Year by year, the Hungarian Health System Scan newsletter has been reviewing changes in the Hungarian healthcare system already for the 8th year. In 2014, we prepared the usual content of the newsletter, and our publication includes changes taking place in 2013 and at the beginning of 2014. To serve a better understanding of the changes, we touch upon some general characteristics of the healthcare system as well.
Table 1: Macroeconomic overview

<table>
<thead>
<tr>
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<th>2012</th>
<th>2013 (forecast)</th>
<th>2014 (forecast)</th>
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</thead>
<tbody>
<tr>
<td>Real Gross Domestic Product growth</td>
<td>-1.7</td>
<td>1.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Government expenditure on healthcare as % of GDP*</td>
<td>4.3</td>
<td>3.9</td>
<td>4.4</td>
</tr>
<tr>
<td>Current account balance as % of GDP</td>
<td>1.6</td>
<td>3.2</td>
<td>3.0</td>
</tr>
<tr>
<td>General government balance as % of GDP</td>
<td>-2.0</td>
<td>-2.5</td>
<td>-2.9</td>
</tr>
<tr>
<td>Government debt as % of GDP (Maastricht definition)</td>
<td>79.2</td>
<td>78.9</td>
<td>77.6</td>
</tr>
<tr>
<td>Consumer Price Index</td>
<td>5.7</td>
<td>1.7</td>
<td>0.7</td>
</tr>
</tbody>
</table>

(Source: Hungarian National Bank, *Draft bill of 2014 Budget of the Hungarian Central Government)

In 2013, the Hungarian Gross Domestic Product grew by 1.1 per cent, which was a great improvement after the 1.7 percent decrease of the preceding year and also one percentage point higher than the economic growth of the entire economy of the European Union. The government expectedly managed to keep the deficit below the three percent limit set by the European Union and the government gross debt is expected to decrease in 2013 by 0.3 percentage points. In 2014, the forecast of GDP growth is 2.1 percent, while general government deficit is to rise slightly – however the government debt is expected to decrease by 1.3 percentage point.

The more detailed picture of the domestic production data of the last quarter of 2013 is especially positive with a 2.7 percent GDP growth. Furthermore, in 2013 the improvement was present all throughout the sectors: agriculture, industry and services all increased in volume and also the export grew by 2.5 percent, whereas the import increased 0.7 percentage point less.

The financial status of the population has improved as well, its gross financial assets increased nominally by six percent in 2013. One third of the gross assets was cash or deposit – their value was five percentage point less than a year before. Business shares accounted for more than forty percent – a 12.4 percent increase in value – and securities for almost another ten percent - their value has grown by 29 percent. At the same time the amount of financial liabilities sank by 6.1 percent, which consisted of the 11 percent decrease of the credits denominated in foreign currencies and the 1.4 percent decrease of those denominated in HUF. Net financial assets increased nominally by 12 percent in 2013 and the value of the net savings reached 5.3 percent of the GDP.
The consumer price index rise was a sole 1.7 percent, which is below the three percent target level of the Hungarian National Bank. Though there are disadvantages of below-the-target inflation rate - particularly as it is expected to sink further in 2014 –, however that is still a clear improvement compared to the 5.7 percent of the preceding year. The low level of inflation was partly due to the aggressive measures of the government decreasing overhead for the population and to the lower prices of the durable consumption goods. Therefore the central bank had the opportunity to keep lowering the base rate – reaching a new record low level every month since March 2013. At the beginning of 2013 the level has been 5.75 percent and by the end of the year it got to three percent. The central bank also used other methods aiming to increase the liquidity of the credit market – providing free credit to banks if they passed it on according to some criteria.

The employment rate reached 58.4 percent, which corresponds to a 1.2 percent increase. Nevertheless, this has been predominantly due to the increased number of unemployed being involved in Public Work Scheme and therefore statistically considered to be employed. Unemployment rate – once again the participants of the above mentioned Public Work Scheme not considered unemployed – sank by 0.7 percentage point to a level of 10.3 percent.[1]

Health financing overview

In 2011, Hungary spent 7.96 percent of its GDP on health [2]. Public expenditure on health amounted to 65 percent of total health spending that year. The share of private expenditures was 35 percent.

In the final accounts, the 2012 budget of the Health Insurance Fund had a revenue of HUF 1744 billion, an expenditure of HUF 1791 billion and a deficit of HUF 47 billion which is HUF 37 billion less than it was in 2011. According to preliminary data, in 2013 the Fund’s revenue was HUF 1848 billion, its expenditure HUF 1848 billion so the budget was balanced in this year. For 2014, the Parliament set the estimated amount of both expenditure and revenue of the Health Insurance Fund to HUF 1884 billion. (Table 2 and 3)

Revenues

In 2012, the employer social insurance contribution (which consisted of health and pension insurance contribution and labor market contribution) was renamed to social contribution tax. From 2013 it goes into the Pension Insurance Fund and partly directly into the Health Insurance Fund. However, the revenues of the Health Insurance Fund have increased since 2011 due to several components. In 2012, the employee health insurance contribution
increased with one percentage point and the rate of the health service contribution (paid by people without legal rights to insurance) continuously expanded in the last years. Before 2011 the contribution was HUF 5100 for years, in 2012 it increased to HUF 6390, in 2013 to HUF 6660 and in 2014 to HUF 6810 per month.

The scope of other contributions widened: 10 percent health contribution is paid on non-wage benefits and furthermore 6 percent on nearly any interest earnings. Moreover, since 2012 two new taxes are earmarked to healthcare: the accident tax – 30 percent of the fee of mandatory vehicle liability insurance – and the public health product tax on ‘unhealthy’ foods, which together results in HUF 40-45 billion extra revenues per year.

In 2013, a workplace action plan was launched under which employers may receive contribution allowance for employing entrants under age 25, unskilled workers, and employees over the age 55. To make up for the missing contributions, the central budget provides a compensation to the Health Insurance Fund, which appears as an item of budget contribution (in 2013 it meant HUF 162 billion). Another remarkable change is that the financing of disability and rehabilitation provisions was transferred (back) from the Pension Insurance Fund to the Health Insurance Fund in 2012. This item is displayed as a central budget contribution with HUF 349 billion in 2013.

Table 2. Revenues of the Health Insurance Fund

<table>
<thead>
<tr>
<th>HUF million</th>
<th>2012 (budget estimate)</th>
<th>2012 (final account)</th>
<th>2013 (budget estimate)</th>
<th>2013 (preliminary data)</th>
<th>2014 (budget estimate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues of Health Insurance Fund</td>
<td>1 700 067.9</td>
<td>1 744 580.4</td>
<td>1 804 273.9</td>
<td>1 847 768.0</td>
<td>1 884 177.5</td>
</tr>
<tr>
<td>Contribution revenues and social contribution tax</td>
<td>856 895.6</td>
<td>854 416.8</td>
<td>727 012.8</td>
<td>768 037.9</td>
<td>852 865.0</td>
</tr>
<tr>
<td>Central budget contribution</td>
<td>738 145.2*</td>
<td>753 280.2*</td>
<td>974 034.5</td>
<td>967 069.4</td>
<td>922 785.9</td>
</tr>
<tr>
<td>Other revenues connected with health insurance</td>
<td>104 587.5</td>
<td>136 069.9</td>
<td>102 787.0</td>
<td>109 379.0</td>
<td>108 087.0</td>
</tr>
<tr>
<td>Revenues for operation</td>
<td>424.6</td>
<td>771.3</td>
<td>424.6</td>
<td>1 627.2</td>
<td>424.6</td>
</tr>
<tr>
<td>Revenues from asset-management</td>
<td>15.0</td>
<td>10.2</td>
<td>15.0</td>
<td>11.6</td>
<td>15.0</td>
</tr>
</tbody>
</table>

* Together with amounts for the coverage of disability and rehabilitation provisions from the Pension Insurance Fund

In 2014, 49 percent of the total revenues is planned to come from central budget contribution, which is 5 percentage point lower than the last year’s budget estimate. After a few years, 2014 will be the first year when the proportion of tax-financed revenues will not increase.
Expenditures

In 2012, there appeared a significant increase in expenditures compared to the previous years. The main reason for this was the earlier mentioned takeover of disability and rehabilitation provision from the Pension Insurance Fund with the paid value of HUF 358 billion. The amount of this item decreased in 2013 and in 2014 (estimated) with nearly HUF 10 billion, but still this is the most significant item of cash benefits. Due to this transfer, the proportion of cash benefits rose to around 30 percent of all expenditures.

The total estimated expenditures of the Health Insurance Fund increased by HUF 149 billion from 2012 to 2014 (9 percent increase, 2 percent in real spending). One of the most important parts of the increase of expenditures is that a wage increase was implemented in 2013, which appears in the row of other curative-preventive provisions in kind as an earmarked provision (with HUF 61 billion). If we dispense with earmarked provisions, unfortunately nearly none of this increase appeared in the field of provisions in kind. The expenditures of curative-preventive provisions amounted to HUF 842 billion in 2012 which increased to HUF 908 billion to 2013. Estimated expenditure to primary care increased by 7 percent from 2012 to 2013, but preliminary data show that there was an 11 percent growth in spending, which means 5.3 percent in real spending. In 2014, the estimated budget of primary care exceed HUF 146 billion, HUF 10 billion more than in the year before. Processes different from primary care can be observed in the field of inpatient and outpatient care: in 2012 and in 2013 the spending was lower than previously planned. In 2012, the expenditure of acute inpatient care was HUF 352 billion, which was even lower in 2013 (HUF 344 billion). In the field of outpatient care and laboratory fund we can also experience a decrease: in 2012 the budget was HUF 144 billion while in 2013 it was only HUF 139 billion.

The Convergence Programme’s goals include the reduction of pharmaceutical reimbursement expenditures partly by a generic programme. In 2012, the expenditure of pharmaceutical reimbursement was HUF 315 billion, which shows a decline of 16 percent compared to the previous year’s final accounts. In 2013, the expenditure of pharmaceutical reimbursement decreased with another HUF 19 billion, but again exceeded the estimate value by HUF 17 billion. The estimated expenditure of pharmaceutical reimbursement in 2014 is HUF 294 billion, which is only 2 billion less than the preliminary expenditures was in 2013.

The amount of the estimated expenditures of the Fund for 2014, HUF 1884 billion, is HUF 80 billion more than the last estimated budget and also HUF 40 billion more than the preliminary spending of the previous year. In addition to the increase in the expenditures of the curative-preventive provisions, we have to mention that there is a significant growth in the row of Expenditures resulting from international agreements and from care outside of domestic territory. This is a reaction to the European Union directive that will make easier for patients to have access to cross-border healthcare, which came into force at the end of 2013.
It is worth to mention that the tax- and contribution-free private health insurance available as optional non-wage benefit since 2012 did not reach the previously expected popularity. In 2014, according to cafeteria plans, this item was not in the 10 most popular options while Health Savings Accounts can be found in the third position on this list with a 16 percent share.

Table 3. Expenditures of the Health Insurance Fund

<table>
<thead>
<tr>
<th></th>
<th>HUF million</th>
<th>2012 (budget estimate)</th>
<th>2012 (final account)</th>
<th>2013 (budget estimate)</th>
<th>2013 (preliminary data)</th>
<th>2014 (budget estimate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure of Health Insurance Fund</td>
<td>1 735 412.1</td>
<td>1 791 503.6</td>
<td>1 804 273.9</td>
<td>1 847 768.0</td>
<td>1 884 177.5</td>
<td></td>
</tr>
<tr>
<td>Provisions in cash of the Health Insurance Fund</td>
<td>555 524.5</td>
<td>553 309.9</td>
<td>557 664.3</td>
<td>553 049.6</td>
<td>561 900.0</td>
<td></td>
</tr>
<tr>
<td>Provisions in kind</td>
<td>1 166 355.5</td>
<td>1 223 208.2</td>
<td>1 223 610.2</td>
<td>1 271 719.5</td>
<td>1 300 275.4</td>
<td></td>
</tr>
<tr>
<td>Curative-preventive provisions in kind</td>
<td>824 906.4</td>
<td>842 053.9</td>
<td>880 606.2</td>
<td>908 011.4</td>
<td>931 870.2</td>
<td></td>
</tr>
<tr>
<td>Primary care</td>
<td>121 346.5</td>
<td>122 798.5</td>
<td>130 048.6</td>
<td>136 191.3</td>
<td>146 192.5</td>
<td></td>
</tr>
<tr>
<td>Special nursing at home</td>
<td>4 097.6</td>
<td>3 979.0</td>
<td>4 337.6</td>
<td>4 276.5</td>
<td>4 479.8</td>
<td></td>
</tr>
<tr>
<td>Inpatient and outpatient specialist care + CT. MRI (with laboratory fund)</td>
<td>638 573.6</td>
<td>624 040.0</td>
<td>651 498.9</td>
<td>615 313.9</td>
<td>636 073.7</td>
<td></td>
</tr>
<tr>
<td>Other curative preventive provisions in kind</td>
<td>60 888.7</td>
<td>91 236.4</td>
<td>94 721.1</td>
<td>148 802.5</td>
<td>145 124.2</td>
<td></td>
</tr>
<tr>
<td>Expenditures on pharmaceuticals</td>
<td>277 700.0</td>
<td>315 129.5</td>
<td>279 981.0</td>
<td>296 026.9</td>
<td>294 114.0</td>
<td></td>
</tr>
<tr>
<td>Pharmaceutical reimbursement</td>
<td>219 000.0</td>
<td>295 987.0</td>
<td>220 981.0</td>
<td>281 532.4</td>
<td>222 414.0</td>
<td></td>
</tr>
<tr>
<td>Reimbursement of therapeutical appliances</td>
<td>43 313.0</td>
<td>51 304.2</td>
<td>43 313.0</td>
<td>51 459.3</td>
<td>51 300.0</td>
<td></td>
</tr>
<tr>
<td>Other provisions in kind</td>
<td>14 200.0</td>
<td>8 800.9</td>
<td>14 100.0</td>
<td>9 211.4</td>
<td>13 440.0</td>
<td></td>
</tr>
<tr>
<td>Expenditures resulting from international agreements and from care outside of domestic territory</td>
<td>6 236.1</td>
<td>5 919.7</td>
<td>5 610.0</td>
<td>7 010.5</td>
<td>9 551.2</td>
<td></td>
</tr>
<tr>
<td>Other expenditures of the Health Insurance Fund</td>
<td>4260.0</td>
<td>5 024.8</td>
<td>13 860.0</td>
<td>12 725.8</td>
<td>13 125.0</td>
<td></td>
</tr>
<tr>
<td>Health insurance budgetary agencies and centrally managed estimates</td>
<td>9 272.1</td>
<td>9 960.7</td>
<td>9 139.4</td>
<td>10 508.0</td>
<td>8 877.1</td>
<td></td>
</tr>
</tbody>
</table>
Basic characteristics and changes of the healthcare system

The Semmelweis Plan, published in 2010, outlines a strategy for reforming the Hungarian healthcare system. Most of the changes in recent years have taken place according to the guidelines laid down in this health policy document. One of the major developments involves the establishment of health regions in the country: from January 2012, health regions serve as territorial bases for the organisation of healthcare. There are 8 such regions, each responsible for the provision of health services to 0.9-1.6 million people. The healthcare institutions of each health region provide care on all levels of progressivity in the majority of specialties.

Public health

The health status of the Hungarian population is poor by international comparison. Though life expectancy at birth is increasing – 71.6 years for males, 78.7 years for females in 2012 – it is 5.9 and 4.4 years below the average of EU countries, respectively [3]. In 2011 the standardised death rate (SDR) for circulatory diseases per 100 000 population was 402.1 (double the EU average), the SDR for ischaemic heart diseases per 100 000 population was 207.5, while the EU average was 77.9. Standardized mortality caused by malignant neoplasms was 238.7 per 100 000 population, within this group the mortality rate for trachea, bronchus and lung cancer was the highest in Hungary among the EU countries [4].

Since lifestyle factors play an important role in mortality and morbidity characteristics, it deserves special attention that there have been several changes in legislation in the past years aimed at the promotion of healthier lifestyles. In 2012, Hungarians were introduced to the idea of the public health product tax, a new type of tax that aims to limit the consumption of unhealthy foods and to increase healthcare revenues. The taxed products are soft drinks, energy drinks, pre-packaged sweet goods, salty snacks, flavourings, flavored beers, alcoholic refreshments and jams, if their sugar, salt or caffeine contents reach a determined level.
In February 2014, a new public health regulation came into effect to control the quantity of trans fats (unsaturated fats) in foods. From 20 February 2014, it is prohibited to sell foods in which 100 grams of the total fats contain more that 2 grams of trans fats. The regulation provides a 12-month grace period for those pre-packaged foods that were produced before the enactment of the regulation. The regulation applies to oils, fats and fat emulsions that are produced for consumption in themselves or as components of a food product. It does not apply to trans fats naturally found in animal fats. The reason for the measure was the acknowledged risk that trans fats pose risks to health, especially to the cardiovascular system. In the European Union, Hungary is the third country to regulate the quantity of trans fats in foods.

For the protection of non-smokers, an internationally acknowledged regulation came into force on 1 January 2012 extending earlier prohibitions. The extended legislation made public places, restaurants, bars and workplaces smoke-free. It is also prohibited to smoke in bus stops, underpasses used by pedestrians, in playgrounds, in schools, child welfare institutes and health service providers, including their courtyard. From the summer of 2013 the retail trade of tobacco products was limited by making it a state monopoly. This measure also aimed at reducing smoking among young people.

Public health services are the responsibility of the Ministry of Human Resources, State Secretariat for Healthcare, through the National Public Health and Medical Officer Service (NPHMOS) and the national institutes supporting its activity.

The improvement of public health is supported by the opening of 58 health promotion agencies in different locations of the country in 2013. The agencies target the health of the local population and also organise health promotion programmes for the communities. The management of the health promotion agencies and the provision of methodological consultation is the responsibility of the National Institute for Health Development under the NPHMOS.
Primary care

The provision of primary care in Hungary is the responsibility of local governments. GP services are provided in primary care districts independent from administrative regions. People may choose their doctor freely. GPs function as gatekeepers - specialist services require referrals, with the exception of some services like dermatology, urology, obstetrics and gynaecology.

At the end of 2012, there were 6664 GP services in the country, 5107 in adult and mixed services and 1557 in paediatric services. On average, one service covered 1434 inhabitants [5].

GPs, who are working mostly in solo practices as private entrepreneurs, and receive capitation payments, an additional fixed amount depending on the size of the primary care district and location of the district and practice, case payments for non-registered treated patients and performance bonus from the Health Insurance Fund. In calculating capitation, physicians receive an age-adjusted point value after the patients on their practice list. Above a certain number of patients (degressive point limit) the capitation payment is degressive. The number of points depends on the qualification and work experience of the physician also. Regarding performance bonus, in the evaluation of adult and mixed GP practices 15 indicators had been defined, which cover screening activities, care of patients with chronic diseases like diabetes and high blood pressure, rate of specialist care referrals, influenza vaccination, use of antibiotics, appropriate and cost-efficient drug prescription. In paediatric practices, the quality of care is measured by 8 indicators, which include administration of vaccination (meningococcus), screening activity, prevalence of breastfeeding of infants registered in the practice.

In addition to GPs, primary care also includes MCH nurses (5052 in 2012), school doctors (3326 in 2012) and basic dental services (3360 in 2012) [5].

*Primary care in the future is planned to shift towards strengthening the tasks of definitive care, prevention and health education of the population, as well as the establishment of practice groups and the formation of practice communities. One of the first examples of this trend is the Primary Care Development Pilot in the northern and eastern region of Hungary made possible by a grant of Swiss Contribution. The goal of the programme is to create*
practice communities and to bring prevention and health promotion into the focus of primary care. It aims to improve the health status of the local population and to widen people’s health-related knowledge by lifestyle advices, screening activities and programmes of health promotion. The programme’s special goal is to eliminate inequalities in access to healthcare and to involve disadvantaged groups, especially the Roma population. In the course of the programme 4 practice communities are established in 14 settlements with the participation of 24 GP practices and other health professionals. The pilot operates from 2012-16 and may serve as a basis for the long-term renewal of primary care in Hungary.

There had been several measures introduced in 2011 and 2012 that aimed at strengthening primary care. To publish and advertise GP practices („practice rights“) on sale, a practice management centre had been established that offer the opportunity for young doctors to purchase GP practices under favourable credit arrangements.

In October 2013 and February 2014, the government provided HUF 16 billion surplus funds for the finance of primary care. In the fall of 2013, GPs, primary care duty services, dental care centres, MCH nurse and school health services received an increase for their monthly funding, provided retroactively to January. The monthly funding of GPs increased in average by HUF 45 000 (about 4.5 percent). To support the employment of allied health professionals by GPs in their practices, a supplementary fee was introduced in 2014. The employment of additional health professionals, resident doctors and specialist doctors is supported by raising regressive point limits. There was an increase in the fees for indicator-based care (performance bonus) and GP on-call care. The remuneration of GP practices increased altogether by HUF 70-80 000 per month (about 7-8 percent of practice financing). A supplementary fee of HUF 100 000 was introduced for all primary dental service providers in all settlements with underdeveloped social and economic infrastructure, or with unemployment rate much above the national average. The funding of workers in district MCH nurse services increased on average by HUF 30 000 per month in each service [6].
Specialist care

The reimbursement of acute hospital care takes place on the basis of contract with the National Health Insurance Fund (OEP) according to „homogeneous disease groups“ (HBCS, Hungarian DRG). The reimbursement of chronic and rehabilitation care is based on weighted patient days. Outpatient specialist service providers are reimbursed according to a point system linked to performed interventions. There is a financing cap for acute hospital care and outpatient specialist care defined in DRG points and outpatient points, respectively, called output volume limit.

Before 2012, specialist care was the shared responsibility of the counties, the local governments and the central government. Large multi-speciality county hospitals were owned by county governments, while polyclinics, dispensaries and hospitals with main specialities were owned by municipalities. The national institutes providing highly specialised tertiary care, the university hospitals, and a few institutes of rehabilitation care belonged to the central government (there ownership has not been changed).

The most important change in the healthcare system in recent years was the transfer of inpatient care providers from local and county government ownership to state ownership, along with the associated tasks such as coordination and development, restructuring of care, wage development of doctors and health professionals. From January 2012, the provision of inpatient and outpatient specialist care had become the responsibility of the state. From that date on, hospitals and their integrated outpatient departments owned by the county councils and the capital had been passed into state ownership, and from May 2012, hospitals owned by city authorities have also been taken over by the state. The transfer of the institutions was managed by the National Institute for Quality- and Organizational Development in Healthcare and Medicines (GYEMSZI). The national institutions (mostly providing tertiary care in a given profession) also came under the supervision of GYEMSZI, which coordinates operation and asset management tasks. Following several institutional integrations, by the spring of 2013 a total of 101 health service providers were part of GYEMSZI’s operation.

Religious and charity hospitals and some private providers of diagnostics and dialysis care contracted with the national Health Insurance Fund are also part of the publicly financed healthcare.
At the end of 2012, the number of hospital beds in operation in Hungary was 68,845, the proportion of acute beds was 61 percent, the proportion of chronic beds 39 percent. The number of beds per 10,000 population was 69.5 [5]. The number of beds in publicly owned institutions constitutes 97 percent of the total number of beds. Religious institutions make up 2 percent, other private institutions make up close to 1 percent of the total number of beds [7].

With the nationalisation of hospitals, large part of the capacities providing specialist outpatient care is available in centrally operated, state-owned institutions: at the outpatient departments of hospitals, or in outpatient institutions integrated to hospitals. Autonomous outpatient care providers working independently from hospitals remained mostly in local government ownership.

In 2012, there were altogether 428 publicly financed service providers in outpatient specialist care, among them 272 were independent institutions, 156 were integrated with hospitals. The share of cases and financing was approximately 20 percent in the independent institutions, 80 percent in the integrated institutions [5].

The aim of the centralisation of supervision and ownership of the larger part of specialist care is to facilitate the correction of structural disproportions existing in the healthcare system, as well as to promote the development of healthcare with a larger consideration of efficiency, equity and real needs. One of the measures to promote the efficiency of financial management is the government decree that set out rules for the centralised national procurement system of medicines, medical appliances and disinfectants for inpatient care institutions, as well as the centralised procurement of gas, electricity and telecommunication.

The nationalisation of healthcare institutions was accompanied by the adjustment of capacities: there was a reduction of acute hospital beds by about 4 percent; acute care in several hospitals or hospital departments was discontinued and these institutions now provide chronic care, day surgery or outpatient specialist care. The restructuring was accompanied by a change in the territorial provision obligation (compulsory catchment area) of institutions, effective on 1 July 2012, and the „output volume limit” introduced earlier on the basis of historical turnover data is gradually determined according to the institutions’ tasks.

The development of clinical practice guidelines, the review of guidelines issued since 2002, and the proper adaptation of evidence-based international guidelines is the responsibility of the departments and councils of the National Advisory Board of Healthcare. The pilot phase of the voluntary accreditation system of inpatient and outpatient care, and the direct pharmaceutical care of the population is carried out by an EU-supported programme launched in 2013. The programme focuses on the improvement of patient safety and healthcare quality.
Human resources of health care

In addition to ageing, a general tendency in Europe, the migration of doctors and health care workers also imposes a high burden on the situation of health care human resources in Hungary. Measures have been taken for years in order to retain the skilled health workforce migrating abroad in the hope of better income opportunities and more favourable general working conditions.

In 2011, Hungary had 295.8 doctors (EU-average 345.8) and 638.4 nurses (EU-average 835.9) per 100,000 inhabitants [8].

Scholarship grant programmes have been launched for several years in order to support the retention of young doctors. Specialist residents and specialist pharmacist candidates can demand for a net extra remuneration of 100,000 HUF per month on condition that they take a job in the publicly funded health system and reject informal payments. Paediatrician residents who take a job in a vacant GP practice, can receive a net monthly allowance of 200,000 HUF. From 2013, the number of scholarship programmes for residents expanded with a scholarship programme for emergency medicine specialist residents. The residents who provide emergency care on location defined by the Hungarian National Ambulance Service, and do not accept informal payments, can receive a net monthly allowance of 200,000 HUF. In January 2014, 600 specialist residents gained support in the framework of these scholarship programmes.

In 2013, wage increase programme for healthcare workers continued. In 2011, nearly 71,000 healthcare workers received a one-time subsidy of totally HUF 5.6 billion. In 2012, 90,000 healthcare workers got a retrospective and ongoing wage increase of totally HUF 30 billion. In 2013, wage increase affected 95,000 healthcare workers and amounted to nearly HUF 50 billion. In 2013, the wage increase was 10-11 percent on average for doctors (following an increase of 20 percent in 2012) and 8 percent for healthcare workers (following an increase of nearly 16 percent in 2012).

The immediate effect of these measures on the retention of health professionals is still difficult to prove. Anyway, in 2013, the number of doctors and dentists who applied for certificate for working abroad decreased (2011: 1419, 2012: 1363, 2013: 1218) [9]. At the end of 2013 the average gross monthly wage of doctors working in a specialist...
healthcare institution was HUF 462 662, double the 2013 average gross wage of salaried Hungarian employees (HUF 230 664) [10], the average gross monthly wage of allied health workers was HUF 203 591, however informal payments still pose a big challenge to the healthcare system.

Healthcare workers have been sensitively affected by changes in pension policy made in the public sector by the government to improve the balance of budget. According to the changes, budgetary institutions may not hire a public sector employee who is eligible for pension [11]. Individual exemptions from the regulation may be requested in healthcare (and public education), which suffer great shortages and employs many elderly workers. However, change in the pension law effective on 1 January 2013 applies also to the exemptions [12]. This means that the granting of old-age pension must be stopped if the pensioner has a civil servant or public servant status. There was a transition period of six months to prepare for the change in regulation for those pensioners who had already been employed in public service on 1 January 2013. Therefore, from June 2013 a pensioner further employed in public service may receive only wages. To compensate for income loss, the pensioner and the worker who is granted permission for further employment, instead of public pension, receive a compensation (that corresponds to the amount of the pension).

Pharmaceuticals

In recent years, the pharmaceutical health policy was characterised by a radical reduction of the reimbursement outflow. To achieve this, use of generics and price competition was stimulated. In order to make patients better informed and more conscious, the legislative basis for pharmacist-provided care was created, as well as an incentive system in a narrow range of diseases was established that takes patient adherence into account when providing reimbursement.

From 2012, the scope of medicines of high value (oncologic, rheumatologic) and medical devices (disposable instruments and implants) falling under itemised account (institutional use) significantly expanded. Before 2012, 6 agents belonged to this scope, in April 2014, the list consisted of 30 agents, while in some cases the application has broadened with new indication areas. Medicines falling under itemised account are purchased by the National Health Insurance Fund (OEP) in a public procurement process. In the course of determining the purchased quantity, consumption data and trends, patient turnover data of the previous period and existing alternatives to the financed therapeutic procedures are taken into account.

Similarly, the national hospital drug procurement resulted in savings, which included 3 active agents in 2012, 40 active agents in 2013, and the procedure is in progress in the case of 18 agents. The procedures saved HUF 3.7 billion (34 percent of costs) [13].
Health information system

Starting in 2013, several EU-supported eHealth projects have been implemented in Hungary that aim at the establishment of a standardized IT environment facilitating the cooperation of IT systems of different actors, a standard reporting system of the sector and a more data-based decision support system.

HR monitoring system

The goal of the human resources monitoring system is to construct an integrated HR monitoring system and data warehouse serving the preparation and support of decisions on different levels (government, health sector, institution). It will support the development of a sectoral HR strategy and will allow for the tracking of sectoral HR features and trends.

National health monitoring and capacity map database

Establishment of a decision support system integrating and utilising the sector's more important sets of data, which provides efficient support and transparency to the evidence-based preparation and making of strategic decisions.

Development of central IT systems ensuring inter-institutional flow of data

The goal of the project is to ensure the free, though controlled flow of data, based on national standards, among health service providers of primary care, outpatient and inpatient specialist care for the sake of managing and providing care.

Development of electronic certified public records and healthcare portal

A catalogue and register of certified public data in the health sector is created, which serves as a central and authentic source of institutional information, accounting and reporting systems, and as an instrument for reaching authentic master data in the health sector.

Local infrastructure developments needed for the construction of regional, functionally integrated inter-institutional information systems

The goal of the project is to modernise local infrastructure at all publicly financed outpatient and inpatient care institutions, carried out in parallel with the establishment of the central e-health system.
Changes of the legislation of the management of healthcare data

Legislation on the management of healthcare and related personal data has been changed, taking into account the goals of monitoring the health status of patients and the promotion of effective treatment activities of providers.

From 2011, GPs have access to their patients' data of healthcare provided under statutory health insurance through electronic data query from the National Health Insurance Fund. From 2013, the legislation allows also the pharmacist to have access to medication data of the patient redeeming a prescription provided under the statutory health insurance within one year. From 2014, the patient's attending physician can also use this option.

The number of registers has expanded in which legislation specifies the provision of data by healthcare providers. (Besides the National Cancer Register, the Child Oncology Register, the National Register of Congenital Anomalies and a register made of human reproduction procedures, at present the National Heart Attack Register and Central Implant are also part of the system.)

Sources:
[1] Hungarian Central Statistical Office
[2] WHO HFA database
[3] Eurostat
[4] WHO HFA database
[7] OEP and GYEMSZI data
[8] WHO HFA database
[10] Hungarian Central Statistical Office
[13] GYEMSZI statistics