and concerns.

On the second day three working groups were invited to consider the key issues discussed during the previous day, share country experiences and identify policy interventions. The first working group examined ways of enabling innovation in the health sector; the second group explored what could be done to maximize the effectiveness of existing healthcare budgets; and the third group looked at ways to sustain health-sector financing and to reach EU levels of health financing.

The working group facilitators presented a summary of the emerging themes and recommendations from each of the working groups in a plenary session. Each presentation was followed by an open discussion before a concluding address by the Chair of GSK, followed by a plenary session where the key themes which emerged from the conference were summarized. These themes are presented below.

3 The Changing Context

The new EU member states from Central and Eastern Europe, and those negotiating EU accession, are engaged in reform programmes designed to guide their transition from command to market economies.

In these countries, accession to the EU is a key factor driving economic growth, with foreign direct investment acting as the catalyst for job creation and GDP growth.

The capacity of these countries to attract further investment and promote economic growth is dependent on appropriate reforms to ensure economic convergence with other EU countries. Given the scarce resources and other constraints, such as their low technological base, the new member states face substantial challenges to attain the fiscal targets set by the EU while attempting to develop capacity to sustain economic growth. However, these countries also face many macroeconomic challenges:

(i) The Visegrad Countries¹⁰ have missed the medium-term fiscal targets set as part of the pre-accession economic programmes. The current priorities of CEE countries include the need to create wealth and resources to sustain economic growth and address growing concerns regarding public deficits.¹¹

(ii) The privatization process has been slow and has all but ceased in several countries. $^{\rm 12}$

(iii) Social-sector expenditures are increasing and pose a significant burden on the public-sector budgets – there are concerns whether the current level of social expenditures is sustainable without significant growth and concomitant public-sector reforms.

(iv) Public-sector spending by governments remains quite high, dominated by social transfers for disability pay and pensions.¹³

(v) There is a high level of social security taxes and commensurately large social benefits – these have been used in many countries as a strategy to ease the social impact of economic restructuring. But reducing high labour taxation and social benefits is critical given the shrinking labour force, an ageing population and growing dependency ratios.¹⁴

The new member states and accession countries face a number of challenges in the health sector. As the presentation by Nicholas Eberstadt starkly demonstrated,¹⁵ some of these challenges are very substantial indeed, and will be insurmountable for many countries unless there is rapid government action. In particular, two areas pose real challenges. First, the uncertainty and financial hardship which accompanied the transition discouraged families from having children, and the dramatic decline in the birth rate has presented many countries with a negative population growth rate and the prospect of rapidly ageing populations, with a consequent impact on dependency ratios. And second, there is a widening asymmetry in the life expectancies of the male and female populations: the transition years, with increased poverty and unemployment, have led to dramatic declines in the life expectancy of males and for many brought ill health. Other challenges include:

(i) changing demand patterns, owing to the epidemiological transition which follows ageing and leads to the increased incidence and prevalence of chronic illness;

(ii) emerging epidemics of HIV and multiple-drug-resistant tuberculosis;

(iii) changing public expectations and an increasingly well-informed public who require more personal and responsive services;

(iv) inappropriate infrastructure, which needs restructuring and capital investment for renewal;

(v) inadequate investment in the health sector, especially in new and innovative technologies to improve health outcomes; and

(vi) outdated resource allocation mechanisms, which are inefficient and lead to inappropriate use of scarce resources.

The CEE countries are in need of large infrastructure investments in the health sector to renew capital stock, but there are many competing demands on public-sector finances and a need to balance government budgets. A balanced fiscal policy is critical to sustained economic growth and the ability to fund current and future health expenditures.¹⁶ However, in many CEE countries, frequent changes in leadership have created obstacles to fiscal reforms and to the structural changes in the health sector that are needed to enhance productivity and rebuild trust with the public.

Accession to the EU has strengthened the political will in many new member states to implement economic and health-sector reforms to improve the efficiency and effectiveness of their health system and its responsiveness to user needs. Governments are also trying to contain pension expenditures to create fiscal space¹⁷ to support current and future healthcare expenditures as well as other competing budget demands.

In the new member states, and especially in the Visegrad countries, health-sector indebtedness is growing as a result of the imbalance between funding and actual expenditure. Without structural changes and increased investment in health from additional sources, many countries will have to raise social insurance premiums, which are expected to reach very high levels by 2007. In many countries, expenditure in health organizations is poorly controlled. As a consequence this is increasing the pressure on the funding agencies (such as the governments or health insurance agencies) which are asked by health organizations to provide greater financing for these expenditures.

Health and demography will constrain and limit the economic development of the new member states and other CEE countries.¹⁸ Deteriorating dependency ratios are due to a decline in the population, driven by a sharp imbalance between births and deaths, and rapid ageing. Decreasing fertility rates, particularly in Eastern Europe, are resulting in zero/negative population growth. The migration of young people to the West, and the resulting 'brain drain', have profound implications for the healthcare delivery system, workforce planning and human capital formation alike.

One of the challenges is the health problems in the economically active age groups, such as ill health among workers in heavy industry owing to high alcohol consumption, poor diet and injuries.¹⁹ Men's health is particularly poor. The prevalence of diseases such as cardiovascular disease and cancer is higher than in the EU-15. Risk factors are also great, given the high rates of smoking and alcohol consumption, and low levels of physical exercise. The economic shock experienced in the early transition period had a severe impact upon health outcomes in some countries, with a decline in male life expectancy by seven or eight years.²⁰ Although life expectancies have since recovered and returned to or exceeded the levels seen at the end of the communist period, as compared with western Europe, the health outcomes are much poorer in the new member states.

The conference participants agreed that a healthy population was crucially important to economies and, along with education, key to sustainable economic growth. Given the importance of health, the sustainability of health-sector financing was of critical concern to many governments. But most noted that the health systems managed by the public sector were inefficient, had high levels of debt and were unresponsive to users: hence they needed reform. A key challenge faced by governments was how to simultaneously

address the deteriorating financial conditions in their health system, introduce reforms to address structural inefficiencies and develop sound investment policies, given that the priorities of the various stakeholders differed substantially.

The presentations by senior officials from new member states and accession countries identified broadly similar problems in the health sector, but these tended to relate to short-term, programmatic issues rather than long-term, strategic ones. Similarly, many of the questions posed in the plenary sessions and the issues identified by the delegates were concerned with immediate challenges and problems anticipated in the short term.

Participants had varied views on the notion that healthcare expenditures should be regarded as an investment rather than a cost. A healthy debate on this issue ensued throughout the conference. Another widely debated point was whether health should be treated as a public or a private good. These varied perceptions on health expenditure and the nature of health resulted in differing views on an appropriate level of health expenditure and on the priority areas for investment.

4 The Emerging Themes

In relation to health, there was a broad consensus around five themes, which were seen to be of critical importance to countries.

Demographic change and health

It was generally agreed that ageing of the population is not necessarily the key factor driving rising healthcare costs, but rather the inadequate prevention and poor management of chronic diseases that accompany ageing. Once established and if poorly controlled, management of chronic disease is very expensive. In particular, the elderly with poorly controlled chronic illness consume a disproportionate amount of health resources.²¹

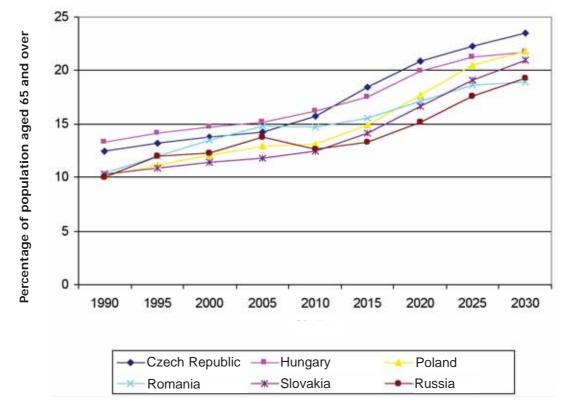


Figure 1: Percentage of population aged 65 and over (1990-2030)

Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2003 Revision, *http://esa.un.org/unpp*.

All of the CEE countries have rapidly ageing populations (see Figure 1). In many, this ageing population is not in good health. Poor management of chronic illness in the elderly leads to substantial avoidable mortality and morbidity. Therefore, two priorities need to be addressed to improve the health of this ageing population: first, investment to encourage health promotion and disease prevention; and, second, effective management of chronic illness using innovative and cost-effective technologies.

A recent review found that, although the direct economic cost of chronic disease in

European countries was substantial and growing, much of this cost could be avoided and outcomes improved by appropriate investment in health.²² However, the conference participants were of the opinion that, to improve the health of the ageing population and those with chronic illness, governments needed to proactively invest to improve access to innovative cost-effective drugs. Further, they needed to encourage implementation of new care delivery models, such as disease management and case management, to replace the redundant service models prevalent in many CEE countries.

To improve the health of the ageing population, the participants recognized the need for a paradigm shift: to develop health systems which focus on health rather than disease.

Organizational interventions to improve the efficiency and effectiveness of health expenditures

There was broad consensus within the conference group that in all of the CEE countries structural reforms were needed in health systems to develop suitable organizational forms, new service delivery models, appropriate financing and resource allocation mechanisms to ensure that investments in health were appropriately channelled and utilized. The delegates concluded that without such changes, increasing health expenditures would fail to improve health outcomes.

Decentralization and reorganization of national health systems were discussed but limited consensus was reached on the approaches to be adopted, extent of decentralization, mechanism of control needed to manage a decentralized system and timing of such reforms. Health system reorganization was viewed as an intervention which could help enhance allocative and technical efficiency by shifting decision-making nearer to the users.

The participants noted the nature of delivery systems in the CEE countries, which are hospital-intensive, and debated how allocative efficiency could be improved by structural changes to better balance hospital- and community-based delivery systems and achieve service shifts to more cost-effective service provision models.

Restructuring of health systems and new resource allocation methods could encourage service shifts away from inpatient care to the primary care level, emphasizing screening, prevention and early diagnosis. This in turn would help achieve efficiency savings, which could be reinvested in cost-effective drugs and technologies to improve patient care, but also ensure that new investments were appropriately utilized.

The evidence shows that with a strong primary care system and appropriate application of innovative cost-effective technologies, substantial shifts from inpatient care are possible, leading to cost savings and improved user satisfaction, and without any adverse effect on health outcomes.²³

However, as was noted in the conference, in the CEE countries health system structures are inefficient, with large but inappropriate hospital networks (which need new capital investment to replace them with more modern designs) and poorly developed primary care levels. Consequently, many of the resources are spent on sustaining this inefficient infrastructure – resources which could be better invested in innovative cost-effective technologies and novel service delivery models that are more responsive to the changing needs and expectations of the population.

The conference noted how some countries in the EU, such as the UK, have recognized the need to increase investment in health, to substantively restructure their health systems and re-conceptualize healthcare delivery models, in order to meet the changing

health needs and rising user expectations.24

It was noted that to improve the efficiency and effectiveness of the health systems in CEE countries good monitoring and evaluation (M&E) systems were needed. In relation to M&E, the CEE countries, like many of the other EU member states, face a range of problems:

(i) excessive but often irrelevant data;

(ii) data in paper form which are not analysed in a timely manner to inform policy;

(iii) fragmented data, with poor integration of socio-demographic and health service data to identify target groups;

(iv) limited data on outcomes;

(v) data of variable quality.

The absence of high-quality information hinders effective planning, as it is not possible to identify need and changing demand patterns. It also makes it difficult to monitor service quality levels, to identify where resources are allocated and to assess whether resources are spent appropriately to improve health outcomes.

Absence of timely information encourages a reactive stance, so that resources are spent dealing with daily crises rather than proactively developing investment strategies.

Resource allocation in CEE countries is based on historical expenditure patterns. Resources follow structures and inputs rather than need or demand. Economic evaluation is not systematically used to inform investment decisions or resource allocation. Clearly, resource allocation mechanisms will need to change to improve efficiency, effectiveness and equity within the health systems.

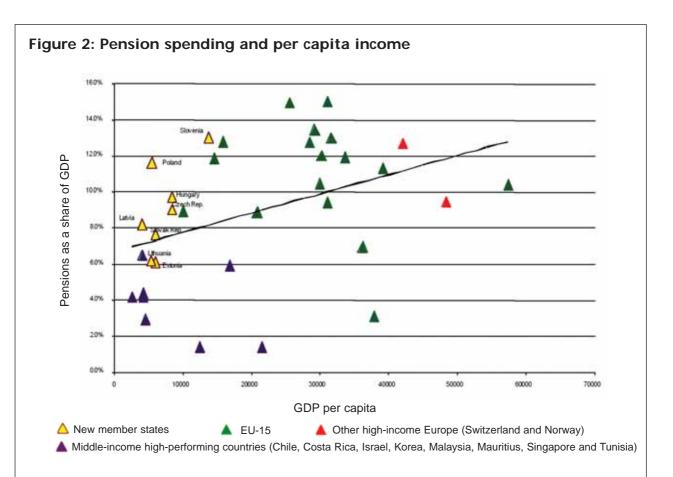
Health-led investments to address changing user expectations

The conference participants concluded that investments in health were needed to address changing user expectations. However, they noted that investment in health should be part of a broader reform package to rationalize social benefits, which in many CEE countries are very generous (see Figure 2).

It was felt that healthcare providers and service delivery models failed to meet the expectations of the users, who demand a greater involvement in decisions regarding their health, access to innovative drugs and technologies, and higher-quality services that are more personalized and delivered in a timely manner.

Currently, in the CEE countries there is a mismatch of expectations, demand and supply. This mismatch has led to a fall in user satisfaction levels and a decline in citizens' trust in the health system, especially with regard to quality levels.

There was general agreement that citizens in the new member states are demanding access to a similar range and quality of services and technologies to those provided in other EU countries. Ready availability of information on innovative drugs and technologies, as well as new service delivery models, will lead to citizens demanding their more rapid uptake and diffusion in their health systems. This is likely to generate pressures for higher spending on health systems. Governments need to plan how best this demand can be addressed, identify sources of funding but also introduce cost-containment policies to prevent inappropriate utilization of services and technologies that are not cost-effective.



Source: Presentation by Pradeep Mitra, Chief Economist, Europe and Central Asia, the World Bank at Chatham House conference on 'Advancing Economic Growth: Investing in Health', 22–23 June 2005.

A broad consensus emerged that governments need to exercise their stewardship function effectively to ensure that their citizens are better educated about their health and cost-effective innovations, and to empower them to take more responsibility for improving their own health. There is a need to consider citizens to be 'consumers' or 'users' of health care instead of perpetuating the traditional view of them as patients who are passive recipients of care.

Health-led investments in human capital formation and workforce planning

The conference participants concluded that investing in health is critical to maintaining a healthy population and workforce, which in turn are necessary for sustainable economic growth.

Investment in health is also necessary to maintain competitiveness in the life sciences sector, an industry which underpins a knowledge-based economy. Many of the CEE countries have previously had strong life sciences industries, but the low level of investment in R&D in this sector has led to a dramatic decline in activities. Consequently, many of the young and more highly educated professionals are migrating to western Europe to take advantage of professional opportunities and higher wages. Although at the start of the transition to a market economy, CEE countries had a surplus of human resources, this 'brain drain' has led to the loss of highly qualified professionals in the life sciences sector, eroded the level of scientific know-how, diminished the size of the scientific community and created a skills gap. This lack of know-how and the absence of a critical mass of scientists have discouraged high-tech foreign direct investment, a

catalyst for sustainable economic growth. Clearly, more investment is needed to invigorate the life sciences sector to develop this knowledge-based element of the economy, encourage innovation and entrepreneurialism and attract foreign direct investment to central and eastern Europe.

Health as a public good

Most participants concurred with the view that health was a public good, necessary to improve the welfare of society and, as such, deserving more investment.

Mixed financing models, involving the state, the private sector and non-governmental organizations, were identified as the favoured approaches to achieve increased investment in the health system. There was a broad consensus that it was necessary for governments to create an enabling environment to develop public-private partnerships and learn lessons from other member states.

The balance of a mixed system was not addressed; however there was acceptance that significantly higher managerial capacity would be required to move from the current publicly financed healthcare delivery system to a mixed model.

5 Themes Emerging from the Working Group Discussions

Having identified key issues emerging from the plenary sessions, the conference moved into three working groups to explore in depth some of the issues identified in the plenary sessions, discuss their policy implications and identify practical steps to develop policies. To encourage discussion guiding questions were given to each group, and discussions were facilitated to ensure wide-ranging debate.

Working group 1

Healthcare costs and innovation: how to enable innovation in the health sector

The first group were given four guiding questions:

(i) What infrastructure/enabling environment needs to be in place to encourage the development of innovation in health care?

(ii) What policies need to be in place to encourage the development of innovation in health systems?

(iii) What practical constraints face the health systems in the region and how might progress be made towards encouraging better use of innovation?

(iv) How can innovation be best disseminated within the health systems and across countries?

There was a broad consensus in the working group that government-led investments and interventions were needed in member states to create an enabling environment for innovation to realize economic and welfare benefits. There was limited agreement on a working definition for innovation.

The group noted that critical success factors, as well as obstacles to innovation, should be identified within the health sector in each country. Countries should commit to reach an appropriate level of funding and subsequently an efficient allocation of resources to develop an enabling environment to encourage innovation. Policies were needed to support two different but related processes: first, the development of ideas; and, second, the translation of these ideas to projects, ventures and eventually services and products.

As a practical starting point, it was suggested that current and pending legislation and regulations should be reviewed to ensure that intended policies supported the key objective of encouraging innovation rather than hindering it.

The group recognized the need for investment to support education and professional development, and to enhance linkages between universities, the health sector and industry.

The group recommended that, when designing educational policies, governments should consider the current and future skills gap within the scientific community, which has been steadily eroded in the transition years, and encourage students to select science subjects in universities and seek careers in sectors where these skills could be harnessed. These educational policies should also encourage the development of professional organizations as competent bodies to ensure the quality, accreditation, licensing and development of professionals.

The group noted an immediate need for investment in each country to develop a strategic plan for national workforce planning and human capital formation to rebuild and strengthen the private small and medium-sized enterprises.

The group felt that the governments could identify and address practical constraints faced by individuals and organizations which hindered innovation within health systems.

The importance of disseminating knowledge and ideas was recognized and it was suggested that the development of professional associations and forums should be encouraged to enhance this. Resources should be dedicated to establishing an environment that supports incubators, science parks and enterprise zones which further encourage the transfer of technology between universities and industries. There should be selective investment to establish Centres of Excellence to encourage research funded through public-private partnerships and industry.

Dissemination of innovations can be supported by better sharing of health technology assessment results which highlight the costs and benefits of drugs that are used to treat common problems. Industry linkages should be encouraged to disseminate information within professional groups and forums, and to support programmes to educate clinicians and patients.

A key conclusion of the group was that access to innovation could be improved by developing a reimbursement process that encourages the involvement of stakeholders and that is transparent and timely. Encouraging innovations and disseminating information about them was not enough: incentives should be established to encourage their adoption and diffusion in the health system.

Working group 2

How to maximize the effectiveness of existing healthcare budgets

The guiding questions posed to the second group were:

(i) How can equity, efficiency, effectiveness and choice objectives be balanced?

(ii) How can allocative efficiency in health systems be enhanced and what tools and mechanisms are available to do this?

(iii) How can the levers available to achieve objectives be modified?

(iv) What policy interventions are available and how can these policy objectives be incorporated into the national planning agenda?

There was broad agreement within the working group that an investment in health was necessary and appropriate, but much of the discussion focused on today's needs, rather than future needs or strategies which might help address these. The group discussed appropriate levels of health investment that would be deemed efficient in macroeconomic terms. However, no consensus was reached on ways to determine appropriate levels of health investment.

There was a general agreement within the working group that new member states must be proactive and think about long-term solutions to address their current and emerging problems rather than continue to incrementally develop reactive strategies.

There was also broad consensus that the current health system model in CEE countries was outmoded, supply-driven, inefficient, unresponsive to users and not sustainable. Implementation of health-sector reform was at an early stage in the majority of countries represented within the working group. There was agreement that major government-led interventions would be required to reorganize the healthcare delivery system to improve the effectiveness and efficiency of health-sector financing.

Allocative and technical efficiency issues were discussed in relation to investment

decisions to effectively target resources. The group explored the kinds of services citizens need and demand, and the most efficient manner in which services could be delivered.

The working group shared similar values, in that equity emerged as the most important health system objective, relative to efficiency, effectiveness and choice. There was no broad consensus on how and when resources should be allocated, but it was clear that in the health systems of CEE countries the current resource allocation processes were opaque and decisions were often influenced by short-term political drivers rather than considerations of equity, efficiency or effectiveness.

The group agreed that much work was needed to achieve effective resource allocation mechanisms at national and local levels. First, the ministries of finance and health should consider healthcare expenditures to be not just a cost but an investment with welfare and economic benefits; second, resource allocation formulae which take into account need and demand patterns should be developed; and third, when setting priorities, there should be means to identify interventions and technologies which are innovative and cost-effective.

Currently, a shortcoming of the health systems in CEE countries is that they are too hospital-centric. The resource allocation mechanisms should be such that they encourage a shift from hospitals to more cost-effective domains, such as primary care, so that resources can be released to invest in health promotion, prevention and early diagnosis, and user-centred services which use innovative technologies.

The group's view was that governments needed to adopt a systemic approach to transforming the health system, simultaneously modifying each of the four 'health levers' (stewardship and organization; financing; resource allocation and provider payment systems; and service provision) to achieve objectives. Approaches which involved only one of the levers (such as financing) were unlikely to be effective if the goal of health system reform is to achieve large-scale systemic change. The group systematically explored what could be done using each of the levers to achieve objectives.

With regard to the first lever, organizational interventions must address weaknesses which prevent large-scale systemic change. For example, transparent mechanisms need to be put in place to encourage broad stakeholder involvement and more widely shared consensus with reform objectives. Decentralization was identified as an organizational intervention to enhance local responsiveness, but the dangers of rapid decentralization without appropriate frameworks for performance management were noted. One critical organizational intervention identified was the need to put in place monitoring and evaluation systems to provide timely and accurate information for policy decisions.

A further organizational intervention recommended by the group was to promote pluralism in health system financing and delivery without adversely affecting equity. Public and private partnerships, including outsourcing, contracting, privatizing management, and joint ventures, were considered as possible options to help improve system efficiency and effectiveness.

Suggested interventions using the second lever – financing – related to the establishment of effective risk pools to capture out-of-pocket expenditures, and development of more efficient mixed financing systems.

The critical interventions using the third lever – resource allocation and provider payment systems – related to development of performance-related provider payment systems with incentives to improve efficiency and quality. Currently, in the health systems of CEE countries, there are no incentives to achieve allocative or technical efficiency, or to improve quality. Conversely, there are perverse incentives which reward inefficient

practices, such as excessive and lengthy hospitalizations. These need to be addressed. It was suggested that national health accounts studies could be used to track resource flows and identify how efficiently resources are allocated and used within the health system. Few CCE countries have undertaken full studies or used the results for forward planning.

The fourth lever relates to service provision. The use of evidenced-based guidelines was considered a means to improve technical efficiency and improve quality.

It was noted that there is an oversupply of hospitals in most of the CEE countries. These are under-utilized and many cannot be sustained. There was a broad consensus on the need to rationalize the hospital sector and encourage a service shift from hospitals to the primary care setting. It was agreed that this shift had to occur in a planned manner: a good primary care system needs to be in place before services can shift from secondary care.

Working group 3

How can health-sector financing be sustained to reach EU levels?

The guiding questions posed to this final group included:

(i) What are the countries' policy priorities to meet the challenge of health system financing at a time when their GDP per capita is still lower that the rest of the EU and economic growth appears to be slowing down?

(ii) How do the new and aspiring EU member states plan to tackle these new human resource needs?

Group members had varied views of what 'investment in health' meant. A starting point for the group's discussion was the assumption that the goal of new member states was to improve the health status of their populations to a level comparable to that of other EU member states, and that to achieve this the supply- and demand-side drivers had to be effectively managed to create some fiscal space to concentrate on priorities.

The group reached a broad agreement that the priority for CEE countries was to ensure that the health system was delivering the appropriate outputs, such as supporting an enabling environment for research and development, improving public health and ensuring access, quality and effectiveness. The critical need for health intelligence to inform decision-making was noted, in particular the need for timely and accurate data and analytic capacity to generate policy-relevant information from the data.

A priority area for investment in health was in support systems to develop capacity for healthcare decision-making. The group discussed at some length the ability of the member states to analyse their own health systems, and whether adequate and relevant data were currently available on health status and health services to enable a meaningful analysis. The group expressed the view that additional financing for the health system should be made available if these funds could be used to influence change in the system, but that an initial investment was appropriate to increase knowledge about the needs in each country and develop an agenda for modernization before further resources were allocated.

The cost-effectiveness of pharmaceuticals formed part of the debate; it was recommended that this should be judged in relation to other technologies and health services, and that the negotiations with the industry should be undertaken within the context of the broader health system, identifying the overall costs and benefits of drugs at the system level.

To address the brain drain from the CEE countries, the group suggested the development of appropriate incentive structures for the workforce, investment in training and more appropriate use of the knowledge and skills of the professionals who work in the health system: for example, more effective use of nurses to perform higher-level functions within the healthcare delivery system. Investment was needed to develop the capacity of the labour force in parallel with health reforms.

The need for a stronger role for the European Union in health was voiced, with the recommendation that the European Commission should take a lead in improving the functioning of the national healthcare delivery systems within member states and to harmonize the efficiency and effectiveness of health systems by creating opportunities for cross-learning, sharing experience of best practice and targeting structural funds to help strengthen support health systems. It was noted that execution was a problem: although many treaties allude to the importance of health in all community actions, at EU level there was no leadership to ensure a consistent approach to health investment decisions.

A number of opportunities were identified to enhance linkages within the EU for health: for example, use of the European Social Fund to develop the healthcare labour force within countries and joint programming between the member states and the European Commission to ensure productive use of the structural funds. The group stressed that, given the excess health-sector capacity in CEE countries, these funds should not be used to build more hospitals or finance expansion of existing hospitals but should rather be targeted towards cost-effective interventions or to develop decision-making capacity.

The group ended by considering how the structure of the current healthcare delivery systems could be changed to achieve goals and objectives, but highlighted the importance of stabilizing health systems before undertaking major reforms. It was noted that although most countries in the region shared the objective of making health systems less hospital-centric, in reality this objective had not been achieved anywhere, including in countries such as the UK which had undergone substantial health reforms. The opportunities offered by public-private partnerships were discussed and successful examples from European health systems debated. However, the group concluded that although there was much debate in the CEE countries about such partnerships, in practice not much action had taken place.

Engagement of a broad group of stakeholders, including the consumers, was seen to be critical to drive reforms but the stakeholder needed to be informed and encouraged to take greater responsibility in the development process.

The group concluded by agreeing that increased investment in health was needed but that the investment should be balanced, targeting infrastructure (to enhance capital stock), service development (for example, to manage long-term care), development of a public health network, and the management of healthy ageing. The ageing hospital estate, currently inappropriate to changing demand patterns, was identified as a barrier which could be overcome with targeted investment. The group recognized that while simply investing in 'more' hospitals would be extremely unwise, in practice it would be impossible to retire much of the existing capacity unless some of the existing hospital capital stock were upgraded. The group recommended investment to upgrade some of the existing hospitals, to enable the health system to squeeze much more efficiency out of what are ultimately unsustainable systems, expensive in terms of their recurrent costs. Investment in new capital stock would also enable the countries concerned to leapfrog a generation in terms of the model of care and help create new, more cost-effective service delivery models.

6 A Forward Agenda

The following agenda needs to be grasped by governments in CEE countries, in particular the ministries of finance, economy and health.

As in other countries in Europe, health services in Central and Eastern Europe face enormous challenges. Men's health in CEE is particularly poor. The prevalence of diseases such as cardiovascular disease and cancer is higher than in the EU-15. Risk factors are also great, with high rates of smoking and alcohol consumption, and low levels of physical exercise. Ageing populations (especially when the chronic illnesses that accompany ageing are not effectively managed), changing demand patterns, rising public expectations, and general poor health add to these pressures, which are particularly severe and acute in the CEE countries. Life expectancy in Hungary is almost 10 years less than in the EU-15. The structural inefficiencies in health systems, which lead to allocative inefficiency and inappropriate use of scarce resources, further compound the problems faced.

In addition to the challenges identified, there are other reasons to invest in health. First, poor health is a major cost to the EU-25 economies. Second, health is a productive factor in a competitive economy. The cost of absence in the workforce due to ill-health is very high, not just owing to the direct cost of their sickness payments, but also because of the cost of replacement by other workers and lower overall productivity for the employer. A healthy population – with improved health status and increased life expectancy – will produce greater output, and early investment in health reduces subsequent costs for the economy as a whole. Third, the health sector is one of the largest sectors of the European economy. In particular, the pharmaceutical sector, which is Europe's most research intensive industry, is the anchor for a knowledge-based economy in Europe, employing 100,000 scientists and 600,000 other workers and contributing to a positive trade balance. Governments in Europe need to invest in health to enable timely uptake of innovative and cost-effective technologies to improve the population's health. This should be an economic priority.

The future economic growth and sustainable development of the CEE will be significantly determined by investment in health. This investment should be targeted to:

- (i) improve health of the ageing population and those with chronic illness;
- (ii) improve the efficiency and effectiveness of health expenditures;
- (iii) address changing user expectations;
- (iv) encourage human capital formation and workforce planning;
- (v) improve public health programmes.

Improved access to new and better medicines, which are a cost-effective substitute for older treatments, could help provide a long-term and sustainable solution to the challenge of rising healthcare expenditure. However, tensions remain between the pharmaceutical industry, which demonstrates the health and welfare benefits of its innovative products as well as efficiency savings for the health system as a whole, and the health system payers, who are concerned with containing costs and identify pharmaceutical expenditures as a budget item where cost controls can be implemented. An environment that will enhance the collaboration between the health system payers

and the pharmaceutical industry is needed, as well as better mechanisms to establish the costs and benefits of all healthcare technologies and interventions in a more transparent manner to inform resource allocation decisions.

Clearly, in Europe, a paradigm shift is needed: to move from a healthcare delivery system driven by hospital-centred curative care to one which focuses on disease prevention and management of health. But to achieve such a shift many issues and problems remain to be addressed, in particular to transform outmoded health systems to address the current and future health needs of European citizens. These problems include, among others:

(i) unwieldly infrastructure which needs to be rationalized;

(ii) inappropriate structures and redundant technologies, which need capital investment for renewal;

(iii) excessive centralization, requiring decentralization to increase responsiveness to local needs;

(iv) inadequate financing, which needs to be augmented by increasing the public–private mix of financing;

(v) resource allocation systems that reflect historical needs, which should be modified to take into account current and future requirements and to ensure the allocation of resources to cost-effective interventions and technologies;

(vi) provider payment systems that reflect inputs, which should be changed to create incentives to improve performance;

(vii) service provision that is not user-centred or dominated by hospital-based care – it needs to be transformed to develop new service delivery models in the community, especially for the effective management of chronic illness of the ageing population in the community by using innovative drugs and evidence-based care guidelines;

(vii) a paucity of relevant and reliable data, which requires development of robust monitoring and evaluation systems to generate timely and relevant intelligence to inform policy.

There are substantial challenges that need to be addressed to stabilize health systems, deal with inefficient expenditures which lead to cost escalation and widen public deficits, and create an enabling environment to prepare health systems for reform. Difficult and challenging trade-offs will need to be made to transform health systems and increase investment in health. This will require leadership, political will and a multi-sectoral approach to strategic planning, involving the ministries of finance, economy and health. Greater investment in health is needed to strengthen and develop sustainable health systems to improve the health of the population, which is so critical to future economic growth and sustainable development.

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