

Health Insurance Coverage in Central and Eastern Europe – Trends and Challenges

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Abstract

Health insurance systems in Central and Eastern Europe have evolved in different ways from the centralized health systems inherited from the Soviet era, but there remain common trends and challenges in the region. Health spending is low in comparison to the pre-2004 EU members; but population aging, medical technology, economic growth, and heightened expectations will generate significant spending pressures. Social health insurance is the dominant model in the region, but benefits coverage is uneven.

Key reform issues include identifying ways to encourage additional investment into the health sector; and defining formal benefits packages, copayments, the role of private insurance.

Keywords: health insurance, health financing, Eastern and Central Europe, European Union

Introduction

This article describes recent trends and upcoming challenges in health insurance coverage in ten countries in Central and Eastern Europe: Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia. Eight of the ten joined the EU in May 2004; Bulgaria and Romania joined on January 1, 2007. Since the early 1990s, extensive changes have taken place in the health sectors in all of the countries – away from centrally-planned health systems and towards varying degrees of private sector involvement in health care financing and coverage, in the context of social health insurance (SHI) systems.

These ten countries are seeking to identify and use the right policy tools to expand health insurance coverage, contain costs, and improve the quality of services provided. These policy tools include: the definition of a universal minimum benefit package; increasing competition among providers to increase quality and efficiency; creation of technology assessment agencies to produce evidence for coverage and investment decisions; and the introduction of private insurance to supplement public coverage. Other priority areas for insurance reform include the improvement of health information technology; and the use of copayments to rationalize service use, increase revenues for providers, and diminish informal payments.

To varying degrees, all ten countries are still influenced by the legacy of centralized Soviet-era health systems. During the 1990s hospital management and oversight was decentralized; responsibility for secondary and tertiary hospital care often became the province of municipalities and counties. The adoption of social health insurance models in the central and eastern European region has been attributed to the desire to depart from the centralized planning and state control of the health coverage system

inherited from the Soviet period. However, hospital care continues to dominate health care provision budgets, a holdover from the hospital-centered Soviet-inspired model.

The analysis presented here is based on a one-year project, including extensive interviews with key individuals in all ten countries and reviews of official documents, published literature, and international data sources. The article is organized in three principal sections. The first describes the current situation and trends in the region in terms of health insurance coverage – in terms of both population coverage and the types of health care covered. Section Two analyzes epidemiological, demographic, and economic factors that have strongly influenced the policy landscape related to health insurance and will continue to do so. The third section assesses future trends and options for further reforms.

Changes in Health Insurance Systems

In all of the ten countries, excepting Latvia, a social health insurance (SHI) system is funded through employment-related premiums. In many countries of the region, social health insurance programs had existed prior to 1945, influenced by the Bismarck social insurance system introduced in Germany in 1883.¹ SHI was reintroduced in the region in the 1990s. Payroll collections began in Hungary and Lithuania in 1991; Romania and Bulgaria started these payments in 1999. In social insurance programs, funds are raised through employer and employee premiums; the percentage of earnings and the ratio of employer and employee contributions vary across the region (Exhibit 1). Social health insurance plans can be regressive since they only tax earned income, and not income from investments and savings which are disproportionately held by the relatively well-off. In Latvia, health insurance premiums are rather paid from an earmarked income

tax collected centrally, with additional funds from general revenues, patients and private insurers. However, Latvia's insurance funds share common features with other countries in the region in terms of contracting and purchasing health services.

Exhibit 1. Social Insurance Financing Mechanisms

Country	Sources of Funds	Size of Contribution (% of earnings)	% of Payroll Tax Paid by Employee
Bulgaria	SHI premiums	6	35
Czech Republic	SHI premiums	13.5	33
Estonia	SHI premiums	13	0
Hungary	SHI premiums	23.5	25
Latvia	Income tax and general revenues	Not applicable	Not applicable
Lithuania	SHI premiums and income tax	6	0
Poland	SHI premiums	7.75	100
Romania	SHI premiums	14	50
Slovakia	SHI premiums and income tax	14	28
Slovenia	SHI premiums	13.25	47.3

Sources: Elias Mossialos, Martin McKee, Laura MacLehose, and E Cho. "Study on the Social Protection Systems in the 13 Applicant Countries: Synthesis Report." Brussels: European Union, 2002.
http://europa.eu.int/comm/employment_social/news/2003/jan/conf_en.html
 Personal Communication from Dr. Ilko Semerdjiev, International Healthcare and Health Insurance Institute, Republic of Bulgaria, April 27, 2006.

Another potential issue with social insurance programs is that in the presence of multiple health insurance funds – as in Poland, Romania, and Slovakia – it is important to share financial and health status-related risks equally across the funds in order for the system to maintain solvency.² Different strategies are used for risk-sharing across regions. In Poland and Slovakia, all revenues from the social health insurance funds are subject to a geographic equalization process. In Romania, a formula is used to reallocate 25 percent of SHI revenues to relatively poor regions.³

Universal coverage is written into the constitution in a number of countries in the region, but resources are limited and real universal coverage is not yet a reality. In principle, central governments pay into SHI on behalf of groups such as pensioners, children, the disabled and dependent spouses. Evidence suggests that, in most countries in the region, those lacking social health insurance – typically non-working adults – have to pay directly for most of their non-emergency care.⁴ In Romania, after 27 months of unemployment individuals are no longer maintained on the unemployment registers.

Private health insurance in the region has thus far been of the supplementary type, rather than the comprehensive “substitutive” type, where patients are permitted to opt out of the system. Only in Slovakia have for-profit publicly traded and foreign companies been allowed to compete with the public sector funds to provide insurance. In Slovakia, where official copayments were introduced in 2003, private insurance to cover those payments has become common. In Bulgaria, where the share of the population with private health insurance is growing and is estimated to be 12 percent, insurance premiums (below a cap) are not subject to corporate income tax, providing an incentive to employers to purchase insurance for employees.

Until recently, countries in the region defined the benefits included in the social health insurance package only in broad terms.^{5,6} Latvia, Slovenia, Estonia, and Slovakia have made clear progress toward defining a health insurance benefits package. In 2002, Slovakia specified priority diseases for coverage. In Estonia, explicit rules have been introduced for adding new services to the benefit package and establishing the appropriate level of patient cost sharing.⁷

The level of health financing available through health insurance has increased in the region – despite economic challenges (Exhibits 2 and 3). Slovenia, for example, has seen a five-fold increase in per capita spending on health in purchasing power parity (PPP) terms since 1990. Lithuania and Romania have increased spending by more than three-fold in the same period.⁸

However, overall levels of spending on health care in the ten countries – measured both in absolute terms and as a percentage of Gross Domestic Product (GDP) – fall below, and in most cases considerably below, spending levels for the fifteen pre-2004 members of the European Union. In 2004, total health spending ranged from \$508 per capita (measured in PPP) in Romania to more than \$1,300 per person in the Czech Republic, Slovenia, and Hungary (Exhibit 2). In 2004, the average level of per-capita health expenditures for the 15 core members of the European Union was \$2,510. In all of the countries except for Latvia and Bulgaria, the majority of health financing comes from payroll taxes, routed through social insurance programs (Exhibit 3).

Exhibit 2. Levels of Health Expenditures

Countries and Indicators	Health spending per capita, 2004, current \$	Health spending per capita, 2004, \$ PPP	Health spending 2004 (% of GDP)
Bulgaria	191	595	4.3 - 7.5*
Czech Republic	667	1,382	7.5
Estonia	366	722	5.3
Hungary	684	1,327	8.4
Latvia	301	756	6.4
Lithuania	351	838	6.6
Poland	354	827	6.5
Romania	159	508	6.1
Slovak Republic	360	854	5.9
Slovenia	1,218	1,833	8.8

Sources: World Bank. World Development Indicators. Washington, DC, 2006.

World Health Organization. "Health system financing in Estonia: situation and challenges in 2005." Copenhagen, WHO Regional Office for Europe, 2005.

Note: *Low estimate for Bulgaria from Bulgarian Ministry of Health

**Exhibit 3. Composition of Health Expenditures
(% from Each Source)**

Countries and Indicators	Private Insurance	Out-of-Pocket	Payroll Tax	General Taxation
Bulgaria	0.4	44.8	5.8	54.5
Czech Republic	0.3	8.4	82.3	9.4
Estonia	1.0	20.2	65.6	10.7
Hungary	3.5	24.5	58.9	11.3
Latvia	2.8	45.9	0.0	68.2
Lithuania	0.1	23.2	64.5	7.2
Poland	0.0	26.4	78.4	n/a
Romania	1.7	33.5	56.8	21.6
Slovak Republic	0.0	11.7	85.9	3.1
Slovenia	14.0	9.7	75.2	3.9

Sources: World Bank. World Development Indicators. Washington, DC, 2006.

World Health Organization. "Health system financing in Estonia: situation and challenges in 2005." Copenhagen, WHO Regional Office for Europe, 2005.

Adam Kozierekiewicz, Wojciech Trąbka, Artur Romaszewski, Krzysztof Gajda, and Dariusz Gilewski. "Definition of the 'Health Benefit Basket' in Poland." European Journal of Health Economics 2005 November; 6(Suppl 1): 58–65.

World Health Organization. "Health system financing in Estonia: situation and challenges in 2005." Copenhagen, WHO Regional Office for Europe, 2005.

Note: Totals do not add to 100% in all cases due to inconsistencies in data sources.

Raising sufficient funds through employment-based premiums or income taxes is a particular challenge in a region with widespread informal employment. Estimates of the percentage of economic activity that is outside of the formal (taxable) sector range from 19 percent in the Czech Republic to 36.9 percent in Bulgaria.⁹ As a result, it can be difficult for social insurance funds to fully fund health care services. In Bulgaria in 2000, social health insurance provided just 13 percent of the health care budget, with national and municipal budgets and private spending making up the difference.¹⁰ In Romania there has been substantial effort to improve the collection of health insurance premiums, with revenues increasing from \$1.2 billion in 1999 to \$3.1 billion in 2004, evidence that enforcement can improve the yield of SHI premiums.

One option for raising additional revenues for social health insurance systems in the region is to apply formal copayments. Latvia, Slovakia and Slovenia are the only countries in the region that have adopted formal copayments for a wide range of health care services. Hungary has announced its intention to include official copayments for outpatient visits and hospital stays.¹¹ In addition to raising revenues for health insurance systems, implementation of formal copayments would also discourage the traditional informal “envelope” payments to physicians and other providers. These payments can have distorting effects that blunt the effectiveness of the incentives policymakers use to change provider and patient behaviors.^{12, 13, 14}

It is difficult to measure the extent of informal payments since in most cases they are not legal. In Slovakia, a 1999 World Bank survey estimated that 71 percent of general practitioner visits, 59 percent of specialist visits, and at least 30 percent of inpatient stays involved informal payments;¹⁵ other estimates suggest that informal payments are charged for 31 percent of health service visits in Latvia and 21 percent in Bulgaria.¹⁶

There is also evidence that informal payments can be effectively discouraged and replaced. In the Czech Republic, where health sector salaries have increased faster than average wages, informal payments are reported to be at lower levels than elsewhere in the region.¹⁷

Economic, Epidemiological, and Demographic Trends

Options for further reforms of health insurance systems in these ten countries are strongly shaped by economic, epidemiological, and demographic trends. The countries have widely varying economic realities and standards of living. Slovenia is the wealthiest country in the region – with a per-capita Gross Domestic Product (GDP) of \$21,808 per year in 2005, adjusted for purchasing power parity (Exhibit 4). Romania, with a PPP-adjusted per-capita GDP of \$8,785, is the least well-off of the countries, followed by Bulgaria. Tax revenues as a percentage of the economy are in the range of 15 percent to 22 percent – a percentage that is low compared to western European countries and limits governments' potential to direct public funds towards social programs.¹⁸

Exhibit 4. Economic and Demographic Indicators

Countries and Indicators	GDP per capita 2005, current \$US	GDP per capita 2005, PPP (\$)	Population growth in 2004 (annual %)	Population total, 2004 (millions)	Total Fertility Rate, 2005
Bulgaria	3,459	9,223	-0.80	7.8	1.30
Czech Republic	12,152	18,341	0.14	10.2	1.23
Estonia	9,727	16,414	-0.33	1.3	1.40
Hungary	10,814	16,823	-0.22	10.1	1.28
Latvia	6,862	12,666	-0.54	2.3	1.24
Lithuania	7,446	14,158	-0.54	3.4	1.26
Poland	7,946	12,994	-0.04	38.2	1.23
Romania	4,539	8,785	-0.26	21.7	1.29
Slovak Republic	8,775	16,041	0.05	5.4	1.25
Slovenia	16,986	21,808	0.07	2.0	1.22

Sources: World Bank. World Development Indicators. Washington, DC, 2006.
International Monetary Fund. World Economic Outlook Database, 2006.
www.imf.org/external/pubs/ft/weo/2006/02/data/weoselgr.aspx
United Nations Development Program. Human Development Reports, 2003.
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Population trends in the region have important implications for future policies related to health insurance. Population growth rates are close to zero, and are negative for several countries – including Bulgaria, Estonia, Hungary, and Latvia. Most of the countries are either losing population, or soon will be. These trends will be exacerbated by population aging.¹⁹ Population projections suggest that the percentage of the population over the age of 65 will climb substantially in all ten countries. In 2005, in all ten countries this percentage was below the European Union average of 17.0. However, by 2025 in each country the percentage of the population over age 65 is projected to be 20 percent – placing a burden on social security and social health insurance systems. By 2050 nearly one-third of the population in many of the countries will be 65 or older.²⁰

Countries in the region will also be faced with higher levels of expensive chronic diseases, and a shrinking contributive tax base for social insurance systems. Most of the countries in the region have moved through the epidemiologic transition and face an increasing disease burden due to circulatory diseases and cancer. However, some countries in the region – notably Bulgaria and Romania – still face a relatively high burden of infectious diseases, as well as high levels of infant and child mortality, measured as the probability of children dying before one year of age and five years of age, respectively (Exhibit 5).

Exhibit 5. Health Outcomes in 2005

Countries and Indicators	Life expectancy at birth (years)	Infant Mortality Rate (per 1,000 live births)	Under-Five Mortality Rate (per 1,000 live births)
Bulgaria	72.4	12.3	15.0
Czech Republic	75.7	3.9	4.4
Estonia	71.6	5.7	8.0
Hungary	72.6	7.2	8.0
Latvia	71.5	9.8	11.9
Lithuania	71.9	7.5	8.3
Poland	74.5	7.1	7.5
Romania	71.3	17.3	19.9
Slovak Republic	74.0	6.0	8.5
Slovenia	76.6	4.0	4.3

- Sources:** World Bank. World Development Indicators. Washington, DC, 2006.
- International Monetary Fund. World Economic Outlook Database, 2006. www.imf.org/external/pubs/ft/weo/2006/02/data/weoselgr.aspx
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In several countries in the region, life expectancy has recovered after a decrease associated with the fall of Communism and the breakup of the Soviet Union. By the year 2000, there was a gap of 12 years in life expectancy between the countries of the former Soviet Union and Western Europe. In, Estonia, Latvia, Lithuania, and Romania life expectancy declined between 1985 and 1995 as living standards worsened.²¹ However, in most of the countries of Eastern and Central Europe, health status as measured by life expectancy at birth has rebounded and is again increasing. Hungary's life expectancy increased from 69.8 years in 1995 to 76.6 years in 2005; Estonia's climbed from 67.8 to 71.6 years in the same time period, and Romania saw an increase in life expectancy from 69.5 to 74.5 years.^{22, 23, 24}

Conclusions – Options for Further Reforms

Health insurance programs implemented in the East and Central European region following the collapse of Communism have already seen widespread reforms. More reforms are likely to be necessary in upcoming years. In particular, the social health insurance programs in the region all face challenges related to defining benefits packages, reducing informal payments, and raising additional revenues.

Several factors will create a need for increased health spending throughout the region. Demand for health services is likely to continue to increase substantially – spurred by economic growth, improvements in medical technology and the availability of new products, and related increases in population expectations. Additionally, health care infrastructure will need to be replaced. Pressures to raise health worker salaries will sharpen as health professionals increasingly cross national borders. As populations age, countries in the region will have to face a much higher “dependency burden” – and

with larger shares of older populations, health care costs will grow significantly and health insurance systems will be stretched. As a result, countries throughout the region will need to identify additional resources for insurance systems. Some funding will derive from future economic growth, but governments will very likely also need to identify additional sources – including income taxes, increased payroll taxes, official copayments, and private health insurance. The right combination of these financing mechanisms will vary by country.

The private sector has an important role to play in the financing of health care infrastructure, services, and equipment – including investment by international insurers, pharmaceutical companies, and medical device manufacturers. Access to capital has been a particular challenge in countries where providers have attempted to privatize. In Estonia there has been a particular need for capital for establishing primary care practices. Since 2003 capital expenses have been factored into capitation payments by the SHI fund, thereby facilitating infrastructure development.²⁵

In several countries the private sector has a longstanding concern with a lack of transparency in revenue collection and health expenditures, and erratic and unpredictable payments. These patterns are changing however, and a more favorable environment for private investment is becoming a reality in the region. Legal changes in Lithuania have promoted the role of the private sector in health care. Contributions to private health insurance are fully tax deductible and health care is exempt from value added taxes.²⁶

There is a strong potential role for private health insurance in the region – in terms of increasing financing, taking pressure off of the public insurance system, promoting innovation in financing and delivery, and creating incentives for quality and efficiency

in the provision of care. Private insurance can also be a source of financing for rebuilding infrastructure in the region. Currently, there are significant barriers to the growth of private health insurance. These barriers include the lack of a defined benefits package in social health insurance systems, public perceptions that governments should provide health services, limited population purchasing power, and the persistence of informal payments.

The form private insurance takes will depend on the services provided by the government and the regulatory environment created by each country and by the European Union. Substitutive insurance – allowing individuals to opt out of social health insurance pools and purchase private insurance as their primary coverage – would expose cash-strapped social health funds to potential adverse selection if private insurers successfully capture the wealthiest and healthiest individuals. Supplementary insurance – as in the United Kingdom, France and Spain – covers benefits and procedures not covered by the statutory insurance, and can reimburse for out-of-pocket expenditures for statutory benefits. In Slovakia, where copayments were introduced in 2003, private insurance to cover those payments is becoming more common.²⁷ In Bulgaria, where the share of the population with private health insurance has grown to an estimated 12 percent, insurance premiums (below a cap) are not subject to corporate income tax, providing an incentive to employers to purchase insurance for employees.

In countries where they have not yet done so, social health insurance systems should clearly define benefits package – so that patients understand what they are entitled to, and insurers know where they can cover supplementary services – and ensure that physicians have the resources to provide those services. There are several important potential barriers to further defining benefits packages; including resistance among patients, providers and politicians – due to the need to explicitly exclude some services

– and, in several countries, a lack of reliable data on current service utilization patterns and the true costs of providing services.

There is significant variation across the central and eastern European region in the prominence of the private sector in the delivery of health care. Throughout the region, most primary care practices and increasing shares of outpatient specialist practices are privately owned. The majority of these providers contract with health insurance funds and are therefore partly paid with public funds. Competitive and selective contracting of health care providers by insurance funds is one method of promoting competition among providers. Slovakia's reforms have aimed to create an improved environment for the development of the private health care sector – including attempts to define the benefits package for social health insurance, and new laws related to regulating the insurance industry.

Due to their evolution, many health systems in the region are financed through dedicated funding streams and make funding decisions on the basis of costs and budgets without fully taking into account the potential benefits of new approaches and technologies for population health and for the health system as a whole. Countries in the region could use a more holistic approach to establishing priorities for investment in the health sector. Investments should explicitly take into account allocative efficiency – comparing costs to impacts measured in terms of the population-based burden of disease. Additional investments into information technology are likely to be necessary to better enable this type of analysis.

Health insurance reform efforts in all ten countries should be viewed in the context of broader political and economic integration among the countries of Central and Eastern Europe and with the European Union. EU membership presents both opportunities

and challenges for the health sectors in the region. The harmonization of labor regulations poses unique human resource challenges for countries in the region due to the risk of a “brain drain” of qualified health workers to wealthier EU member countries. Manufacturers of medical devices and pharmaceuticals may be attracted to countries in Central and Eastern Europe that have a competitive advantage due to lower wages.²⁸ As the countries of Central and Eastern Europe continue to advance economically, their health insurance systems will need to identify additional sources of funding and resolve key issues – related to resource mobilization, investment priorities, and formalizing access to health care through well-defined benefits packages and copayment structures.

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