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# When will it happen?

## Paving the way for risk adjustment in Slovakia

Lucia Kossarova

As the revenues of health insurance companies in Slovakia increase (Table 1), their role as effective spenders of resources and purchasers of high quality services for the population is becoming ever more important. However, the current incentive structure for health insurance companies (HICs) does not necessarily encourage this function. The risk adjustment\* mechanism in place is based only on age and gender; it is coupled with a new amendment to the Health Insurance Act which obliges HICs to use any profits generated for health care services and also requires them to reduce administrative costs from 4% to 3.5% of total annual premium payments. This imperfect risk adjustment mechanism and a lack of options to compensate for losses may encourage the HICs to 'cheat' the system instead of becoming more efficient purchasers. They may 'cream skim' and select healthier patients or provide poor quality of care in order to compensate for high cost patients.

### The case for risk adjustment

Individuals require a wide variety of health care services throughout their lifetimes, depending on their personal characteristics and behaviour, social, economic and physical environment. As a result, purchasers of health care services have to finance a range of health care expenditures. While for some individuals, these expenditures can to some extent be planned for (for example, patients with a chronic condition), for others they are more unpredictable. Therefore, in countries with plural systems of health care service purchasers, such as Slovakia, where premiums are set by law and HICs are not allowed to openly select their enrollees or

**Table 1: Health care resources in Slovakia (Slovak Korunas billions)**

	2005	2006 <sup>e</sup>	2007 <sup>p</sup>	2008 <sup>p</sup>	2009 <sup>p</sup>	2010 <sup>p</sup>
Revenues of health insurance companies	73.5	80.3	89.7	94.4	101.4	108.9
Ministry of Health (excluding the state's payment for its insurees)	3.0	3.1	2.9	2.6	2.6	2.6
Resources of cities, municipalities and regions	0.5	0.6	0.5	0.5	0.5	0.5
Eurofunds	0.0	0.0	0.3	1.5	1.5	1.5
Net financial expenditures of households	19.9	21.2	21.0	22.9	24.9	27.3
<b>Total Resources</b>	<b>96.9</b>	<b>105.3</b>	<b>114.4</b>	<b>121.9</b>	<b>130.9</b>	<b>140.9</b>
Public resources (% of GDP)	5.2	5.2	5.3	5.1	5.1	5.1
Private resources (% of GDP)	1.4	1.3	1.2	1.2	1.2	1.2
<b>Total resources (% of GDP)</b>	<b>6.6</b>	<b>6.5</b>	<b>6.4</b>	<b>6.3</b>	<b>6.3</b>	<b>6.3</b>

Source: 2007–2010 General Health Policy Framework<sup>2</sup>; e: estimation, p: projection

adjust their premium rates to accommodate for health care expenditure risks, there may be a motivation to engage in hidden selection to improve the health profile of the pool of the insured. In addition, undersupplying care to those patients who need it, and oversupplying it to healthier ones, or simply not treating those cases that are expensive, are ways that HICs can attempt to reduce high health care expenditures.

While the evidence from Slovakia is still scarce, there have been several instances which suggest that HICs may have been engaging in risk selection instead of focusing on improvements in quality and

efficiency. These include the recent revelations that individuals have been reinsured by HICs without their knowledge, while misleading advertisements have also been published, including offers of products that cannot be provided or products clearly targeted at the healthier part of the population.<sup>3</sup> While not all of these activities can be directly attributed to risk selection, some clearly aim to attract the healthier element of the population into their insurance pools. Moreover, anecdotal evidence suggests that HICs may have been involved in selection activities for one group of patients who represent a substantial portion of annual health expenditures – people requiring renal dialysis.

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\*Risk adjustment can be defined as the use of information to calculate the expected health expenditures of individual consumers over a fixed interval of time and set subsidies to consumers or health plans to improve efficiency and equity (see Folland S, Goodman AC, Stano M, 2001<sup>1</sup>)

**Table 2: Relative frequencies of dialysis in Slovak health insurance companies**

Health insurance company (HIC)	A	B	C
Number of dialysis patients per 1,000	1.62	0.28	0.56
Number of dialysis sessions per 1,000	155.36	30.32	47.32
Number of dialysis sessions per N17–N19 diagnosis	19.66	3.92	7.73

Source: Sanigest Internacional, 2003<sup>4</sup>

While HICs may not be able to predict which patients will need dialysis, they may limit access, for example by contracting with a more limited number of dialysis providers. Available data<sup>4</sup> bear this out; examination of three HICs suggests great variation in both the number of dialysis patients and dialysis treatment sessions provided (Table 2).

While regulatory measures and lawsuits against the HICs can to some extent control such activities, it is necessary that they be coupled with an appropriate risk adjustment and redistribution mechanism; one that will compensate for higher risks while at the same time not providing perverse incentives on cost-effectiveness and efficiency.

### Current situation in Slovakia

Slovakia has a system of mandatory social health insurance where citizens can freely choose from six HICs, re-register once a year and are entitled to uniform benefits\*. The insurance premium is set out in the law as a percentage of income to be paid by economically active citizens, self-payers, while the state contributes from general taxation for the economically inactive portion of the population.

In order to achieve a certain level of fairness in the system Slovakia has been developing its redistribution mechanism to compensate HICs for the potentially sicker and more costly patients. The risk adjustment mechanism has undergone numerous changes, evolving from a system where adjustment was only by age (two age groups) to the one implemented in 2005 where 85.5% of the premiums

collected by the HICs are redistributed using two parameters: age (seventeen age groups) and gender.<sup>5</sup> The insured are divided into age groups by gender, where each group has a corresponding cost risk index, adjusted on a yearly basis, according to historical data. Thus those HICs who have enrolled a substantially higher number of more risky individuals, as determined by age and gender, are compensated by the remaining purchasers who have a less risky pool of citizens. This mechanism is overseen by the Health Care Surveillance Authority.

While risk adjustment based on demographic parameters is better than no risk adjustment at all, it does not take into account the health status of the population. A young male can be considered low risk yet he could be suffering from a disease which is extremely costly to treat. If the HICs cannot adjust their premiums and redistribution depends on age and gender only, the health plans will incur substantial predictable losses on their high-risk members as demographic models are weak predictors of individual expenditure and explain only up to 5% of overall variance.<sup>1</sup> Thus they will continue to be motivated to select low-risk members or take other measures, including poor quality of care or reduced access to care for high-risk individuals, to reduce their costs.

One of the main goals of the 2007–2010 General Health Policy Framework<sup>2</sup> is to improve the redistribution mechanism. The Framework proposes the establishment of (i) high risk pools which would help to cover catastrophic costs such as transplants or rare diseases; (ii) the

expansion of the current redistribution mechanism by health status parameters based on diagnosis, drugs, and presence of chronic disease or inclusion in a disease management program; or (iii) carve outs where some services or diseases that HICs are likely to select by would be managed separately.

One proposal<sup>6</sup> to amend the 2004 Health Insurance Act (2004) sought the creation of a ‘high risk pool’ which would be used to compensate HICs for cases above a certain threshold. This proposal seemed to be a positive step towards establishing risk sharing, which is an ex-post tool where HICs are retrospectively reimbursed for part of their costs and could to some extent mitigate high cost individuals that the age-gender redistribution mechanism does not account for. Unfortunately, this proposal has not been approved.

### Conclusion and recommendations

The absence of an appropriate redistribution mechanism coupled with a continued lack of progress on this front should worry both policy makers and patients. Morbidity, through the use of diagnosis, needs to be taken into consideration as a parameter for risk adjustment, or failing this some other form of risk sharing should be introduced\*\*. Without this HICs are likely to improve their “risk selection skills” by providing lower quality services instead of improving efficiency. For example, they can decide not to contract physicians who have an excellent record of treating patients with chronic or expensive illnesses; the underlying aim being to reduce the number of such patients enrolled with their company. With the prevalence of chronic diseases in Slovakia (for whom costs are more predictable than acute episodes) now becoming similar to that seen in other parts of Europe, this is something that Slovakia needs to worry about.

Inappropriate incentives, a lack of understanding of the complexities of risk adjustment, implementation difficulties and data weaknesses are the main areas requiring the full attention of policy makers. The current system does not provide the right incentives for health care purchasers and recent changes in the law may have exacerbated the situation. While getting the incentives right is not an easy task, only once policy makers begin to understand the technicalities surrounding risk adjustment and its implications for access to quality care, can the necessary

\* Some insurance companies started to offer additional benefits such as screenings, home visits, vaccinations etc. However, there continues to be almost no competition on the basis of benefits.

\*\* (i) Proportional risk sharing; (ii) outlier risk sharing or (iii) risk sharing for high-risks.

changes be implemented. This has to go hand in hand with a focus on improving data quality and a gradual implementation of the more refined risk adjustment mechanism. Everyone involved in data collection and reporting needs to understand how data is to be used and how it can contribute to the better functioning of the system.

In addition, patients should also begin to share information on their experiences within the health care system, especially if in switching health plans, they have experienced problems accessing care or have been denied care altogether. Their inputs are essential. Finally, providers should clearly state to their patients if they cannot provide appropriate care as a result of inappropriate incentives from HICs. Disclosing all this information would help raise public awareness about the gravity and importance of these issues. It would also help encourage HICs to reduce their risk selection activities and facilitate demands on policy makers to implement an appropriate, fair and viable redistribution mechanism.

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# The Price is Right?

## Promoting local production for ARVs in Sub-Saharan Africa

Kinsley Wilson, Jillian Cohen-Köhler and Alan Whiteside

*Summary: Affordability is a key concern of European donors who finance antiretroviral drugs (ARVs) to treat AIDS in Sub-Saharan African countries. In country manufacture of ARV drugs could favourably affect ARV access through increased affordability; however, generics are a volume based market, relying on economies of scale. The ability of Sub-Saharan African countries to reduce their prices below large-scale manufacturers in India is challenging. Additionally, these medicines must meet WHO prequalification standards. While the cost of second-line ARVs remains a concern, donors should focus resources on other components ARV access, such as the supply of human resources for health, health infrastructure and issues of sustainable financing.*

*Keywords: ARV drugs, Access to medicines, Developing countries, Generic manufacture, Donor financing*

To increase access to antiretroviral drugs (ARVs) for treating AIDS in the developing world, donor countries and multilateral agencies have developed a variety of initiatives. In 2008, the European Commission and European countries provided over 60% (about €1.19 billion) of the Global Fund to Fight HIV/AIDS, Malaria and Tuberculosis budget. With these sustained pledges, Global Fund supported programmes project to treat 1.8 million HIV infected patients over a five year period.<sup>1</sup> To equitably access this treatment, the World Health Organization (WHO) emphasises a drug's rational selection and use, sustainable financing and affordable pricing, while also maintaining reliable health and supply systems.<sup>2</sup> For ARV treatment, a notable challenge has

been affordability. This is why the promotion of local production has the potential to address the critical issue of ensuring sustainable ARV supply.

One of the barriers to ARV price in high prevalence HIV/AIDS countries is the World Trade Organization's Agreement on the Trade Related Aspects of Intellectual Property (TRIPS). In exchange for international trade liberalisation, TRIPS requires twenty years of pharmaceutical patent protection. This provides a market monopoly for patent holding drug companies and enables them to set their prices freely. ARV prices are often out of reach for developing and least-developed countries. In 2000, when few generic drugs were available, the lowest price triple combination ARV treatment was US\$10,439 (€11,326).<sup>3</sup>

Since TRIPS took effect in 1995, international organisations, such as Médecins Sans Frontières (MSF), have encouraged both developing and the least-developed countries to exercise flexibilities in the agreement and subsequent Doha Declaration in order to increase ARV access. Compulsory licensing authorises government use of a patent under public

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