



Ministerstvo financí
Slovenskej republiky



Ministerstvo zdravotníctva SR

Spending Review of Health

Final report - summary

October 2016

Introduction

The Slovak government has launched Value for Money project that aims to reform rules, set up processes and strengthen institutions that will in turn support adoption of good decisions in public interest and significantly improve value for money in Slovak public sector.

One of the VfM's tools is a complex revision of majority of public spending. The government has committed to this revision through its [programme declaration](#). Further plans were detailed in the [Stability programme of the SR](#).

Health system, transport and public sector digitisation reviews were conducted in 2016. The majority of public spending will be reviewed in the present government term. Efficiency and effectiveness of spending will be evaluated and actions identified that will increase public finances' VfM. This will allow for fiscal savings, better public services for citizens (outcomes) and/or transfer of resources/finances to government priorities. The proposed measures are sustainable in the long-term.

A preliminary report has identified sectors/areas with greatest reserves in effectivity improvement. The final report offers a more detailed view of the drafted problems and measures. The report is part of the government budget.

Developed countries use spending revision as a standard tool that helps governments to find reserves in public policies for more effective use of public resources as savings necessary to meet national and European fiscal commitments.

A key part of the evaluation is to identify and correctly evaluate all costs and benefits. Financial costs and benefits are the basis. The analysis also aims to quantify (in financial terms) as much of non-financial costs and benefits as possible allowing the state to obtain a complex overview of costs and benefits of individual projects.

Spending Review – Health care

Healthcare system spending review amounting to 5.6% GDP (4 443 m €) per year has set out a **goal to identify possible savings (especially in health care costs)** and subsequently use them for an effective and inevitable investment into inpatient facilities as well as for costs increase management to the level of price rise in the economy. **Outcome target of the review is reduction of amendable mortality through public health care system** to the average levels in Czech Republic, Poland and Hungary (V3 countries). Achieving this goal requires effective redistribution of resources from cost inefficient areas to areas where they can contribute to amendable mortality reduction.

Slovakia is spending more on health care than surrounding countries, yet it is lagging behind in outcomes. Czech Republic, Poland and Hungary achieve in average 18% lower amendable mortality by public health care system than Slovakia. **One of the causes is the low effectivity of Slovak healthcare system.** If Slovak healthcare effectivity was on the average OECD level, life expectancy in Slovakia would rise by 3 months or Slovakia could save 8% on costs while maintaining the same life expectancy.¹

¹ Methodology as described in the study **Málo zdravia za veľa peňazí: Analýza efektívnosti slovenského zdravotníctva (Less Health for More Money: Analysis of Effectiveness of Slovak Healthcare System)**
<http://www.finance.gov.sk/Default.aspx?CatID=8789>.

The review has identified measures totalling 174 m € in 2017 out of which, measures totalling 143 m € is in costs of public health insurance. Internal restructuring of public health insurance spending will be carried out based on the identified measures without cuts on scope or volume of provided health care. Efficient operation and procurement of hospitals subordinate to the Ministry of Health will release an additional 31 m €. More efficient operation and procurement will help halt the hospital indebtedness and create space for capital investments into reconstruction and equipment.

Table 1: Savings measures

Million €	2 017	2 018	2 019	Potential saving
Measures reducing costs of public health insurance	143	159	165	268
Overprescription of medications – introduction of prescription limits for outpatient service providers	20	20	20	59
Exceptions for medications – introduction of rules on refund of exceptions	10	10	10	10
Cost inefficient medications – central procurement of medications covered by health insurance	25	25	25	42
Special medical material – price reduction through reference pricing	35	45	45	55
Medical devices – reference pricing and inspection activities	15	15	15	15
Diagnostic exams – reduction of unit prices and limits to CT and MRI examinations	10	16	22	25
Diagnostic exams– introduction of limits for outpatient service providers	3	3	3	37
Improvement of inspection activities of VŠZP	25	25	25	25
Measures reducing hospital costs (subordinate organisations of the Ministry of Health)	31	31	31	95
Operational expenses optimisation	5	5	5	10
Medical processes optimisation	15	15	15	74
Medication and special medical material procurement optimisation	8	8	8	8
Medical equipment procurement	3	3	3	3

Source: MF SR

Budget proposal for 2017 indicates that healthcare system resources are 69 m € higher than identified by the VfM scenario.² Potential savings identified by the spending review will be used for health care in a way that will effectively contribute to the reduction of amendable mortality. Areas that will benefit from the saved resources identified by the review in 2017 will be designated throughout the implementation process.

Table 2: Healthcare system resources according to the public administration budget and VfM scenario (increased by inflation)

Million €	2015 S	2016 OS	2017 B	2018 B	2019 B
Public resources collected in healthcare system in TOTAL - PAB	4 290	4 335	4 443	4 666	4 927
Health insurance– economically active population EAO	2 880	2 934	3 100	3 286	3 500
Health insurance – people insured by state	1 349	1 355	1 296	1 334	1 381
Health insurance – other incomes	61	47	46	46	46
Public resources in the healthcare system TOTAL – Value for Money (increased for inflation)			4 374	4 514	4 754
<i>Difference between PAB and VfM scenario</i>			69	153	173

Source: MF SR

Discussion on necessary costs and purposes to which state payments to the public health system should be used is absent. Public health insurance system is funded from contributions of economically active population and state

² VfM scenario expects resources of public health insurance to increase by inflation. Additional investments into inpatient capacities shall be financed from the resources as well.

payments. State payments are insurance contributions on behalf of selected population groups (children, students, pensioners, etc.) that are covered by the state.

Health care expenditures used to be budgeted (from budgeting process perspective) as a whole. It is necessary to introduce a discussion on overall resources required in the health system and their usage in health care procurement in individual areas to the budget negotiations.

Table 3: Public health insurance

Million €	2013	2014	2015
Insurance costs on health care	3 672	3 882	3 996
Medical care	999	1 042	1 077
Outpatient care:	1 448	1 567	1 616
General outpatient care	264	276	293
Specialised outpatient care	1 108	1 208	1 233
Inpatient care:	1 084	1 175	1 246
General hospitals	769	837	890
Specialised hospitals	156	174	183
Health care provided to foreigners, abroad, homeless, refugees, emergency health care	25	31	36
Other	116	66	20

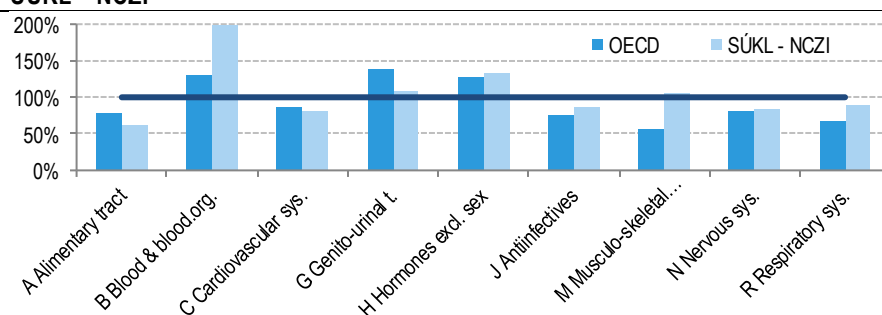
Source: MF SR, UDZS

Healthcare spending review has identified measures in the following areas with significant room for cost efficiency improvements – increase of Value for Money:

1. Medications, medical equipment and special medical material – Medication, medical equipment and special medical material expenditures will drop by 105 m € in 2017 due to the measures in overprescription and reference pricing of special medical material and devices. The total potential for effectivity improvement has been identified by the review in the amount of 105 – 389 m €. Thanks to the reference pricing, Slovakia has one of the lowest medication and medical device prices in the EU, yet it spends more on medical devices (including medications) per person than the surrounding countries.

Compared to the Czech Republic, Slovakia consumes more medications for alimentary tract; cardiovascular, nervous and respiratory systems; and anti-infectives. The outcome of the comparison of medication consumption in defined daily doses (DDD) based on the OECD data was confirmed by the comparison of data from national institutions (Czech State Institute for Drug Control - SÚKL and Slovak National Health Information Center – NCZI).

Figure 1: Proportion of Czech to Slovak consumption (%) * according to OECD and SÚKL – NCZI



Source: OECD, SÚKL, NCZI

* Consumption in DDD per 1000 persons/day. ATC value lower than 100% (below the line) means Czech consumption is lower than Slovak

High consumption of medication compared to other countries may also be caused by non-standard prescription. Additional resources totalling 158 m € could be used if doctors that prescribe more medication than 75% of their colleagues reduced their prescription to the “75%” level. If this is to be done by the top 10% of doctors, 59 m € could be saved.

Table 4: Prescription in selected specialties (no. of prescriptions), expenditure of their reimbursement and quantification of savings (m €)

specialty	10%	25%	50%	75%	90%	99%	max	expendi ture	Saving at 75%	Saving at 90%
general practice	1,00	1,00	3,07	8,70	10,98	15,85	33,70	144,50	17,55	5,30
diabetology, metabolic disorders	1,00	1,00	2,00	4,75	6,30	9,10	13,00	68,15	11,31	2,91
neurology	1,00	1,00	2,00	3,08	4,00	6,59	25,00	53,32	10,38	3,81
internal medicine	1,00	1,00	1,97	3,22	4,75	8,79	25,80	47,88	13,71	3,65
cardiology	1,00	1,00	2,00	3,57	5,00	7,74	14,00	45,04	13,30	4,26
psychiatry	1,00	1,50	3,00	7,56	10,50	15,51	18,30	41,24	7,68	2,17
immunology and allergology	1,00	1,18	2,29	3,58	4,51	7,78	11,00	32,22	4,37	1,58
GP paediatrics	1,00	1,29	2,72	3,50	4,24	5,73	14,66	27,14	2,56	0,84
dermatovenerology	1,00	1,43	2,16	2,82	3,43	4,61	10,67	23,08	5,93	3,87
24 specialties total								828,00	158,15	59,37

Source: MF SR eHealth data

Price reduction of cost ineffective medications based on cost-effectivity rules would generate saving of 120 m €. Substitution by more cost-effective alternative would save 171 m €. Central procurement of medications would release 43 m €. Cost-effectivity of a medication is a necessary requirement for its entry to the categorised medications list (medications reimbursed from the public health insurance). Medications categorised according to the old rules or referring to same reference group might not have passed the test.

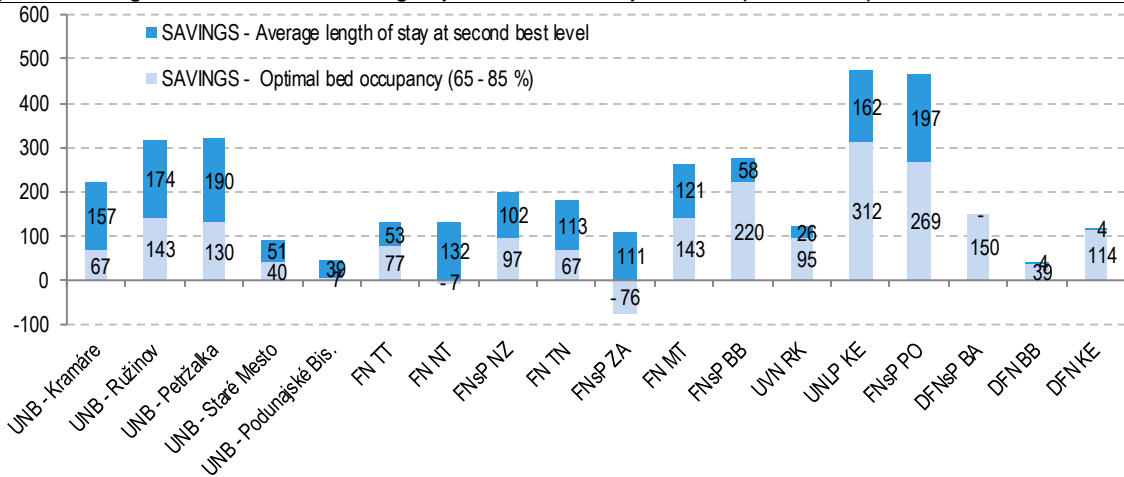
2. Healthcare providers – measures optimising of operation, processes and procurement will save hospitals (subordinate organisations of the Ministry of Health) 31 m € in 2017. Identified resources will help halt hospital indebtedness and create room for capital investments directed at reconstruction and equipment. Spending review has identified savings up to 84 m € per year in operation and procurement in university hospitals (without the procurement of medications and special medical material)

Hospitals continue to indebted themselves despite recurring settlement of their debts by the state. Liabilities of the 13 largest hospitals run by the Ministry of Health amounted to 591 m € in the first half of 2016 (both current and overdue). Introduction of DRG (diagnosis related groups) payment system will also strengthen hospitals' direct accountability for their costs and introduce transparent and fair payments for medical procedures.

The analysis evaluated operational indicators at the level of departments – bed occupancy, average length of stay, number of hospitalisations per doctor and nurse – and at hospital level: goods and services procurement.

Optimal bed occupancy may save 2.3 m € per year. Shortening of length of stay to the second-best value in the analysed hospitals' departments may generate potential annual saving of 1.7 m €.

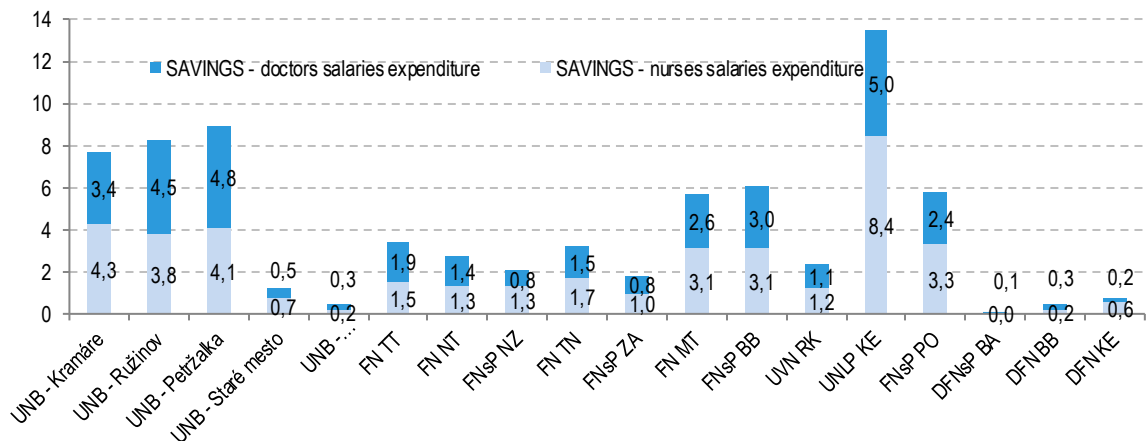
Figure 2: Savings estimation in beds usage optimisation at hospitals level(thousand €)



Source: Own analysis of NCZI data

Beds usage optimisation creates potential for staff reduction and annual saving of 2.1 m € on doctors' salaries and approximately 1.1 m € on nurses' salaries. Achieving the second best result in number of hospitalisations per doctor and nurse within individual departments would release an additional staff saving of 34 m € per year on doctors and 39 m € on nurses.

Figure 3: Hospital staff savings estimation (million €)



Source: Own analysis of NCZI data

Procurement of energies on the level of current market prices (that are on long-term minimum) and services on the level of average contractual price from 2015 allows for potential saving in university hospitals of 3.1 m € per year.

3. Radiodiagnostics and laboratories – Reduction of unit prices for CT and MRI examinations along with an introduction of limits will create saving of 13 m € in 2017. Analysis of radiodiagnostic and laboratory prescription has identified possible saving ranging from 13 m € to 91 m eur.

Number of CT and MRI examinations in 2010 – 2015 has risen by double-digit rate. OECD data shows that the number of CT and MR examinations in Germany and Netherlands increased by 5.1% and 5.8% respectively. The relatively rapid recent increase in the number of examinations has been concentrated in regions with new CT/MRI facilities while the number of examinations in nearby regions remained unchanged. This indicates supply-induced consumption.

Figure 4: Evolution of CT examination numbers*

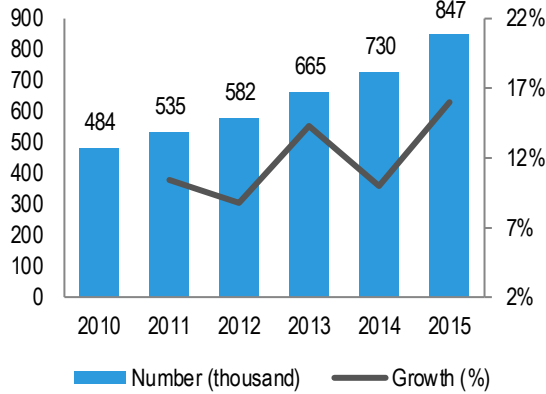
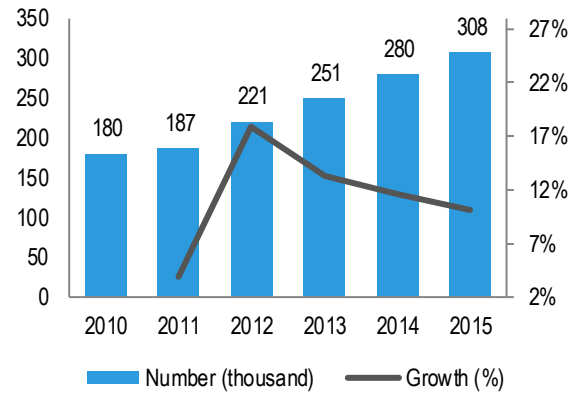


Figure 5: Evolution of MRI examination numbers



Source: NCZI

Source: NCZI

* Overall number of examinations is lower since a single examination can include several steps

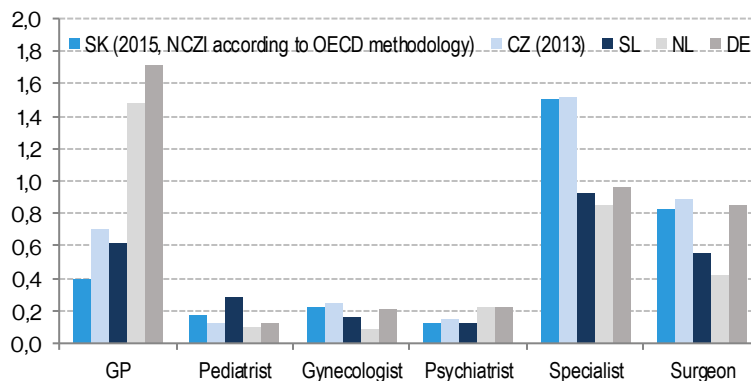
Reducing the unit price of CT and MRI examinations according to the VsZP model creates potential annual saving of 25 m € (extrapolated for all health insurance companies). Average price could drop by 22 % for a CT examination and by 18 % for MRI. Moreover, reduction in prescription frequency of doctors who prescribe more than 90 % and 75 % of doctors in their specialty can result in annual saving of 10 m € and 26 m € respectively. Saving potential in the case of laboratory examinations is 27 – 65 m €, presuming a reduction in the prescription frequency by doctors prescribing over 75 % and 90 % within their own specialty.

-

5. Healthcare professionals – an increase of public expenditures effectivity will be achieved through further competence strengthening of general practitioners, nursing staff and healthcare assistants, as well as a shift in procedures.

An international comparison of the number of doctors by specialty shows that Slovakia has fewer GPs and more specialists. GPs' role in the healthcare system is to be the first point of contact and to control patient entry into the system (gatekeeping). Lack of GPs or their not fulfilling of their competencies results in more costly healthcare as specialists who are more expensive must deal with basic health problems.

Figure 6: Number of doctors by specialty (per 1 000 people, 2014*)



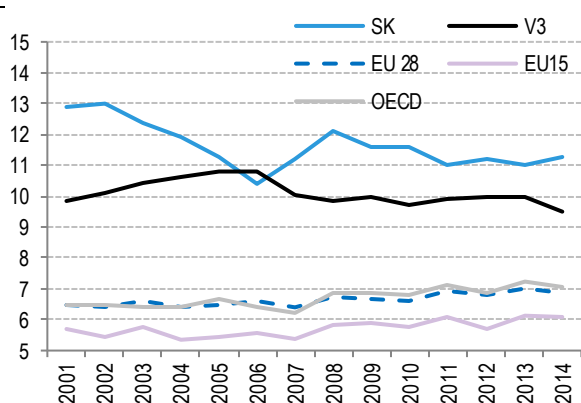
*or newest available data

Source: OECD, NCZI

6. Doctor's visit – It is necessary to explore the causes of the high number of doctor's visits and their connection to high consumption of medications in Slovakia. Slovaks visit their doctor more frequently than other people in the EU (11 as opposed to 7 per year).

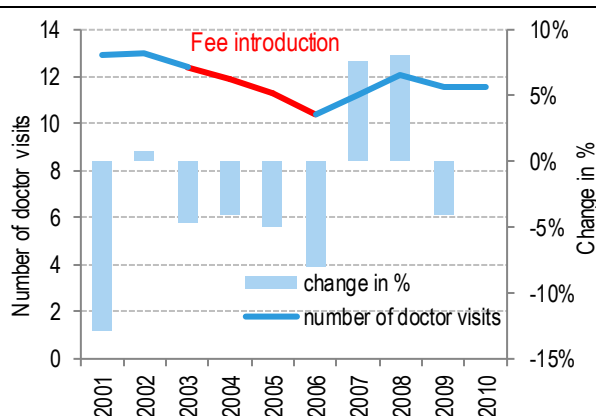
Fees are one of the possible causes of the change in the number of doctor visits. In 2013, Slovakia had approximately 11 consultations per person, V3 had 10, OECD and the EU had 7. The number of visits dropped by 20% in 2002 – 2006. During the same period, a visit fee of 20 SKK was in place. Doctor's visits increased by 7.7% after 2006 when the fee was withdrawn.

Figure 7: Number of doctor's visits (per person per year)



Source: OECD

Figure 8: Influence of doctor's visit fee introduction (per person per year)



Source: OECD

ABBREVIATIONS:

MF SR – Ministry of Finance of Slovak Republic

VsZP - Všeobecná zdravotná poisťovňa – General Health Insurance Company (the biggest health insurance company, operated by the state)

PAB – public administration budget

B - budget

ÚDZS – Úrad pre dohľad nad zdravotnou starostlivosťou - Healthcare Surveillance Authority

NCZI – Národné centrum zdravotníckych informácií – National Health Information Center

ATC – Anatomical Therapeutic Chemical Classification System