How to Improve Competition in the Health Insurance Market?
Recommendations inspired by foreign best practices, especially the Netherlands and the US Medicaid program.

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(As the author is an economist, not a medical professional, some expressions may not be fully in line with established medical terminology.)

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"When European exploration began, Britain's more constrained crown left trade in the hands of privateers, whereas Spain favoured state control of ocean commerce. The New World's riches solidified Spanish tyranny but nurtured a merchant elite in Britain. Its members helped to tilt the scales against monarchy in the Glorious Revolution of 1688 and counterbalanced the landed aristocracy, securing pluralism and sowing the seeds of economic growth."
Creating economic wealth: The big why, The Economist, March 10th 2012
Review of the book "Why Nations Fail: The Origins of Power, Prosperity and Poverty", written by Daron Acemoglu and James Robinson.

The quote above hints at contrasting circumstances that led to the decay of the Spanish monarchy and to the birth of modern democracy and enormous growth in living standards in the United Kingdom and later all across the developed world. Here the key difference was the strengthening of private ownership as well as plurality of opinion and power centers that outweighed state power in the United Kingdom contrary to Spain. We think that also contemporary health care system in Slovakia and other mainly European countries stands before a question if and to what extent there should be stronger private ownership and plurality outweighing the state influence.

This document analyses the health insurance systems in Slovakia and the Netherlands as well as in the USA with a focus on the Medicaid program. Our goal is to recommend steps aimed at improving competition in the Slovak health insurance market based on foreign best practices. Our analysis aims to provide information to members of the public with an interest in health insurance reform.

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1. Introduction

Several Slovak industries have experienced a better quality of services as well as higher efficiency as a result of privatization and a subsequent rise in competition in the market. Examples include banks, telecom companies, trade and, to a certain extent, the energy sector. But health insurance is not among the success stories. Competition in the health insurance market faces multiple barriers: patients and insurers lack information on the costs and quality of provided health care, insurers and health care providers are overwhelmingly state-owned and highly concentrated, insurance payments are uniform and the package of goods and services financed from compulsory insurance is broad and only vaguely defined.

High information asymmetry is characteristic of health care. Providers typically have substantially more information on the quality and volume of provided services than those, who cover the costs, i.e. insurers and patients. This asymmetry increases the risk of patients and insurers being asked to pay too much. To foster competition in the market, it is crucial to lower the information asymmetry. But the Slovak market still lacks quality information on health care products such as information on prices (costs), volumes and the quality of provided care:

- If insurers lack information on products they buy from providers, they will not be able to compete in terms of price, quality and volume. Similarly, they will be unable to motivate providers to increase quality and efficiency.
- If the insured are unable to compare insurers and providers based on individual preferences, they will not be able to choose the best suited ones and thus create pressure and increase competition in the market.

The oligopolistic structure of the health insurance and regional monopolies of the large provider markets increase the risk of rent-seeking (i.e. the redistribution of existing wealth with no added value), price setting by large actors as well as collusion agreements on e.g. payments to providers. An additional risk arises due to the state's conflict of interest. The state owns the largest insurance company as well as the biggest providers which led to preferential conditions for state hospitals in the past.

The insured are free to select an insurance company. This, however, has no impact on the premiums they pay and next to no influence on the extent and quality of received benefits. From the point of view of the insured, the insurance companies are as good as uniform.

Due to a lack of competition, insurers are unable to promote efficiency and higher quality in the provider network. This is bad news for health care. Paradoxically, it is often said that „competition and private capital have no place in health care." Such arguments are the source of regulations aimed against competition and plurality in the insurance market, e.g. 2007 legislation banning owners of health insurance companies from collecting their profits. The insurance system seems to be standing at a crossroads: one road leads to more competition, the other to single-payer health care, i.e. health care financed by the state through a single insurer.

Both solutions can be supported with success stories from abroad: while Sweden operates a single-payer health care system, competition is the core of the Dutch system and, to a large extent, also of the US Medicaid, a government program designed to fund health insurance for the poor.

In spite of the setbacks, the Slovak system is not far from plurality – and competition. Potential new investors pose an opportunity for improvement: they could provide know-how, a better culture, a wider selection of insurers and insurance plans and more innovation in the market. On the other hand, Slovakia's experience with the public sector's low transparency, extensive corruption and

cluelessness regarding solutions to problems suggests single-payer health care might not be as successful here as it has been in Scandinavia.

Based on these observations, rather than abolishing plurality, INEKO recommends strengthening competition in the insurance market:

- Key measures include providing patients and insurers with transparent information on the costs, volumes and quality of services. This can be done mainly by **publishing online rankings of provider and insurer quality, introducing standards for quality diagnostics and treatment, as well as service catalogues or a DRG system for in-patient care.**
- In order for competition to work, providers and insurers must be allowed to freely negotiate prices and for elective procedures also volumes of DRG defined services. If necessary, prices of certain services may remain temporarily regulated and competition may be introduced gradually, as was the case in the Netherlands. The government should also establish some minimum criteria (e.g. for waiting lists) so that the insurers don't negotiate volumes based on the services that are the best for them financially rather than what patients need.
- Furthermore, we recommend lowering the concentration of ownership and state influence in the insurance market. One approach may be splitting and privatizing the state insurer Všeobecná zdravotná poisťovňa.
- Insurers should be allowed to offer varied insurance plans. This could be achieved by introducing the so-called nominal insurance, used in the Netherlands; by creating health plans with diverse deductibles or with various patient management methods.
- A core health care package covered by compulsory health insurance should be defined, possibly narrowing down the extent of goods and services covered and creating conditions for the development of additional optional insurance.
- **The insurers as buyers should take more responsibility for the quality of provided health care. At the same time, by using managed care practices, they should gain more control over providers they choose and over health care provided to their members.**

This overview implies the state must play a key role in strengthening competition in the insurance market. Compared with the insured, the state is better equipped to gather and process the necessary information on quality and efficiency of insurers and providers. Unlike the insured, it is also in a position to lay down rules for all actors in the market such as basic claims and uniform standards. The US government's Medicaid program could serve as an inspiration for Slovakia, as it actively uses most of the above mentioned measures: it monitors insurers' adherence to pre-defined measurable quality and efficiency standards or set goals. Results are published online and influence government payments paid out to individual insurers.

2. A Short Description of the Slovak Health Insurance System

All Slovak citizens have an equal (universal) right to make use of public health care services based on mandatory public health insurance. Additional optional insurance is non-existent, apart from selected types of life insurance contracts, which provide benefits in the event of disability.

Mandatory public insurance covers virtually all health care with the exception of a few selected services (e.g. in dentistry or cosmetic surgery) and a proportion of drugs and medical supplies costs, which patients pay for in cash. These payments are the same for everybody; however, from 2011 there is a top quarterly limit for direct payments for prescribed drugs provided to pensioners and disabled people above which they get refunded. This is different from the Medicaid program in the US, where there are different copayments on drugs for pensioners, non-economically active groups and higher income patients. Apart from these exceptions, patients in Slovakia are entitled to cost free health care based on public insurance; there are no formal copayments.

In reality, the limited public funds are not sufficient to cover the formally almost unlimited consumption. Cost free health care is but an illusion. Direct payments expand spontaneously throughout the system, with no state regulation in terms of their structure or size. Based on available data, private health care expenditure rises annually, currently amounting to roughly a third of overall health care expenditure. In 2000, Slovakia's private health care expenditure was among the lowest in the OECD; by 2007 it placed among the highest. The unregulated rise of direct payments has an undesirable social impact on the poor and sick as well as on corruption (informal payments) in health care. According to Transparency International Slovakia (TIS), out of all sectors of the Slovak economy, corruption is the most wide-spread in health care. According to a TIS survey carried out in January 2012 TIS, 61% of respondents thought bribery in health care either existed or was prevalent, only 2% thought it was non-existent.

Table: Financial resources in Slovak health care

Year	Health care expenditure as a share of GDP (%)	Public expenditure as a share of overall expenditure (%)	Private expenditure as a share of overall expenditure (%)		
			Overall	Households	Firms
1997	5.8	91.7	8.3	8.3	0.0
1999	5.8	89.6	10.4	10.4	0.0
2001	5.5	89.3	10.7	10.7	0.0
2003	5.8	88.3	11.7	11.7	0.0
2005	7.0	74.4	25.6	22.6	2.8
2006	7.3	68.3	31.7	26.0	4.7
2007	7.7	66.8	33.2	26.2	6.6
2008	8.0	67.8	32.2	25.2	6.2
2009	9.1	65.7	34.3	25.6	7.6

Source: OECD

Mandatory public insurance is available from one state-owned and two private joint-stock companies. With 64.7% of the insured, state-owned Všeobecná zdravotná poisťovňa (VšZP) is the largest player in the market. The market share of private insurers Dôvera and Union reaches 27.5%, and 7.8% respectively. This high concentration is a result of two mergers, both of which occurred on January 1st 2010: VšZP merged with another, smaller state-owned insurer Spoločná zdravotná poisťovňa (SZP) and Dôvera merged with Apollo. In May 2008, Európska zdravotná poisťovňa (EZP),

the then smallest private insurer, left the market, leaving its insured to the state-owned SZP. The rising market concentration was criticized by several experts due to its negative impact on competition in the insurance market.

Filko (2010) notes the Herfindahl-Hirschman (HH) index, designed to measure market concentration and thus indirectly competition, reaches 0.53 in the Slovak health insurance market. The HH index equals 0 to perfect competition, 1 to a monopoly, and an arbitrary 0.18 marks already undesirably high market concentration. The Slovak provider market is also highly concentrated. The HH index for faculty hospitals reaches 0.13 on the national level and 0.8 on the regional[1] level. The HH index for regional hospitals amounts to 0.26 on the regional level and 0.39 when natural 'clusters' of counties are considered.

Table: Health insurers providing public health insurance

Insurer	Ownership	Market share (based on number of insured individuals)				
		1.1.2008	Until 1.1.2010	Since 1.1.2010	1.1.2011	1.1.2012 (estimate)
VšZP	State	56%	55%	69%	66%	65%
Dôvera	Private	15%	16%	25%	27%	28%
Union	Private	9%	6%	6%	7%	8%
SZP **	State	11%	14%	x	x	x
Apollo***	Private	8%	8%	x	x	x
EZP *	Private	1%	x	x	x	x

Source: Health Care Surveillance Authority (Úrad pre dohľad nad zdravotnou starostlivosťou)
*EZP left the market in 2008, its insured ware taken over by SZP.
**SZP was taken over by VšZP on 1.1.2010.
***Apollo was taken over by Dôvera on 1.1.2010.

Table: Market division by number of insured individuals

	VšZP	SZP	Apollo	Dôvera	Union	Total
31.12.2008	2,920,629	715,882	446,161	856,681	336,959	5,276,312
31.12.2009	2,896,224	641,526	498,856	865,156	370,629	5,272,391
31.12.2010	3,485,650	x	x	1,402,133	366,455	5,254,238
31.12.2011*	3,387,017	x	x	1,442,032	407,592	5,236,641

Source: Health Care Surveillance Authority
*Estimate

The insured may switch to a different insurer once a year cost free. The most significant shift occurred after a 2004 reform, which prompted several private insurance companies to enter the market. In 2006, 778,000 insured (approximately 15% of the market) switched their company, most leaving state-owned insurers for private new-comers. It is highly likely the majority of those who transferred where economically active (and thus healthier) which had a negative impact on the state-owned insurance companies, especially VšZP. New regulations (e.g. banning profits) led to a decline in transfers to 5% in 2007, 3.5% in 2008, 2.6% in 2009 and 1.5% in 2010. The number of transfers rose again to 3.5% in 2011, when roughly 157,000 of the insured switched to a different insurer. Dôvera saw the largest increase with 41,000 new members, Union attracted 21,000 new members, while VšZP lost almost 62,000.

[1] Slovakia is divied into 8 'self-governing regions' (samosprávne kraje) and further into 79 counties (okresy).

Table: Clients switching insurance companies in 2011

Insurer	Number of clients (30.9.2011)	Acquired clients (accepted)	Lost clients (accepted)	Change	Number of clients (1.1.2012 estimate)	Market share in % (1.1.2012)
Dôvera	1,401,058	88,182	47,208	+ 40,974	1,442,032	27.54 %
VšZP	3,448,558	14,152	75,693	- 61,541	3,387,017	64.68 %
Union	387,025	54,997	34,430	+ 20,567	407,592	7.78 %
Total	5,236,641	157,331	157,331	x	5,236,641	100 %

Source: Health Care Surveillance Authority

The Slovak health insurance system underwent major change in 2004. Health insurance companies were transformed into joint-stock companies, enabling stock-owners to decide on the use of profits. The aim of the reform was creating a competitive market: one where insurers compete for clients as well as while buying services from providers.

A new government, formed after the 2006 parliamentary election, meant a turn-around in health-care policy. Even though with limited success, the new government attempted to create a single-payer health care system, which allows no plurality. In a May 2007 decree, the government claimed it sought to *'make maximum use of public health insurance funds to cover health care'.* In 2007, the government decided that profits created from 2008 on could not be collected by owners and may only be used for health care provision. This meant an effective ban on profits and a sharp decline in the profitability of investment in health insurance. Among the worst affected were the post-2004 private newcomers. Európska zdravotná poisťovňa (funded by J&T, a Slovak investment group) claimed the profit ban as the reason for leaving the market in May 2008. The owners of Dôvera (Dôvera's owner is Penta, a Slovak investment group) and Union (Eureko, a Dutch insurer) sued Slovakia for damages in an international arbitration court. In 2009, the European Commission (EC) also initiated proceedings against Slovakia. The EC suspected the ban represents an infringement of free movement of capital. In January 2011, the Slovak constitutional court ruled the ban was in breach of the Slovak constitution. The government and parliament subsequently permitted the creation and distribution of profits under two conditions:

1. Insurers must create a reserve fund of at least 20% of their basic capital.
2. Insurers must create technical reserves for reimbursing costs of treatment of all clients on waiting lists.

To compensate for varied risk associated with different member structure, the state redistributes funds among insurers. VšZP, with the largest pool of high-risk patients, regularly received funds redistributed from other insurers, Spoločná zdravotná poisťovňa being the main contributor. In order to boost competition, the 2004 reform lowered the redistribution base from 100% to 85.5% of prescribed premiums. However, as of 1.1.2009, the base was hiked anew to 95%. Several experts claimed the rationale of this move was increasing the revenues of VšZP, which was facing financial difficulties. In a similar move the government increased VšZP's basic capital by €65.1 million in 2009, and subsequently merged VšZP with SZP in 2010. Redistribution criteria include gender and age of members; since 2010 the number of members paid for by the state (who are economically non-active) is also taken into account. Drug expenditure (the so-called PCG, Pharmaceutical Cost Groups) should also be included in the near future; VšZP is likely to be the main beneficiary of the change.

Insurers are responsible for negotiating payments with health care providers on a yearly basis, without government interference. Payments to GPs are determined mainly by a payment agreed per

patient and the number of registered patients (so-called capitation). Payments to specialized medical practitioners are determined mainly by the number and price of services provided in a given period (so-called fee-for-service). Payments to in-patient treatment facilities are determined mainly by the price and number of completed hospitalizations per department as well as by type and size of facility (see box below). **Differences in costs and actual treatments are not taken into account. This is a major set-back of the system: a hospital will receive equal payments for hospitalizations regardless of particular services provided or possible complications. Moreover, for the same services, smaller regional hospitals receive lower payments than large faculty hospitals. Large hospitals use the extra funds to finance underfunded complicated procedures, which are too complex for smaller hospitals to carry out.** A 'Diagnosis Related Groups' system is to be introduced to deal with the setbacks by laying down uniform rules for pricing defined groups of diagnoses and procedures.

The 581/2004 Act on health insurance companies (zákon č. 581/2004 o zdravotných poisťovniach) orders insurers to disclose criteria for contracting providers as well as information on fulfilling the criteria. The act formed the basis for government decrees 752/2004 and 51/2009, which defined quality and efficiency criteria for general and specialized out-patient health care providers as well as for in-patient care. Moreover, insurance companies regularly carry out surveys on patient satisfaction with individual providers. However, using this data faces several setbacks:

- The criteria are poorly structured and allow only for minor differentiation of providers in terms of their fulfillment. Essentially, only three evaluation outcomes occur: standard, low and high quality of care, with vast majority of providers falling into the standard category.
- Assessment of criteria fulfillment is irregular. It is also hard to follow for the public. Insurance companies use different methodologies and present their findings differently. Comparisons by year are missing or time consuming and creating rankings impossible.
- No system is in place to evaluate and rank quality and efficiency of providers by using data from all insurers. Members are not able to compare providers by criteria or look up developments over time.

Insurance company payments to in-patient service providers

Current types of payments:

- Payments for completed hospitalization in a particular department
- Payments for procedures by joint diagnostic and treatment units – especially laboratories (spoločné vyšetrovacie a liečebné zložky SVaLZ), payments for special medical materials
- Procedures covered on an individual basis and particularly costly services

Insurers receive the following information from providers:

- Diagnosis on entry and leaving, gender and age of patient
- Special medical material consumption and SVaLZ procedures
- Drug consumption in case of high cost of drugs
- Information on patient's surgeries (yes/no), however, few providers disclose this information (selected cardiology departments are among the exceptions)
- Information on the length of hospitalization, however, it only affects payments in cases of chronically ill or psychiatric patients
- Information on procedures covered on an individual basis and particularly costly services

Problems:

- No single information source is available, information is provided separately on hospitalization, particularly costly services as well or procedures covered on an individual basis; most data comes from providers' data sheets
- No catalogue of procedures is available for in-patient care. With no catalogue of procedures, many hospitals are unable to keep record of provided treatments and end up losing track. As a consequence, insurance companies lack information on diagnostics and carried out treatments. This makes it impossible to distinguish differences in individual treatments (the so-called case-mix), which is particularly challenging in departments with an intricate case-mix, such as traumatology departments. However, insurance do monitor selected issues more closely:
    - Outliers - financially demanding hospitalizations, making up roughly 1% of overall costs
    - Procedures covered on an individual basis (e.g. gall bladder surgery, chronic appendicitis surgery, cataracts), making up approximately 40% of total costs in surgical departments, as well as a smaller proportion in several other departments
    - Cardiac surgery, which, based on available information such as tools used, incidence of surgery, etc., allows insurers to make an informed estimate on diagnostics and treatments performed
    - Departments with similar patient structure (e.g. departments for the long-term ill, psychiatric wards, maternity wards), where patients' age is the key indicator for a case-mix estimate
- For common hospitalization (e.g. maternity wards, complete endoprothesis) large faculty hospitals receive higher payments than smaller general hospitals, even though costs should be comparable when similar procedures are concerned. This practice creates incentives for large hospitals to unnecessarily hospitalize 'common' patients. The reasons for this practice include:
    - State-regulated payments for hospitalizations have traditionally been set at a certain level – in the past, payments were determined by departments and hospitals, with faculty hospitals receiving higher payments. In 2004, regulated payments were abolished, but parts of the traditional system remain.
    - Large faculty hospitals have basically evolved into monopolies in their regions, making it difficult for insurers to create pressure on lowering prices. The fact, that insurers would not dare withhold a contract from a faculty hospital, illustrates their monopoly power. With no general hospitals available for common hospitalization in the vicinity, the Faculty hospital in Bratislava (Slovakia' capital) poses a particular challenge.
    - State ownership of the largest insurance company and major hospitals creates a conflict of interest, leading to better conditions for state hospitals. Since 2006, the state insurer's and faculty hospitals' special relationships have manifested through a sharp rise in payments received by faculty hospitals. One faculty hospital saw a 20% rise in payments - twice within a single year. As a consequence, the Slovak Antimonopoly Office (Protimonopolný úrad SR) fined the Association of Faculty Hospitals (Asociácia fakultných nemocníc) for creating a cartel and pressuring smaller insurance companies to increase their payments.
    - Due to its dominant position, VšZP has all but secured the position of a price-setter, limiting the smaller insurers' space for negotiations on payments.

The introduction of the German model of the DRG system, planned for 1.1.2013, should provide both insurers and providers with more information.

- The DRG will provide information on diagnoses on entry and leaving, procedures, auxiliary diagnoses, complications, gender, age and patients' health on admission and discharge. This information will be sorted into groups of clinically and economically similar hospitalizations; patients in a certain group will draw equal payments from insurers.
- The DRG will create uniform standards for information provision to insurance companies; it will lay down a basic communication infrastructure for insurers and in-patient care providers. Hospitals will no longer be forced to provide different insurers with information based on their own methodologies, which should lighten their administrative burden. Furthermore, costs of individual procedures will be uniformly set.

However, several aspects of the Slovak DRG remain unclear:

- It is not clear whether the DRG will cover costs of training, capital costs or depreciation. The German DRG model, due to be introduced in Slovakia, does not provide this information.
- Will hospitals be allowed to negotiate hospitalization prices for different groups (or rather the so-called basic fees, which will be later multiplied by cost weights for individual hospitalizations)? Or will prices be regulated with uniform fees set for the entire market? If uniform prices are enforced, insurers will not be able to set different prices based on the number of hospitalizations with a certain provider or the quality of services. This would have a significant negative impact on competition in the provider market, as the number of particular surgeries affects their quality as well their unit costs immensely.
- How will erroneous information be handled? The German system understands errors as fraud and automatic sanctions ensue. If no sanctions were in place, hospitals may be tempted to deliberately provide 'erroneous' information.
- How detailed will the diagnosis and procedure classification be? Too much detail may provide information for accurate price estimates but raise the administrative burden above an acceptable level.
- Will diagnostic and treatment standards be introduced along with the DRG? It is likely the DRG will cause unit prices to fall. **If no standards are enforced, hospitals may drop more expensive procedures or replace drugs and tools with cheaper or low-quality substitutes in order to compensate for the revenue fall-out.**

Insurance companies are obligated to conclude contracts with all GPs, who treat at least one of their members. Insurers are also obligated to conclude contracts with all pharmacies and emergency medical services providers, as well as with a limited number of specialist practitioners and hospitals. In 2007, the government introduced the so-called end network of hospitals (koncová sieť), initially listing 34 and later expanding to 39 facilities, all of them state-owned. Insurers were obligated to conclude contracts with hospitals in the network, regardless of their quality and efficiency. The network skewed competition in the market: hospitals within the network negotiated with insurers from a much stronger position than outsiders. The imbalance led the next government to abolishing the end network in 2011. Insurers are now only obligated to contract hospitals within a so-called fixed network (pevná sieť) defined by regions rather than a list of selected hospitals. Insurers must contract enough hospitals to ensure the provision of minimal defined urgent care in every region. The state also lays down minimal quotas for doctors, nurses and hospital beds in individual departments.

Until 2008, insurance companies were required to secure basic capital of at least 3% of yearly premiums' revenue. In 2008, all insurers met the target easily, with the exception of Všeobecná zdravotná poisťovňa, which stayed just barely above the 3% line all year. This was one of the reasons prompting the government to introduce a new insolvency rule in 2009, declaring an insurance company insolvent only when its liability payments are 30 days overdue. If insolvency lasts for five consecutive months, the Surveillance Authority will close the insurance company. Some experts regarded the new rule as soft, warning it may jeopardize the financial stability of public insurance. As

of 2011, a new insolvency definition was put in place. However, due to VšZP's inability to comply, the rule will not become effective until July 2012. Presently, a further delay has been proposed, citing the same reasons. The new conditions are as follows:

1. Insurers' capital and reserves must reach at least 3% of yearly insurance revenue after state redistribution.
2. The current ratio (ratio of short-term to outstanding liability) must reach at least a figure of 1.2.
3. Liabilities to providers overdue more than 30 days may not exceed 0.5% of all outstanding liabilities.

VšZP's financial problems had a significant impact on its net income; audit showed the company had suffered a € 120 million loss in 2010. As a consequence VšZP implemented a downsizing plan, terminating contracts with 150 hospital departments (cutting around 3,000 hospital beds), reducing the number of new contracts with specialists, introducing financial incentives for out-patient surgery as well as reducing staff. In 2011, VšZP is expected to achieve net income of € 5.7 and a balanced budget is the goal for 2012. Dôvera, a private insurer, achieved a net income of € 16.2 million in 2010 and around € 10 million in 2011, a balanced budget is expected in 2012. Union, the smallest insurer is expecting a net income of € 9 million in 2011 and a surplus net income in 2012 as well.

Table: Insurance companies' net income (in millions €)

	VšZP	Dôvera	Union
2010	- 120,23	+16,2	- 2,265
2011 (estimate)	+5,7	+10	+9

Source: Health Care Surveillance Authority

Individual clients pay insurers different required payments:

- Employees and employers pay a compulsory levy of 14% of employees' gross monthly income (an employee pays 4%, an employer 10%). The minimum wage, roughly 40% of the average wage in Slovakia (€ 327.2 in 2012), constitutes the minimum base of assess. The maximum base of assess is set at three times the level of average monthly wage from two years ago (€ 2307 in 2012).
- Self-employed individuals pay a levy of 14% of the tax base of assess, divided by a coefficient of 2.14. The maximum base of assess for the self-employed is similar to the employee maximum. The minimum base of assess is set at 44.2% of the average wage from two years ago (€ 340 in 2012). Due to the lower base of assess, most self-employed pay contributions based on the minimum base of assess.
- The state pays premiums for children that are unprovided for, the unemployed and for people caring for children under the age of three. This amounted to 3.1 million people in 2011 or 57% of the population. In 2009 the premium rose to 4.9% of the average wage from 4% in 2006; however it dropped back to 4.78% in 2010 and 4.32% in 2011. This increase in premiums paid by the state for its clients significantly softened the impact of the economic crisis on insurers' resources.

Table: Premiums paid by the state for its clients

	2006	2007	2008	2009	2010	2011 (p)
Proportion of average wage	4%	4,33%	4,5%	4,9%	4,78%	4,32
Total payments in millions €	773	893	990	1 158	1 341	1,208
Proportion of GDP	1,4%	1,5%	1,5%	1,8%	2,0%	1,7%

Source: Ministry of Finance of the Slovak Republic

(p) – prognosis

Table: Insurance companies' revenue (financial operations excluded) in millions €

	2008	2009*	2010	2011
Total revenue	3,276	3,363	3,593	3,608
Change	-	+2,6%	+6,8%	+0,4%

Source: Health Care Surveillance Authority, 2011 – estimate of the Ministry of Finance of the Slovak Republic
*VšZP's basic capital increase excluded

No rankings of insurance companies' quality are available for the insured. Health Policy Institute, a private think-tank, published a complex ranking in 2008, placing private insurers before state-owned companies. In reaction, the Health Care Surveillance Authority published its own ad-hoc ranking, placing state-owned companies before private insurers. In 2009, Health Policy Institute announced it would not be updating its ranking due to the dubious validity of available data and public insurers' reluctance to provide data.

3. Foreign Best Practices (With a Focus on the Netherlands and the US Medicaid Program)

Plurality in health insurance is typical of most developed countries, with several insurers active in individual markets. Typically, the state heavily regulates mandatory health insurance, limiting competition to a minimum. This is the case in Slovakia as well as in France, Germany, Belgium or Austria. However, several states have introduced competition into public insurance and achieved impressive results in terms of health care (e.g. the Netherlands or Switzerland) since. With more than 1,000 insurers, competition in health insurance is best developed in the United States. A single-payer system, where health care is financed by a single state agency through taxation, is an alternative, typical of countries such as the United Kingdom, Sweden or Finland.

The next chapter focuses on countries with competitive health insurance markets. Two basic approaches to allowing new actors into the market are introduced. In a so-called open market, any number of companies may enter the market and compete, as long as they fulfill pre-defined government criteria. Slovakia has an open insurance market. However, this chapter will focus on the Dutch system and the US open market for commercial insurance. In a second approach, a government allows new companies into the market by way of a public tender. The government seeks a minimum of two companies most capable of fulfilling set criteria. Selected companies win a contract to finance and manage health care in a specific region over a given period. United States use tenders for government financed insurance programs, such as Medicaid, the largest program designed to provide health care to the needy.

3.1. The Netherlands

Among countries, that aim to improve quality and efficiency of health care provision by increasing competition in the health insurance market, the Netherlands is one of the most successful. As in almost all OECD countries, the Dutch have mandatory health insurance and their insurers may not take their members' health condition into account.

Until 2006, the Netherlands had no universal system requiring the Dutch to take out health insurance based on government standards. Two parallel systems, private and public, co-existed side by side. Roughly 65% of the population made use of mandatory public insurance, private insurance catered to the remaining 35%, mainly the well-off with a yearly income of over €30000. Around 30 non-profit health insurers provided mandatory public insurance, offering uniform services and facing no competition. They were funded by a special levy, deducted from clients' salaries along with income tax. High-income earners were excluded from mandatory insurance, but allowed to take out private insurance. Private insurers were allowed to differentiate clients based on income, age and gender; they could also refuse to grant insurance. No redistribution of revenues took place in private insurance. However, the government regulated both systems to ensure the older and less healthy also had access to private insurance and that public insurers were compensated for their higher share of high-risk insured. A growing dissatisfaction with the dual system led to a 2006 reform, unifying private and public health insurance into a universal system.

Since 2006 health care is financed from several resources/ pillars:

1. Universal mandatory health insurance for long-term care - according to Schäfer (2010) used predominantly to cover social and nursing services for immobile, chronically ill (e.g. with birth defects) or geriatrics patients in nursing homes or in home care, and related expenses (e.g. medical tools, accommodation). This type of insurance is managed by private insurers and financed with a special income levy. In 2011, the levy amounted to 12.15% of income up to 33,427€ annually. First pillar insurance may also be managed by regional authorities. In 2009, this type of health care expenditure amounted to 27% of overall health care expenditure in the Netherlands.
2. Universal mandatory health insurance for basic care - according to Schäfer (2010) used predominantly to cover:
    a. In-patient care (general and specialized practitioners)
    b. Dental care up to the age of 22 (for older patients only specialized dental care and dentures are covered)
    c. Hospitalizations other than those covered by long-term care insurance (usually hospitalizations shorter than 1 year)
    d. Drugs, medical supplies and equipment (only up to costs of the cheapest alternative in a particular therapeutic category)
    e. Maternity care and delivery
    f. Emergency health services
    g. To a limited extent the following services: physiotherapy (only for chronically ill patients – insurance does not cover first 10 consultations in a year), dietary counseling, rehabilitation, speech therapy and mental care (up to 8 consultations with primary psychologist, hospitalizations of up to 1 year), artificial insemination (up to three attempts)

   This type of insurance is managed by private for-profit or non-profit insurers (the majority being non-profit), based on licenses granted by the central bank. In 2009, this type of health care expenditure amounted to 41% of overall health care expenditure in the Netherlands.

3. Optional additional insurance - used to cover services that exceed government-set standards such as adult dental care, physiotherapy for others than the chronically ill, glasses, cosmetic surgery for non-medical reasons or co-payments (with the exception of deductibles, see below). Roughly 90% of the Dutch population takes out optional insurance. Insurers are allowed to take potential risks into account, refuse to accept insurance applications as well as require various payments. Additional insurance makes up around 4% of overall health care expenditure.
4. Government-funded expenditure (14% of overall health care expenditure in 2009)
5. Direct payments (9%) and other resources (4%)

Although insurance is mandatory in the first two pillars, around 1% of the population fails to take out insurance for various reasons, and further 2% are insured, but fail to pay their insurance payments. Both groups face fines as a result. The armed forces are exempt from mandatory insurance as are persons who opt out based on their faith or worldview. However, the resources that would otherwise be paid to insurers will in these cases be credited to individual private health care savings accounts, set up specifically for financing health care. Health care costs that exceed the balance in specialized accounts are covered by individuals directly.

Second pillar mandatory insurance covers a core universal health care package defined by the government; insurers may include further services. The following criteria are used to select the core package (the so-called Dunning funnel):

1. The impact on the quality of life or rather the ability to prevent the quality of life from decreasing
2. Effectiveness
3. Cost efficiency
4. Individual financial accessibility and individual responsibility

Parents or guardians are responsible for securing an insurance contract for their child; however, costs are covered by the state. An independent state agency makes sure insurers adhere to requirements regarding the extent and quality of the core package. The agency also regulates most health care payments. However, since the introduction of a DRG (Diagnosis Related Group) system in 2005, room has opened up for insurer-provider price negotiations (see below).

According to Schäfer (2010) the insured may chose in-kind or in-cash benefit plans:

1. In-cash benefits plans allow the insured to select any provider. While paying for services in cash, the health insurer subsequently refunds costs up to a typical market price of the particular service. If the actual price charged by a provider exceeds the typical price, the difference is covered by the patient. Expensive treatments are typically covered directly by insurers, rather than with in-cash benefits.
2. In-kind benefits may limit the choice of providers of the insured to an insurer's provider network; services outside the network require extra payments. Health care within the network is paid for directly by the insurer with no cash payments by the insured. However, in 2009 insurers made no use of selective contracting, with the exception of certain individual providers. Thus all hospitals and most other providers in the market were included in the network.

In 2009, 40% of the population chose to receive in-kind benefits and 25% in-cash benefits, the rest opted for a combination of the two.

Differences between in-kind and in-cash benefit plans are limited as insurers must charge equal premiums for both, even though insurers should be able to offer more affordable premiums for in-kind benefit plans as compensation for a limited choice of providers. A limited network of providers

should lead to more efficient management and lower costs for insurers. An unlimited choice of providers, on the other hand, increases insurers' risk as their influence on providers decreases with their growing number. Consequently, insurers' costs and prices rise. If insurers are banned from asking lower premiums even if lower costs would allow them to do so, patients are not financially motivated to opt for a limited provider network. This results in a minimum use of selective contracting and management.

Schäfer (2010) states long-term care first pillar patients are free to choose between in-kind benefits and a so-called personal budget, or a combination of the two. With in-kind benefits, health care is organized by a dominant regional hospital or by regional authorities through public procurement; personal budget patients organize their health care themselves.

According to Pourová (2011), in 2011, the Dutch could choose from 56 types of contracts offered by 27 health insurers. Ninety percent of the population opted for one of four largest holding companies, which dominate the market. Even a higher market concentration is typical of some regions, creating a barrier to competition and individuals' choice. Once a year, the insured are allowed to change their insurer. Maarse (2011) states 18% of the insured switched to a different insurer in 2006. In 2010 the figure fell to 3.9%, and rose again to 5.5% in 2011. Insurers must accept all applications for insurance, if they provide the desired types of services.

Private insurers fund core universal mandatory insurance (second pillar) from three sources:

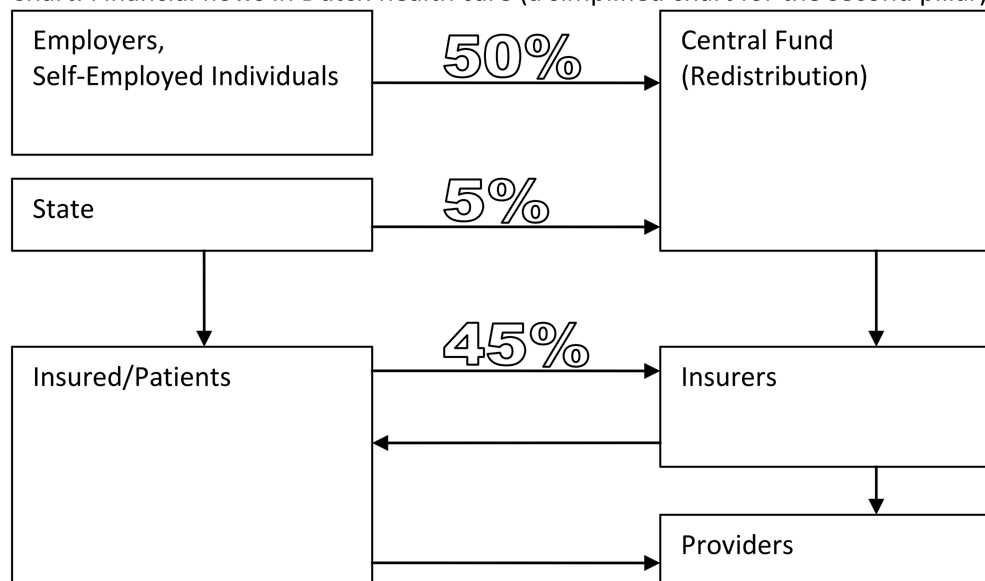
1. Contributions from a central fund, which collects levies from employers and the self-employed through tax authorities. These contributions amount to roughly 50% of total resources. In 2011, employers paid a levy of 7.7% (up from 6.6% in 2006) of an employee's salary, however, only up to €2,600 a year. The self-employed paid a levy of 5.65% in 2011 (up from 4.4% in 2006)
2. Nominal insurance (including deductibles – see below), collected directly from the insured over the age of 18. Nominal insurance amounts to roughly 45% of insurers' revenues. Insurers may compete by setting lower prices. However, they are required to collect uniform payments from their insured (this is called a community rating), allowing for no differentiation based on age, gender of health condition. Often used collective contracts, usually taken out by employers, are an exception, which allows insurers to offer clients a discount of up to 10%. Maarse (2011) states an average nominal payment amounted to €1,100 in 2011, up from €795 in 2006. Low initial payments, introduced to attract clients at the time of the reform in 2006, may have been the reason for the subsequent rise. Insurers' low profits seem to support this. In reality, payments to individual insurers do not vary by more than 5% (in 2011 yearly payments varied from €1,068 to €1,272).
3. Insurance for the poor and children under the age of 18 is covered by the state from a central fund; it amounts to roughly 5% of insurers' total revenues. The state subsidizes the nominal insurance of about a third of the adult population (i.e. fixed payments collected directly by insurers).

Not all core package services are fully covered by insurance. Individuals over the age of 18 are required to pay a deductible (given sum of direct payments), which may be covered by neither mandatory nor optional insurance. Insurers only start redeeming costs once clients have paid their deductible. In 2011, the deductible amounted to €170 a year. Selected treatments are exempt from deductibles, primarily in maternity care and dental care up to the age of 22. Since 2009, insurers may compensate deductibles to chronically ill patients, patients who stay within their provider network, patients who take preferred drugs and use preferred medical tools or take part in state defined preventive programs for diabetes, depression, cardiovascular diseases, obesity, etc. On the other hand, state-regulated co-payments for drugs are not included in the deductible. The insured

may opt to increase their deductible by between €100 and €500 (rising by the hundred) in exchange for lower nominal insurance. This also creates room for competition among insurers. **The rationale of deductibles is that limited direct payments discourage the insured from unnecessary consumption and thus decrease moral hazard.**

Apart from deductibles, the government also regulates other co-payments, especially in the first pillar. Co-payments generally mean the insured cover only a proportion of overall costs of received health care. The total amount varies with individuals' income; however, maximum and minimum limits are set. Patients also pay fixed direct payments for other specialized services, such as psychiatric consultations.

Chart: Financial flows in Dutch health care (a simplified chart for the second pillar)



Source: Ministry of Health Care, the Netherlands, Health Insurance System

The Netherlands redistributes collected revenues among insurers in order to balance out or share risks associated with different characteristics of the insured. This policy discourages insurers from discriminating against high-risk patients. In other words, fund redistribution aims to decrease differences between high- and low-risk members in terms of profits. Redistribution is carried out in two phases:

1. Ex ante redistribution, where income levies and state payments collected in the central fund are redistributed, amounting to roughly 55% of insurers' total income. In order to allow for competition, nominal insurance payments are exempt from redistribution. For redistribution purposes, personal characteristics of the insured are taken into account, such as age, gender, economic activity, region (e.g. compensation depending on the size of the immigrant population, mortality risk or income), as well as historical costs of drugs for chronic illnesses (PCG, Pharmaceutical Cost Groups) and chronically ill patients' diagnoses (DCG, Diagnostic Cost Groups). These characteristics influence an individual insurer's yearly cost outlook, from which expected revenue from nominal insurance is subtracted. The insurer receives the resulting sum from the central fund. This way all sources of funding are subject to risk sharing, although only 55% is actually redistributed. The nominal insurance revenue outlook is based on standardized rather than actual payments. This is done to discourage insurers from artificially decreasing their payments in order to receive more central funding.
2. Ex post redistribution compensates insurers for unforeseeable costs after the relevant ex ante period is up, such as unexpected changes in the members' characteristics or

unexpectedly high health care expenditure. Insurers also receive compensation if their average variable costs per patient in in-patient care exceed the national average, and must compensate other insurers if their costs are too low. Ex post redistribution also includes payments intended to even out expected and actual costs of all the insurers.

One of the goals of the 2006 reform was inducing competition into insurer-provider negotiations on quality, quantity and price of provided services. Insurers should become real buyers of provided health care. Price competition in negotiations with hospitals was based on two main assumptions:

- A uniform transparent price-setting mechanism for hospital as well as specialized practitioners' services (a DRG system was introduced in 2005)
- The introduction of selective contracting, i.e. allowing hospitals to create limited provider networks; however, selected contracting has remained marginal to date.

Until 2005, hospital budgets were created predominantly based on the size (e.g. number of hospital beds or employees) or type of facility. Services were charged separately, making the costs of individual patients or diagnoses hard to track. A Dutch alternative to a DRG system (Diagnosis Treatment Combinations) was introduced in order to make financial flows more transparent. All hospitals are now required to track financial flows for individual patients, allowing hospitals to keep track of the number of patients with particular diagnoses. The system defined roughly 30,000 combinations of diagnoses and corresponding treatments, starting with a first consultation and diagnosis, and going all the way to treatments. Costs, which hospitals will receive for provided services, were specified for each combination. The new system thus transferred part of the financial risk associated with health care provision to the provider, as providers' revenues are no longer determined by the length of hospitalizations or the number of diagnostic procedures.

Since the introduction of the DRG system, the share of non-regulated prices of diagnoses and corresponding treatments has been steadily rising. In 2005 insurers could negotiate prices in 10% of all combinations; in 2009 the proportion rose to 33%. Initially, price negotiation was only possible for routine procedures such as knee and hip joint replacement surgery, cataract surgery, varicose veins surgery or diabetes treatment. Non-negotiable prices are regulated by the state. In the regulated segment, negotiations on quality and volume of health care are also largely ruled out. According to Maarse (2011), a hospital typically agrees upon conditions with the dominant insurer and the remaining insurers follow suit. Furthermore, hospitals are not allowed to exceed maximum costs set by the state. The duality of the hospital financing system decreases transparency and leads to administrative problems. In 2010, the problems resulted in an announcement by the ministry of health that the non-regulated segment will be radically expanded to 70% of all hospital revenues in 2012.

Schäfer (2010) criticizes the Dutch DRG system for its complexness and lack of international compatibility. Such criticisms lead to a decrease in diagnosis and treatments combinations from 30,000 to 3,000 in 2011. It is too early to judge the impact of the DRG and the free contract negotiation on the Dutch health care system. However, early data suggests a slight increase in the quality and decrease in the prices of health care. **The system still faces major barriers in a lack of objective standards as well as a lack of information on the different quality of services.**

Since 2010, the Netherlands have been phasing in so-called episode payments for selected diagnoses in primary and specialized care (e.g. diabetes or cardiovascular diseases). The new system aims to strengthen competition and managed care. It **resembles a DRG transposed into out-patient care.** Introducing single payments motivates general and specialized practitioners to cooperate while treating a particular patient and thus to increase efficiency. The new system may also induce insurers to compete when buying out-patient care, where competition is still basically

non-existent. Since 2008, the DRG has been the basis for remunerating specialized practitioners. Remuneration for individual diagnosis and treatments combinations is determined by worked hours and state-regulated hourly wages. These criteria are uniform for all specializations. GPs are mostly remunerated by capitation payments and, to a smaller extent, for particular consultations and procedures. Schäfer (2010) writes that representatives of GPs (e.g. chambers) renegotiate maximum payments with insurers and the ministry of health care every year. The chambers subsequently negotiate contracts with the region's largest insurer. A majority of the remaining insurers accept conditions agreed upon in this way. In rare cases insurers may also negotiate individual contracts with doctors.

Long-term first pillar providers were remunerated based on the number of hospital beds until 2009. In the reformed system, several packages have been introduced, depending on the time-intensity and other characteristics of care affecting costs. A state agency regulates the costs of each package.

The reform also created room for vertical integration of insurers and providers. According to Schäfer (2010), this has so far only resulted in ownership links between several insurers and non-emergency health care providers and pharmacies. An insurer is also currently planning to acquire a regional hospital. Maarse (2011) states one insurer specializes in investment in primary health care centers.

Insurers have refrained from managing patients' selection of providers. So far only soft tools have been introduced, such as providing information on hospital waiting times or compensating deductibles (€170 in 2011) if members stay within their provider network. However, Maarse (2011) states some hospitals have announced they will no longer be contracting some hospitals for all procedures (e.g. breast cancer surgery), as the hospitals failed to meet required quality standards. **Insurers also require GPs to refer patients for specialized non-emergency care.** GPs thus become key decision-makers in terms of further care and related costs. However, patients are able to choose hospitals themselves; referrals specify only treatments, not particular facilities.

3.2. The United States - with an Emphasis on the Medicaid Program

Along with Mexico and Turkey, the United States is one of three OECD members with no universal health care system set up to provide care to the whole population. However, some states have taken steps towards a universal system, such as introducing mandatory health insurance for a majority of the population, with the state subsidizing the poor. The Massachusetts 2006-2007 reform is the most prominent example.

More than one thousand insurers are active in the US market. The majority are non-profit; however, for-profit insurers are also a part of the system. Approximately 83% of the population take out insurance, the remaining 17% are uninsured (according to Wikipedia 16.7% of the population, mostly low income earners, were uninsured in 2009). Private insurance dominates the market with 59% of the population insured through their employer and 9% taking out individual insurance. Insurance premiums are nominal, i.e. no income levies are paid; insurers offer various premiums and are free to differentiate between the insured based on health risks. Consequently, health insurance becomes more expensive for certain individuals, which is most likely one of the main reasons for the large proportion of the uninsured. The government uses tax revenue to fund health care for approximately 28% of the population, especially the elderly and disabled (Medicare, financed by a special tax levied on wages), the poor (Medicaid), children from low-income families (SCHIP) as well as for veterans (VHA) and active duty officers (TRICARE).

For a full picture, the following section provides an overview of the basic US commercial health insurance forms, i.e. excluding government-funded programs (Source: Goliaš 2009 and 2011):

1. Traditional insurers (fee-for-service plans or indemnity plans). Traditional insurers reimburse treatment selected by the insured from any provider. Due to broad provider accessibility, traditional insurers are more expensive than insurers with a limited provider network. The insurer does not cover the full cost of treatment; patients pay a basic fee themselves. Patients also share a part of the costs above this fee; however, for the most part they are covered by the insurer. Insurers generally define an annual ceiling for patient expenses. Costs exceeding this ceiling are reimbursed by the insurer in full. From the patients' point of view, traditional insurers are more demanding in terms of administration as they require completing forms in order to reimburse costs of care. This is similar to the "in-cash benefits plans" used in the Netherlands. Traditional insurers' market share among employers dropped from 73% in 1988 to 1% in 2011.

2. Managed care organizations. Managed care insurers primarily pay for treatment from selected providers (emergencies, such as injuries may be an exception). Due to established relations with providers, treatment is cheaper. Managed care organizations' market share continues to rise. Nearly all US employers currently conclude contracts with a managed care organization. These include:

    a. Health Maintenance Organizations (HMO). The majority of HMOs are for-profit insurers. HMOs place patients with selected providers with whom they closely cooperate or whom they employ. Payments are agreed upon in advance. A key role is played by GPs. GPs decide on their patients' further treatment in accordance with HMO standards (thus they are also called gatekeepers). HMOs as insurers cover nearly all costs associated with treatment; the patient pays but a small proportion. HMOs are less demanding in terms of administration from the patients' point of view as health care costs in the HMOs network of providers are more easily controlled. The share of HMOs in the employers' market has risen to 31% in 1996, but has since fallen to 17% in 2011.

b. Preferred Provider Organizations (PPO). PPOs are provider associations, which conclude contracts with multiple insurers or employers. The majority of PPOs are self-funded by employers. In other words, the employer holds the risk and chooses what to charge employees and their families as well as what benefit plans employees can choose from. They pay an insurer a monthly administrative fee to administer the health plans (i.e. pay claims) and access their contract rates negotiated with providers. Compared with HMOs, those insured by PPOs have better access to providers outside of their network (e.g. they need no referral from their GPs). However, they still pay more and have to fill in forms in order to be reimbursed. Those insured by PPOs generally pay more in additional fees than HMOs patients. The market share for PPO insurance among employers increased from 11% in 1988 to 55% in 2011.

c. Point of Service (POS). Like HMOs, POSs assign a key role to GPs, whom the insured choose within the insurers' network. The GPs become patients' 'point of service,' deciding on their further health care. Like PPOs, POSs allow treatment outside of insurers' networks. However, the insured face higher additional fees and are also responsible for administering all outstanding payments. The share of POS in the employers' market increased to 24% in 1999, but has declined to 10% in 2011.

3. High Deductible Health Plans with Savings Options (HDHP/SOs). HDHP/SOs are all Indemnity plans, HMOs, PPOs and POSs, that fulfill two conditions:
   - The premium may be lowered by a deductible if the insured agree to directly cover their costs up to a certain level. Only costs above this level are covered by the insurer. In 2011 the deductible amounted to $1,000-1,200 per person or $2,000-2,400 per family.
   - The insured or employers are allowed to save for their direct payments in special accounts.

   The share of HDHP/SOs in the employer market grew from 0% in 2005 to 17% in 2011. It is primarily used by larger companies with more than 1,000 employees.

Table: Individual insurance programs' market share in the employer market by number of employees

	Traditional insurers	HMOs	PPOs	POSs	HDHP/SOs
1988	73%	16%	11%	0%	0%
1993	46%	21%	26%	7%	0%
1996	27%	31%	28%	14%	0%
1999	10%	28%	39%	24%	0%
2003	5%	24%	54%	17%	0%
2006	3%	20%	60%	13%	4%
2011	1%	17%	55%	10%	17%

Source: Kaiser, 2011 (b)

This table highlights the development of the various forms of managed care, currently used by nearly all US employers. PPOs are the most common, as they offer favorable conditions to employers and their employees but allow patients to seek treatment outside of their networks as well. The table also shows a sharp rise in demand for plans with deductibles.

The key advantage of managed care is that insurers gain closer control over costs, quality and volumes of provided health care. The idea behind managed care is based on coordinating healthcare to prevent unnecessary or avoidable claims within the delivery of services while maintaining a required level of quality. Such claims include duplicate or superfluous tests,

prescribing more expensive medication when cheaper alternatives are available, excessive hospitalization or claims resulting from the occurrence of illnesses and complications that can be avoided with prevention and quality therapy. The health care provided can be coordinated based on insurer-provider cooperation defined in the contract; and/or on motivating patients as well as health care providers by ensuring that they bear a part of the financial risk associated with the received/ provided care.

Fundamental characteristics of managed care include the following:

1. Unlike in a fee-for-service system, capitation contracts between insurers and providers are typical of managed care. Based on capitation contracts providers regularly receive a fixed sum per client regardless of the volume of services she is provided. **Compared with the traditional system, in managed care, insurers transfer a share of the financial risk associated with covering health care costs to providers,** as capitation payments discourage providers from generating unnecessary treatments and inflating costs.
2. Insurers can pay providers work as groups rather than separate individuals, ranging from associations of independent providers to individual companies employing practitioners. Group members share clinical and economic (financial) risks to promote the most efficient allocation of clinical resources to meet the needs of patients. A strong role of GPs is typical, with GPs becoming personal/ family doctors and becoming patients' gatekeepers to further health care (i.e. deciding on their further health care).
3. Providers actively participate in managing health care alongside insurers and the insured; they share costs as well as associated risks. Providers decide on most suitable treatments. However, when diverging from recommended procedures, providers should be able to justify their decision.
4. Quality incentives motivate providers to increase efficiency while emphasizing prevention and early diagnostics to prevent possible complications. Shared risk-arrangements between insurers and providers may tempt providers to lower costs at the expense of quality so to prevent this, it is necessary to define quality standards and introduce mechanisms to monitor adherence and encourage improvement.
5. Modern managed care programs use motivational means such as awarding points to encourage desired behaviors and discourage unwanted behavior in the insured (for example the insured may gain certain benefits in exchange for points they earned). Similar motivational means may be used in relation to providers.

Managed care was created in a reaction to a sharp rise in health care costs. The goal of these changes was to slow down the rise of medical costs and to increase health care quality without having to apply treatment limits or waiting lists for procedures which are commonly used cost controls in Europe. Indeed, a slower growth in US healthcare costs occurred in the 1990s. According to Kaiser 2011 (a), while the 1980s saw a rise of the health care expenditure to GDP ratio all the way to 3.2%, the ratio rose just by 1.2% in the 1990s.

However, according to Wikipedia, patient surveys, carried out from the end of the 1990s, showed patients believed cutting costs came at the expense of service quality. Furthermore, in the 1990s, health care as well as other sectors saw an increase in competition for customers, who demanded ever more personalized products. Discontent with the limited selection of providers emerged as more patients than before demanded the right to choose their services and providers. Several states reacted by introducing stricter controls on health care quality, while insurers responded with a wider range of health care plans as well as a loosening of the tight oversight of costs within managed care. A sharp rise in health care costs since 2000 was one of the consequences.

Managed care took hold fast in the United States and has become the dominant mode of financing health care in both private and public insurance. The rise of managed care was sped up by the lack of popularity of alternatives such as lowering payments to providers or including fewer services in insurance packages.

Multiple analyses explore the rise of managed care and its influence on health care costs and quality (see Miller, 1997; CBO, 1994; Cutler, 1997). According to Cutler, in 1997, only 5% of privately insured Americans made use of managed care in 1980, in 1987 the proportion rose to 25% and in 1995 to 75%. However, substantial differences exist between individual states. While 80% of privately insured Californians subscribed to managed care, the share was close to zero in Alaska or Wyoming. According to Cutler's study, the average per capita health care expenditure in California in 1980 was 17% higher than the national average, but fell back to the national average level by 1993. Similar comparisons show that a **10% rise in insurance by HMOs may amount to a 0.5% slow-down in the growth of health care expenditure annually. Cost savings arise mainly due to cutting back on the length of hospital stays, while the number of hospitals remains unchanged.**

Managed care is currently experiencing a renaissance in the USA among individuals insured by the state, especially through the Medicaid program. Medicaid was created by the Social Security Amendments of 1965 as a federal medical assistance program designed to provide free health insurance to poor and disabled Americans. The program is co-funded by federal and state government revenues but is administered by states who must abide by the same rules established by the federal government to receive their Medicaid portion of federal funding. With the exception of Arizona, the Medicaid programs in each state were structured around the state government serving as a single payer for all Medicaid beneficiaries. In 1970, combined Federal and State expenditures for Medicaid represented 0.4 percent of the USA GDP, but this percentage grew to 0.9 percent in 1980, 1.2 percent in 1990, 2.0 percent in 2000, and 2.7 percent in 2009 (CMS, 2010) with total state and federal Medicaid spending reaching $381 billion in FY2009. According to the Economist (2011), Medicaid is the largest US health care program with at least one in five Americans having used Medicaid in 2011 for a minimum of one month. Medicaid is now the second largest line item in most state budgets (behind education) accounting for 16% of their general budgets (Kaiser, 2012).

Medicaid benefits are broad in scope and federal rules prohibit states from being able to reduce costs by imposing copays or reducing benefits for the most Medicaid beneficiaries. As states grappled to control the rising costs of their respective Medicaid programs, some began to pilot managed care with private subcontractors who were better equipped to address the inefficiencies and disparities that are most commonly associated with public health insurance programs administered by a single payer. Since the 1990s the share of Medicaid clients who enrolled in managed care increased from single digit figures to 72% in 2009 and continues to grow.

According to most analyses (Lewin, 2009), introducing managed care to Medicaid has lead to a fall in health care costs while improving access to health care (especially preventive and primary care) as well as patient satisfaction. The most significant economies arise due to lower costs of hospitalizations; drugs are a second source of economies. However, several states have to date refrained from extending managed care to high-cost and severely handicapped patients (e.g. ABD patients – aged, blind, disabled). As a result, a majority of Medicaid clients receive managed care but a majority of costs (60% in 2009) is still covered by the traditional fee-for-service system which remains under the single-state payer. Extending managed care to high-cost patients remains the major challenge for the future.

Medicaid managed care differs from commercial insurance in several major aspects:

1. Commercial insurers are free to enter the market upon satisfying basic regulatory conditions and gaining government approval. Medicaid insurers compete for contracts in government tenders. Tenders are announced for insuring Medicaid clients in a given region and period. By defining tender criteria (e.g. costs, quality, accessibility), the government selects areas in which it wants insurers to compete and is able to select the Medicaid insurers who offer the greatest value for their Medicaid clients to choose from.
2. Rather than the clients or their employees, the state pays premiums under Medicaid. Insurers receive capitation payments, i.e. the state pays uniform premiums for all insured (the same is valid for state payments for economically inactive people in Slovakia). As the former single-payer for the Medicaid clients, the state has better access to information as well as a stronger position in relation to insurers than individual clients. Thus the state should be better equipped to select, oversee and motivate insurers to provide optimal services to the insured.
3. Unlike commercial clients, Medicaid clients pay no co-payments even if they receive care outside their provider network. Medicaid insurers must act as agents of the government and monitor their network providers to ensure they provide all covered benefits to their Medicaid clients and report any providers to the appropriate authorities who attempt to charge a Medicaid client for services.

As stated above, **the state regularly announces tenders for managed care provision of government-funded health insurance in a specified period**. Tenders are usually aimed at specific regions, population groups and types of health care. As an example, in 2011 the government announced a tender for Medicaid-funded health care in Texas. The tender specified the government was seeking insurers who may be able to provide the same or better services for lower costs than the government payer incurs by funding complex health care for Medicaid clients, acute and long-term care for the elderly and the handicapped, as well as primary and preventive care for children from low-income families. **In order to secure competition in the given region and period (e.g. 4 years with a possibility of further four years in Texas) the state grants a minimum of two license to organizations providing managed care** (MCOs – Managed Care Organizations; MCOs may be HMOs or other types of organizations such as provider associations). Tenders are announced as calls for project applications.

Each call for proposals defines population groups which must, may or must not be included. Calls for proposals include a detailed definition of the extent of health care that will be provided to given population groups free of charge.

The Texas tender assess applications mainly based on the following criteria: quality and accessibility of health care, innovation and quality of client services, meeting defined standards, experience and applicants' financial stability. The following standards are defined:

- Provider network – criteria include number and type/qualification of providers or time (e.g. waiting times) and space accessibility of providers. Each applicant indicates the number and share of clients with access to certain types of providers defined by distance (e.g. what is the number and proportion of patients living no further than 30 miles from a GP or a hospital providing acute care, and no further than 15 miles from a pharmacy or 75 miles from a pharmacy open around the clock). Applicants also indicate average distances of all patients for given types of providers.
- Quality and efficiency of health care provision – criteria include rules for measuring provider quality including measuring client satisfaction; rewarding quality and drawing consequences from poor quality; enforcing clinical procedure standards; individual providers' drug consumption; conditions supporting economizing and distributing extra resources; conditions for mandatory phone counseling/provider hotlines, etc.

- Continuity in patient – provider relations
- Client services – e.g. conditions for mandatory phone counseling/client hotlines; conditions for providing information on the available health care package; plans for tackling accessibility problems; dealing with client complaints, etc.
- Management of chronic diseases (disease management) and management of patients with a risk of high/catastrophic treatment costs (case management) – patient identification and treatment. This type of know-how often constitutes the decisive competitive advantage, as it allows for largest economies. **Insurers keep detailed records of provided care and attempt to assess and prevent future costs.**
- Information system management (timely reimbursement of providers, work with data, etc.)
- Specific goals (e.g. providing timely prenatal care to a given proportion of pregnant women, providing mental health counseling, zero tolerance for discrimination based on race or nationality, etc.)

The government does not take individual insurers' costs into account. Insurers must cover their costs from revenues in form of capitation payments, i.e. regular government payments per client, regardless of the volume of provided health care. Payments are defined individually for particular programs and population groups, as well as for individual organizations providing managed care. Thus the government may take the health condition of the insured into account or the volume and structure of provided health care.
Capitation payments consist of three components:

1. Payments for health care provision costs
2. Payments for administrative costs of insurers or organizations providing managed care
3. Payments in the form of a profit margin for insurers or organizations providing managed care

The sum of the three components must be less than what it would cost the government under a single-payer model where it does not make a profit. In other words, the managed care capitation includes lower amounts for health care provision and administration than what the state expects its costs would be as a single payer and the difference must exceed the allowed profit margin or else the government is better off administering the program itself as a single-payer.

Once a tender is awarded, the government monitors insurers' performance based on pre-defined criteria. Performance is measured against yearly goals as well as against other organizations in the market. This detailed monitoring may include reviews of patients' attendance at select providers, reviews of the execution of defined diagnostic procedures, dealing with complaints or monitoring marketing services. A common practice is using secret shoppers, i.e. hiring individuals to pose as real clients in order to accurately assess provided services. The government may publish evaluation results on-line, which impacts insurers' reputation - a major criterion of their success and thus a significant influence on prospective clients' decisions when deciding about an insurer. The government may also reward quality insurers by assigning them clients, who have not selected a particular insurer themselves. On the other hand, insurers, who fail to meet set goals, may face a decrease in capitation payments of up to 5%. Withheld resources may in turn be used to reward the best insurers.

The government also regulated insurers' profits by allowing companies to retain profits only if they do not exceed 3 % of revenues before taxation. If insurers achieve good results, which may also be pre-defined, the limit may be increased to 3.5 %. If insurers' profits exceed the 3% limit, a proportion of profits will be subtracted by the government. Of profits between 3 and 5 % of revenues 20% will be collected by the government, rising to 60% for profits ranging from 5 to 7%, and 100% for profits

between 9 and 12%. If profits exceed 12% of revenues, the total sum exceeding the 12% limit will be collected by the government.

Table: Regulating insurers' profits under medicaid, Texas, 2011

Gross Profit to Revenue Ratio	Insurers' share	State share
Bellow 3%	100%	0%
3% - 5%	80%	20%
5% - 7%	60%	40%
7% - 9%	40%	60%
9% - 12%	20%	80%
Over 12%	0%	100%

Source: Call for Applications for Managed Care, Texas 2011

4. INEKO Recommendations for Increasing Competition in the Insurance Market

The previous chapters showed that foreign best practices prove competition in the health insurance market can be effective. Examples include the Dutch nominal insurance system or the US managed care system under Medicaid. Slovakia has its own success stories of industries, which saw a rise in quality and efficiency once privatization allowed for competition. The banking, telecom, trade and, to a certain extent, energy sectors serve as examples. Slovakia's mandatory car insurance, provided by for-profit private insurers, offers further proof that mandatory insurance and competition are not mutually exclusive.

Although several private insurers are active in the Slovak health insurance market alongside their public counterparts, competition is restricted due to the following reasons:

- **High information asymmetry is characteristic of health care. Providers typically have substantially more information on the quality and volume of provided services than those, who cover the costs, i.e. insurers and patients.** This asymmetry increases the risk of patients and insurers being asked to pay too much. To foster competition in the market, it is crucial to lower the information asymmetry. But the Slovak market still lacks quality information on health care products such as information on prices (costs), volumes and the quality of provided care:
  - If insurers lack information on products they buy from providers, they will not be able to compete in terms of price, quality and volume. Similarly, they will be unable to motivate providers to increase quality and efficiency.
  - If the insured are unable to compare insurers and providers based on individual preferences, they will not be able to choose the best suited ones and thus create pressure and increase competition in the market.
- A limited number of insurers and high market concentration. The dominant position of Všeobecná zdravotná poisťovňa limits smaller insurers' room for negotiation. Competition is further limited by the high concentration in the provider market, especially in the market for largest providers – faculty hospitals. The oligopolistic structure of the insurance market and providers' regional monopolies increase the risk of rent-seeking (i.e. the redistribution of existing wealth with no added value) and collusion agreements on payments to providers or similar.
- Dominance of state ownership in both the insurance and provision market, resulting in a lack of foreign investors' know-how and culture, such as experience with functional competition in foreign markets. Moreover, as the owner of the largest insurer as well as the biggest providers, the state faces a conflict of interest resulting in ineffective management and preferential relations with state hospitals in terms of payments.
- An inability to offer varied premiums.
- A broad and vague definition of a core health care package. The state does not clearly define goods and services covered from public funds; time-accessibility (e.g. waiting times or minimum proximity of facilities) is insufficiently regulated as are diagnostic and treatment standards. As a result, insurers' options to offer differentiated benefits are severely limited as is the state's ability to enforce legal standards. So-called defensive medicine is common, where providers carry out excessive or even unnecessary procedures to avoid potential problems resulting from complications or future complaints.
- A strong emphasis on the regulation of inputs (e.g. minimum provider network regulations, such as their material and staff characteristics) and a lack of emphasis on outcome (e.g. time accessibility, quality and volumes of provided care).
- Inaccurate revenue redistribution among insurers, to the disadvantage of insurers with a high proportion of high-risk clients.

- Frequent and inconsistent introduction of new state regulation, such as allowing insurers to form and freely use profits in 2004, banning insurers from distributing profits to shareholders in 2007 and in 2011, repealing the 2007 act, provided waiting times in select diagnoses are adhered to.

Due to a lack of competition insurers are unable to promote efficiency and higher quality in the provider network. This is bad news for health care. Paradoxically, it is often said that „competition and private capital have no place in health care." Such arguments are the source of regulations aimed against competition and plurality in the insurance market, e.g. the 2007 legislation banning owners of health insurance companies from collecting profits. The insurance system seems to be standing at a crossroads: one road leads to more competition, the other to single-payer health care, i.e. health care financed by the state through a single insurer. To make the right decision it is necessary to weigh the advantages and disadvantages of both alternatives.

Compared with competition in a plural system, a single-payer system has the following advantages:

- A single payer system maximizes the use of collected insurance for providing health care, especially due to economies of scale, avoiding duplicities, lowering administrative costs, abolishing profits, etc.
- Sector regulation can be implemented more effectively
- A lower administrative burden for regulators as well as the insured arises

Compared with competition in a plural system, a single-payer system also has the following disadvantages:

- The monopoly structure leads to lower efficiency, less innovation, no choice for the insured, higher demands in terms of state oversight and price and provider network regulation
- Political influence and dependence on the quality of public administration – a quality public administration is a condition of both taking advantage of the positives and limiting the impact of the negatives of the single-payer system. Consequently, several limitations arise:
    - Short-term goals may be preferred to the long-term due to 4-year election cycles
    - The state faces a conflict of interest, as it is both the regulator and a player in the market (as an owner of an insurance company and selected providers)
    - The state's capacities for effective management and regulation of the market are limited
    - Slovakia has a poor track record regarding public administration (low transparency, high corruption, lack of experience and know-how are common). Compared with countries with a more effective public administration, such as the Scandinavian countries, this decreases Slovakia's chances of successfully implementing a single-payer system.

Thus, the system currently in place in Slovakia has several advantages (in terms of opportunities) compared with a single-payer system:

- The current system constitutes a better starting position for a shift towards more plurality and competition, which could result from new actors arriving to the market, bringing along a better culture and know-how.
- It also poses a chance for more differentiation (more options for the insured) and innovation in the market. Although limited, differences between insurers already exist, such as different approaches to remunerating GP' and hospitals, publishing quality rankings and lists of drugs, offering extra benefits, different waiting times, etc.

Thus, rather than banning plurality and introducing a single-payer system, we recommend taking the following measures aimed at strengthening competition:

- Lowering information asymmetry by providing transparent information on prices, volumes and quality of services:
    - This can be done by **publishing online rankings of provider and insurer quality.** Patient and provider surveys should be carried out regularly, **standards or guidelines for quality diagnostics and treatment introduced and enforced.**
    - Uniform rules should be introduced for defining products bought by insurers from providers. **For in-patient facilities this means predominantly creating a catalogue of procedures and introducing a DRG system**, which will categorize diagnoses and related diagnostic and curative procedures into groups.
    - **Awareness of patient rights should be strengthened** (e.g. by making hospitals distribute information flyers at the beginning of each hospitalization) and patient rights enforced.
- **In order for competition to work, providers and insurers must be allowed to freely negotiate prices and in case of elected services also volumes of DRG defined services.** If necessary, prices of certain services may remain temporarily regulated and competition may be introduced gradually, as was the case in the Netherlands. Demanding diagnoses are less well suited for competition: comparing alternative treatments may be challenging or even impossible. The government should also establish some minimum criteria (e.g. for waiting lists) so that the insurers don't negotiate volumes based on the services that are the best for them financially rather than what patients need.
- **Furthermore, we recommend lowering the concentration of ownership in the insurance market, in other words ending the dominant position of Všeobecná zdravotná poisťovňa. Two ways forward are at hand: (1) One approach may be splitting and privatizing the state insurer. (2) A second approach would entail new private investors entering the market.** The first solution would most likely yield faster results, as more time would be required to set up new companies. New actors may also be reluctant to enter the market due to political risks (e.g. uncertainty resulting from administration changes and a fear of policies damaging to private insurers). In case of privatization, the risk of unfavorable political interference could be diminished by including contract provisions protecting private property.
- Insurers should be allowed to offer varied insurance plans:
    - This could be achieved by **introducing the so-called nominal insurance.** Nominal insurance would entail a fixed uniform premium for all clients with a single insurer and insurance plan, regardless of their income. Low-income earners' premiums could be paid by the state, as is the case in the Netherlands.
    - **Creating health plans with diverse deductibles** is a second option. Deductibles would vary with the insurers' ability to manage patients within a provider network.
    - A third option would **allow insurers to gradually reflect certain risk factors in premiums,** e.g. by introducing bonuses for responsible behavior and vice versa. Insurers could start by differentiating those who undergo preventive check-up and those who do not, smokers and non-smokers, overweight and obese individuals, individuals with high-risk behavior or jobs (professional sport, drugs, alcohol, etc.).
- Strengthening the emphasis on outcomes rather than inputs in regulation. **The state should clearly define a core health care package, define and enforce diagnostic and treatment standards, evaluate treatment quality and regulate time-accessibility of providers.** Regulations requiring insurers to contract select providers, as well as regulations enforcing staff and material standards should be loosened.
- A clear definition of a core package **will support the development of optional additional insurance and a more effective enforcement of standards**, while lowering incentives to carry out the so-called defensive medicine.
- A more accurate revenue redistribution mechanism should be introduced, in order to yield more precise estimates of cost differences, which result from different risk in patients.

Pharmaceutical Cost Groups as well as Diagnostic Cost Groups should be prominent among the redistribution criteria.

- **As buyers, insurers should take more responsibility for the quality of provided health care. By using managed care practices, they should also gain more control over providers they work with, their costs and over the services provided to their members.**

This overview implies the state must play a key role in strengthening competition in the insurance market. Compared to individuals, the state is better equipped to gather and process necessary information on quality and efficiency of insurers and providers. The state also pays insurance for 60% of the population, amounting to roughly a third of insurers' revenues, which further strengthens its position. The state should adopt a more active role in evaluating the quality and efficiency of insurers and providers, defining rights and introducing uniform standards. Medicaid, which uses all of the above mentioned measures, could serve as an example. Medicaid monitors insurers' adherence to pre-defined measurable quality and efficiency criteria. Insurers' performance is measured against set goals as well as against other companies in the market. Evaluation results are published online and may, to a certain extent (+/- 5%), affect the payments paid out to individual insurers.

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