

Managed Competition in Health Insurance Systems in Central and Eastern Europe

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This policy brief summarizes common trends in the development of health care systems in the Czech Republic, Slovakia, and Russia in late 1990s–early 2000s. These countries focused on regulated competition between multiple health insurance companies. However, excessive regulation led to various deficiencies of the model. In particular, improvements in such quality indicators of the three health care systems as infant and under-five mortality are unrelated to the presence of multiple insurers or insurer competition.

A number of transition countries in Central and Eastern Europe and the former Soviet Union introduced health care systems with compulsory enrollment, obligatory insurance contributions unrelated to need and coverage according to a specified package of medical services. This so-called social health insurance (SHI) model (Culyer, 2005) is regarded as a means for achieving universal coverage, stable financial revenues, and consumer equity (Balabanova et al. 2012; Gordeev et al., 2011; Zweifel and Breyer, 2006; Preker et al., 2002). While most transition countries chose to only have a single health insurance provider on the market, the Czech Republic, Slovakia, and Russia allowed competitive (and often private) insurers in the new system. However, the evidence from the three countries shows excessive regulation of health insurers and limited instruments for insurer competition within indebted post-reform health care systems (Naigovzina and Filatov, 2010; Besstremyannaya, 2009; Medved et al., 2005). Consequently, the three countries may have been over-enthusiastic in putting large emphasis on market forces in the

reorganization of health care systems in economies with a legacy of central planning (Diamond, 2002).

This brief addresses the results of Besstremyannaya (2010), which assesses the impact of private health insurance companies on the quality of health care system. While various performance measures reflect different goals of national and regional health care systems (Joumard et al., 2010; Propper and Wilson, 2006; OECD, 2004; WHO, 2000), aggregate health outcomes directly related to the quality of health care are commonly infant and under-five mortality (Lawson et al., 2012; Gottret and Schieber, 2006; Wagstaff and Claeson, 2004; Filmer and Pritchett, 1999). Consequently, Besstremyannaya's (2010) analysis regards mortality indicators as variables reflecting the overall quality of health care system.

The estimations employ data on Russian regions in 2000-2006. The results indicate that regions with only private health insurers have lower infant and under-five mortality.

However, given the low degree of competition on the social health insurance market in Russia, we hypothesize that this effect is mostly driven by positive institutional reforms in those regions. Indeed, incorporating the effect of institutional financial environment, we find that the impact of private health insurers becomes insignificant.

Development of a Social Health Insurance Model in the Czech Republic, Slovakia, and Russia

At the beginning of their economic transition, the Czech Republic, Slovakia, and Russia established a model for universal coverage of citizens by mandatory health insurance (Balabanova et al., 2012; Medved et al., 2005; Sheiman, 1991). The revenues of the new SHI system came from a special payroll tax and from government payments for health care provision to the non-working population. The main reason for combining certain features of taxation-based and insurance-based systems was the desire to establish mandatory health insurance as a reliable source of financing in an environment with unstable budgetary revenues (Lawson and Nemeč, 2003; Preker et al., 2002; Sheiman, 1994). The insurance systems instituted in the three transition countries correspond to the major SHI principles implemented in Western Europe: contributions by beneficiaries according to their ability to pay; transparency in the flow of funds; and free access to care based on clinical need (Jacobs and Goddard, 2002).

The Czech Republic, Slovakia, and Russia placed emphasis on regulated competition, decreeing that SHI should be offered by multiple private insurance companies with a free choice of the insurer by consumers. Managers of private insurance companies were assumed to perform better than government executives (Lawson and Nemeč, 2003; Sinuraya, 2000; Curtis et al., 1995), so an intermediary role for private insurance companies was seen as a key instrument for

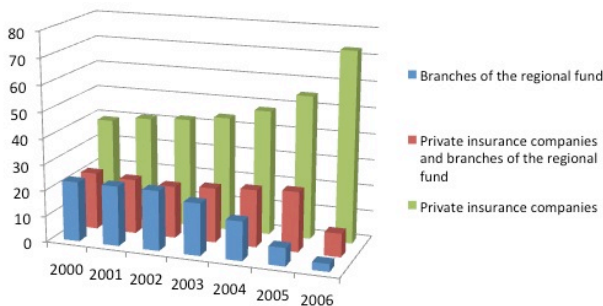
introducing market incentives and improving the quality of the health care system (Sheiman, 1991).

However, the activity of health insurance companies in the three countries was heavily regulated, since the content of benefit packages, size of subscriber contributions, and the methods of provider reimbursement were decided by government, and tariffs for health care were frequently revised (Lawson et al., 2012; Rokosova et al., 2005; Zaborovskaya et al., 2005; Praznovcova et al., 2003; Hussey and Anderson, 2003). In particular, Russian health care authorities enforced rigid assignments of areas, whose residents were to be served by a particular health insurance company (Twigg, 1999) and imposed informal agreements with health insurance companies to finance providers regardless of the quality and quantity of the health care (Blam and Kovalev, 2006). As a result, the three countries experienced an initial emergence of a large number of health insurance companies, followed by mergers between them, resulting in high market concentration (Sergeeva, 2006; Zaborovskaya et al., 2005; Medved et al., 2005).

In Russia, the Health Insurance Law (1991) specified that until private insurers appeared in a region, the regional SHI fund or its branches could play the role of insurance companies. Therefore, several types of SHI systems emerged in Russian regions in the 1990s and early 2000s: the regional SHI fund might be the only agent on the SHI market; the regional SHI fund might have branches, acting as insurance companies; SHI might be offered exclusively by private insurance companies; or SHI might be offered by both private insurance companies and branches of the regional SHI fund (Figure 1). The variety of SHI systems reflects the fact that many regions opposed market entry by private insurance companies (Twigg, 1999). Indeed, the boards of directors of regional SHI funds usually included regional government officials (Tompson, 2007; Tragakes and Lessof, 2003) who were reluctant to reduce government

control over SHI financing sources (Blam and Kovalev, 2006; Twigg, 2001). The controversy with health insurance legislation created a substantial confusion at the regional and the municipal level (Danishevski et al., 2006).

Figure 1. Health insurance agents in Russia in 2000-2006, (number of regions)



This context suggests that Russian regions provide an interesting study field to address the impact of private health insurance companies on the quality of health care system. In particular, the wide variety of SHI systems across Russian regions, as well as the gradual introduction of the health insurance model in Russia provide a sufficient degree of variation in practices and outcomes to allow for a well-specified empirical analysis.

Data and Results

In our analysis we use data on Russian regional economies between 2000 and 2006 (as based on data availability). Our measures of health outcomes are given by the pooled regional data on infant and under-five mortality. Our key explanatory variable is the presence of only private health insurers in the region. Arguably, the coexistence of public and private health insurance companies does not enable effective functioning of private health insurers owing to their discrimination by the territorial health insurance fund. Therefore, in the empirical estimations we focus on the presence of only private health

insurers in the region, regarding it as a measure of effective health insurance model. The analysis also employs a variety of important socio-economic and geographic variables influencing health outcomes (per capita gross regional product (GRP), share of private and public health care expenditure in gross regional product, share of urban population, average temperature in January).

The results of the first set of our empirical estimations demonstrate that the presence of only private health insurers in a region leads to lower infant and under-five mortality. Furthermore, an increase in the share of private health care expenditure in GRP leads to a decrease in both mortality indicators. The result is consistent with numerous findings about the association between personal income and health status in Russia (Balabanova et al., 2012; Sparling, 2008).

Prospective reimbursement of health care providers is associated with a decrease in infant and under-five mortality. The finding suggests the existence of a quasi-insurance mechanism in the Russian SHI market. Operating in an institutional environment where provider reimbursement is based on prospective payment, private insurance companies in effect shift a part of their risk to providers (Glied, 2000; Sheiman, 1997; Chernichovsky et al., 1996).

Table 1. Factors leading to decreased infant and under-five mortality in Russia

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| Only private health insurance companies in the region* |
| Prospective reimbursement of health care providers* |
| Increase in the share of urban population* |
| Increase in per capita gross regional product |
| Increase in the share of private health care expenditure in gross regional product |

Notes: * indicates that the coefficient is statistically significant in a parametric regression

Although our analysis shows that the presence of only private health insurers is statistically associated with improvements in infant and under-five mortality, we believe that the

influence is indirect. Namely, the overall positive institutional environment in the region may result in both a decrease of mortality indicators and a lower coercion of regional authorities towards the presence of private health insurance companies.

To test this hypothesis, we use financial risk in a region as a measure of institutional environment and incorporate it in the analysis through an instrumental variable approach. (We measure financial risk by an expertly determined rank ordered variable by RA expert rating agency; this variable reflects the balance of the budgets of enterprises and governments in the region, with lower ranks corresponding to smaller risk.)

In line with our hypothesis, the results suggest that the presence of private health insurance companies now becomes insignificant in explaining infant and under-five mortality.

Discussion

The existing literature suggests that the improvement in infant and under-five mortality in the Czech Republic, Slovakia, and Russia can be attributed primarily to an increase of health care spending (Gordeev et al. 2011; Besstremyannaya, 2009; Lawson and Nemeč, 2003) rather than being an effect of the social health insurance model with multiple competing insurers. It should be noted that insufficient government payments for the non-working population and a decline of the gross domestic product in the early transition years left SHI systems in the three countries indebted (Naigovzina and Filatov, 2010; Sheiman, 2006; Medved et al., 2005), which undermined the development of the managed competition in the health care provision.

In Russia (and also in the Czech Republic and Slovakia) there is little competition between insurers, and surveys show that the main factors causing consumers to change their health insurance company are change of work

or residence, and not dissatisfaction with the insurer (Baranov and Sklyar, 2009). The fact that law suits on defense of SHI patient rights are rarely submitted to courts through health insurers (Federal Mandatory Health Insurance Fund, 2005) may also be evidence of the failure of Russian health insurance companies to win customers on the basis of their competitive strengths.

Summary and Policy Implications

The above findings as well as the other mentioned literature suggest that improvements of infant and under-five mortality in the Czech Republic, Slovakia, and Russia are not associated with the positive role of managed competition in the social health insurance system. In particular, in Russia the decrease in infant and under-five mortality is likely to be related to financial environment, rather than the existence of insurance mechanisms or competition between health insurance companies. One possible explanation of this absence of effect may come from the excessive regulation of the private insurance markets, as well as the insufficient competition between insurers. Importantly, the health insurance reform, implemented in Russia in 2010, both addressed underfinancing (by raising payroll tax rates) and took a step towards fostering provider competition, by allowing private providers to enter the social health insurance market (Besstremyannaya 2013). However, insurance companies are still not endowed with effective instruments for encouraging quality by providers, which may greatly undermine their efficiency.

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