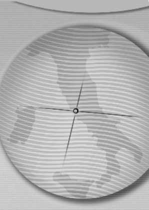

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Health insurance system and provider payment reform in the Republic of Macedonia

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Abstract

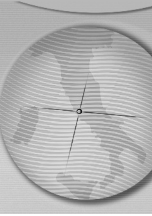
This article gives an insight to the current health insurance system in the Republic of Macedonia. Special emphasis is given to the specificities and practice of both obligatory and voluntary health insurance, to the scope of the insured persons and their benefits and obligations, the way of calculating and payment of the contributions and the other sources of revenues for health insurance, user participation in health care expenses, payment to the health care providers and some other aspects of realization of health insurance in practice. According to the Health Insurance Law, which was adopted in March 2000, a person can become an insured to the Health Insurance Fund on various modalities. More than 90% of the citizens are eligible to the obligatory health insurance, which provides a broad scope of basic health care benefits. Till end of 2008 payroll contributions were equal to 9.2%, and from January 1st, 2009 are equal to 7.5% of gross earned wages and almost 60% of health sector revenues are derived from them. Within the autonomy and scope of activities of the Health Insurance Fund the structures of the revenues and expenditures are presented. Health financing and reform of the payment to health care providers are of high importance within the ongoing health care reform in Macedonia. It is expected that the newly introduced methods of payments at the primary health care level (capitation) and at the hospital sector (global budgeting, DRGs) will lead to increased equity, efficiency and quality of health care in hospitals and overall system.

Key words: health insurance system, Republic of Macedonia (FYR), provider payment reform, capitation, global budgeting, DRGs

Country Overview

Macedonia is located in the Central Balkans, bordering Bulgaria, Greece, Albania, Serbia and Kosovo, covering an area of 25,713 km2.According to the 2002 census, the country's population was 2,022,547. Data on the declared ethnic affiliation from the 2002 census reported that 64.1% of the population identify themselves as Macedonians, 25.17% as Albanians, 3.95% as Turks, 2.66% as Roma, 1.78% as Serbs, 0.84% as Bosniacs,,0.48% as Vlachs and 1.04% others. The country seceded peacefully from Yugoslavia after an independence referendum, held in September 1991. The Constitutional name of the country is the Republic of Macedonia, but it was recognized by the United Nations on April 8, 1993 under the provisional name of the Former Yugoslav Republic of Macedonia. The country's title and heritage were the subject of a sharp disagreement with Greece, whose Northern Province is also called Macedonia. This dispute has not yet been fully resolved although a trade embargo was lifted in 1995 and the two neighbours' relations have since improved considerably.

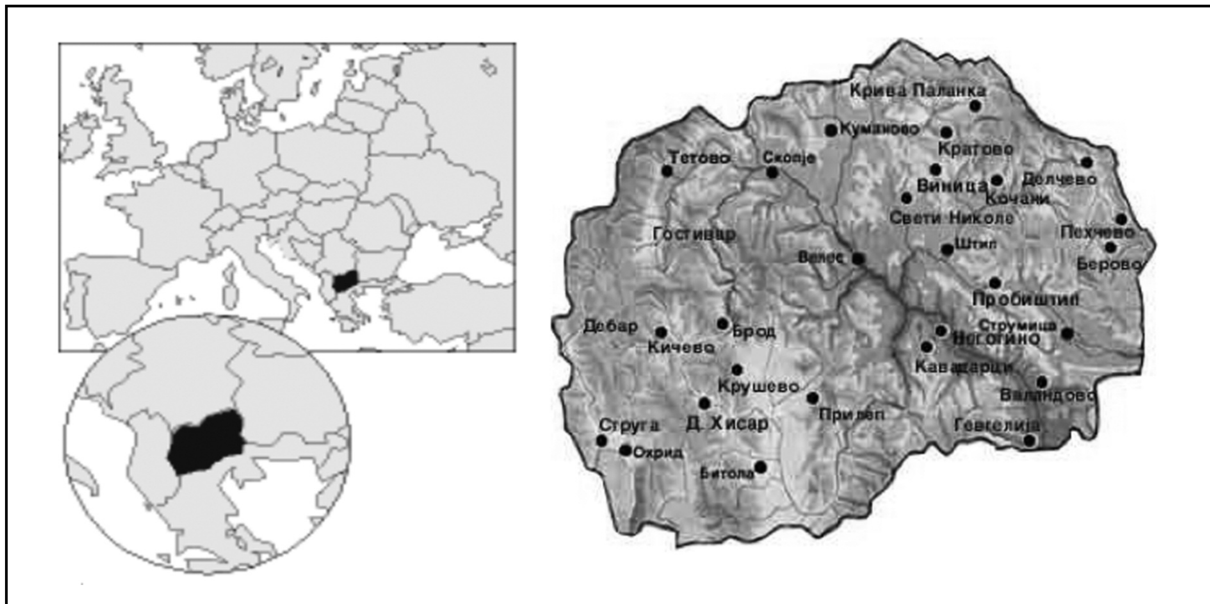
At the time of independence, Macedonia was economically one of the least developed of the six republics of the SFR Yugoslavia and in the years immediately following independence, the economy contracted even more. The economy is currently recovering and GDP growth is positive. From an international perspective, poverty in Macedonia is moderate with 20-25% of the population living below the official poverty line of US $75 per month or per capita consumption or below the international standard of US$2.15 per day. The population groups identified as being most at risk of poverty are the unemployed, socially imperilled households, retired persons and farmers. Larger households in the rural areas, particularly those with members who are unemployed or have low educational levels, are identified as specific risk groups together with the unemployed in urban areas. United Nations Development Programme reported that the



unemployment rate in Macedonia was 32.1% of the labour force in 2001, and 36% in 2006, placing Macedonia in the rank of countries with an extremely high unemployment rate in Europe. Basic demographic and socioeconomic indicators, as well as some health care system indicators for Macedonia are presented in Box 1.

Poverty has a serious impact on the health status of the population and accessibility to health services. Certain illnesses associated with poor living conditions remain typical for some vulnerable groups of the population. The data on the results obtained from scientific research and the epidemiological studies clearly indicate the connection between the deteriorated social and economic conditions and, especially unemployment, the social and economic exclusion and increased human insecurity and the psychosocial stress, on one hand, and certain indicators for deterioration of the health of the population, on the other hand. Among the most important indicators are the morbidity due to cardiovascular diseases, malignant neoplasms and other diseases, mental breakdowns and suicides, growth of alcohol dependency, smoking and drug addiction etc. The rates of general mortality of the population in Macedonia in the period from 1992-2007 showed constant growth and slight changes in

Country overview, health status of the population and health system indicators in Macedonia.



Box 1. Republic of Macedonia, demographic and socio-economic aspects, and health care system indicators, 2007.

- Land area: 25,713 sq km
- Population (2002 Census): 2,022,547 (urban population 60%)
- Life expectancy at birth: 73.8 years (71.7 males, 75.9 females)
- Birth rate: 11.1 per 1,000 population
- Mortality rate 9.6 per 1,000 population
- Population growth rate of 0.15%
- Infant mortality rate: 10.3 per 1000 live births
- GDP per capita (US$), 2006: 2398; PPP US$ (HDI) 7921
- Unemployment rate (%): 36
- UNDP Human Development Index / World rank (2006): 0,808 / 68th
- Gini Index / World rank (2006): 39 / 61st
- Physicians (2006): 5134; Physicians per 100.000 population: 254
- Dentists (2006): 1175; Dentists per 100.000 population: 58
- Pharmacists (2006): 908; Pharmacists per 100.000 population: 45
- Nurses (2006): 7545; Nurses per 100.000 population: 370
- Public health institutes (2006): 11 (one at national and 10 at regional level)
- Hospitals (2006): 55 (public 52 and private 3)
- Hospital beds (2006): 9440; hospital beds per 1000 population: 4.6
- Inpatient care admissions per 1000 population (2006): 98.6

the prevalence of certain causes of death. Leading causes of death are circulatory diseases and malignant tissues, which jointly made up 75.7% of all causes of death in 2007 as opposed to 2002 when they had made up 74.4% (Table 1).

Introduction

The current Health Insurance System (HIS) in Macedonia was introduced by the Health Insurance Law [1], which was adopted in March 2000, and modified and supplemented by the amendments in 2000, 2001, 2003, 2005 and 2007. The Health Insurance Law was enacted on April 7th, 2000, replacing the articles of the 1991 Health Protection Law related to the health insurance [2,3]. In fact, the current HIS in Macedonia is somehow a continuation of the previous one, with some modifications. New elements are the way of regulating relationships within the health insurance concerning obligatory and voluntary insurance, the scope of the insured persons and their benefits and obligations, the way of calculating and payment of the contributions and the other sources of revenues for health insurance, new policy for user participation in health care expenses, reform of provider payment, as well as public accountability measures and defining the scope of activities and responsibilities of the Health Insurance Fund that was established as an independent institution outside of the Ministry of Health [4,5].

Two types of health insurance in Macedonia

There are two types of health insurance according to the Law on Health Insurance [1]: compulsory and voluntary insurance for some forms of health care.

Compulsory health insurance was established for all citizens of Macedonia in order to provide social and health security and to realize certain rights in case of disease or injury and other benefits from health care established by the Health Insurance Law. Compulsory health insurance is based on the principles of obligation and universal coverage, solidarity, equality and effective usage of financial resources in accordance with the Law. It means that, each insured person can use health care services in the event of illness and injury and health insurance benefits (pecuniary compensations) in an unlimited manner when necessary. On the other side, there is an obligation to all employees and other bearers of insurance for continuous payment of contributions for health insurance. The contribution rate is the same for all employees, regardless of the level of salary or income, or the frequency and amount of the health services used on the account of the health insurance funds. The principles of solidarity and equity are compulsory [6].

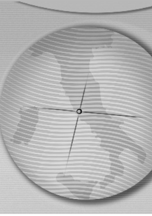
Some special risks and services, which are not covered by the obligatory health insurance, should be provided for by the employers of certain groups of workers. It includes preventive and screening measures and the use of health care in case of injury at work and occupational diseases due to the increased risk associated with the nature of their work. It also applies to the insured professional sport persons, drivers, pilots and aircraft crew etc.

Voluntary health insurance was introduced for the health services that were not covered by the obligatory health insurance. It covers use of some specific health care services, as well as services and degree of comfort at a higher than standard level as offered by the obligatory health insurance, in accordance with the agreements and norms set by the agency/company that provide voluntary insurance. Voluntary health insurance is an additional insurance, allowed only for the insured

Table 1. Most common causes of death of the population in Macedonia in 2007 and 2002.

Rank	Causes of death	Died persons			
		2007		2002	
		Number	%	Number	%
1	Diseases of the circulatory system	11311	57.7	10236	57.0
2	Malignant neoplasms	3524	18.0	3129	17.4
3	Symptoms/undefined causes of death	1482	7.6	1508	8.4
4	Injuries and poisoning	743	3.8	750	4.2
5	Endocrine and metabolic diseases	713	3.6	557	3.1
6	Diseases of the respiratory system	707	3.6	592	3.3
7	Diseases of the digestive system	365	1.8	379	2.1
8	All other causes	749	3.8	811	5.5
	Total	19594	100.0	17962	100.0

Source: Statistical Yearbook of the Republic of Macedonia, 2008 and 2003.



within the obligatory health insurance. However, due to the lack of interest shown by the citizens, voluntary health insurance has not yet been implemented in practice.

Modalities of becoming an insured through compulsory health insurance

Health Insurance Law (1) promotes various modalities for a person to become member of the compulsory health insurance offered by the Health Insurance Fund of Macedonia (HIFM). Almost all citizens (about 95% of the total population) of Macedonia are insured by the obligatory HIS, in various modalities: (a) on the basis of their employment - employed individuals (workers), individuals working in the private sector, and individuals performing agrarian activity (farmers); (b) on the basis of their retirement rights - retirement, disability and family pensions, as well as pensions and disability rents from foreign insurance bearers; and (c) on other grounds - unemployed persons registered by the Employment Office, beneficiaries of basic social care, war-disabled persons (soldiers and civilians), family members of the insured who serve in the Army of Macedonia, persons who are in prison or sentenced to other punitive measures, as well as persons in religious communities (monks, nuns) etc.

Citizens who are not included in any of the above-mentioned groups, can voluntarily obtain obligatory health insurance for themselves and for their family members by paying health insurance contributions in accordance with the Law.

The compulsory health insurance, apart from covering the active insuree (bearer of insurance), also covers his/her close family members: spouse and children up to the age of 18 or to the age of 26 respectively if they are students involved in regular education. Compulsory health insurance is also valid for foreign citizens and individuals without any citizenship, if they are employed on the territory of Macedonia, in domestic or foreign firms, in international organizations or diplomatic residencies, or if they are involved in an expert training or education in Macedonia. Foreign citizens from countries having international agreements with Macedonia for social insurance, use health care benefits according to those agreements.

The expenses of the health care services for the citizens of Macedonia who do not undergo any form of the compulsory health insurance, i.e., who are not Fund insurees, are covered by the State budget in the following cases: (a) health care of children and adolescents up to the age of 18 and pupils and students up to the age of 26; (b) health care of women related to pregnancy and delivery; and (c) treatment of infectious diseases, mental diseases, rheumatic fever with complications, malignant diseases, diabetes, chronic dialysis, progressive nervous and muscle diseases, cerebral paralysis, multiple sclerosis, cystic fibrosis, hemophilia, thalassemia and similar diseases, epilepsy, alcoholism and drug addiction.

Benefits from the compulsory health insurance

The HIFM provides the right to health care as well as the right to a sick-leave and other financial reimbursements to the insured.

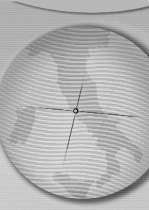
The compulsory health insurance, on the principle of solidarity as a key element for providing health care benefits, provides the insured with a broad scope of basic health care benefits or "basic package of health care services" at all health care levels – primary, specialist-consultative and hospital health care level:

I. Health care benefits at the Primary Health Care (PHC) level: (a) medical examinations and other kinds of medical assistance in order to determine the diagnosis, follow-up or check the health status; (b) undertaking expert medical measures, other measures and procedures for promoting the health condition, i.e. prevention and early detection of diseases and other health disorders; (c) providing emergency medical assistance; (d) outpatient treatment or home care treatment at the beneficiaries' home; (e) health protection related to pregnancy and delivery; (f) implementation of preventive, therapeutic and rehabilitation measures; (g) prevention and treatment of oral and dental diseases; (h) providing medicines in accordance to the list of medicines, issued by the HIFM;

II. Health care benefits at the Specialist-consultative Health Care level: (a) examination of the health status of the insured and establishing diagnosis and giving recommendation for further treatment; (b) performing specialized diagnostic, therapeutic and rehabilitation procedures; (c) prosthetic, orthopedic, and other facilities, supporting and sanitary instruments and dental technical devices according to the General Act issued by the HIFM; and

III. Hospital (in-patient short-term and long-term) services: (a) examination of the health status, providing treatment, rehabilitation and care, accommodation (in standard conditions) and meals during hospitalization; (b) providing medicines and supporting materials in accordance to the List of medicines, issued by the HIFM; (c) accommodation and meals for the accompanying person of a child up to 3 years of age during hospitalization up to 30 days if necessary.

Moreover, the funds collected from the statutory



health insurance are used to cover the preventive measures and activities, which are an important part of the basic health care package. These include: protection against harmful influences on population health; detection, curbing, and prevention of contagious diseases; systematic check-ups of children and students; women's protection in relation to pregnancy, childbirth, maternal leave, and family planning; protection of newborn and small children; protection against various types of addiction, and other preventive measures and activities.

The HIFM provides basic health care services to the insured persons through the health institutions with which it has signed contracts.

Some areas and specific programs are financed directly from the state budget, such as maternal and child health care, family planning, HIV/AIDS, blood donation, immunization and environmental health.

The following services are not covered by the compulsory health insurance and might be a subject to voluntary health insurance: (a) aesthetic surgery, sanatorium treatment and medical rehabilitation of certain chronic non-communicable diseases (except for children up to 18 years of age); (b) in-patient health services with higher standard or comfort; (c) medicines not included in the List of medicines determined by the HIFM; (d) orthopedic facilities and instruments not included in the list prepared by the HIFM or made of higher standard of materials; (e) accommodation (lodging and food) in gerontology facilities. The areas of care not in the benefits package include also pregnancy termination unless clinically indicated, issuance of medical certificates and treatment for alcohol abuse.

Compulsory health insurance also provides some other benefits to the active insured: (a) reimbursement of salary due to temporary incapacity to work due to illness or injury, medical examination, voluntary donation of blood or biological tissues, during sickness leave or during temporary absence from work due to pregnancy, childbirth and maternity leave for 9 months as well as for the care of a sick child up to age of 3 years (no limit) or other family members (up to 30 days); (b) all of the insured have the right to reimbursement of travel expenses related to the usage of health care services, as well as some other reimbursements.

Realization of the rights to health care

The compulsory health insurance benefits are used by the active insured persons and their family members through HIFM on the basis of their insurance record i.e. the *health book and blue tickets/marks*, which is a payment record for their health insurance contributions.

The insured person has a right and obligation to choose a physician (doctor of choice) within the appropriate service at the PHC level. The doctor of choice is responsible to follow the health status and to provide preventive measures and activities for health promotion and prevention and early detection of diseases as well as treatment of diseases and injuries, to determine the need for sick leave and to provide referrals to higher levels within the health care system, if necessary.

Basic health care benefits might be realized on all levels of the health care system as follows: 1) primary health care, including general practice, occupational medicine, pediatrics, school medicine, gynecology, and general dental practice; primary health care also covers emergency medical assistance and home treatment; 2) consultative-specialist health care; 3) sub-specialist health care provided at the clinics and institutes of the Medical Faculty in Skopje and some other health institutions at the national level; 4) hospital health care; and 5) medical rehabilitation at outpatient services, health homes/centers, and hospitals during the hospital treatment as well as specialized medical rehabilitation in specific rehabilitation centers.

An insured person has the right to treatment in a foreign medical institution (hospital) if the disease can not be treated in Macedonia and if there is a possibility for successful treatment in the country to which the insured person is referred. The conditions and procedure for treatment abroad are regulated precisely by the General Act of the HIFM. Physician recommendation and the approval for treatment abroad by the Fund Committee are required before the insurance company (HIFM) can grant coverage for that treatment. Coverage for services obtained abroad that are available in Macedonia is not provided for in order to protect Macedonian medical care services against erosion.

Resources for health financing

Health care system services and certain broader public health activities are financed by the monthly payroll (profit) contributions of the employed persons in the public and private sectors and by contributions from the general budgetary revenues, external assistance and limited imposition of user fees. Most of the revenues (about 96%) are raised from the obligatory health insurance contributions and transfers in accordance with determined rates. About 56.96% of domestic health sector revenues, in the year 2007, were derived directly or indirectly from individual's payroll contributions to the HIFM, with the rest, about 40.39%, from transfers from other state agencies such as the Pension Fund and Employment Institute, and 2.64% other non-taxable

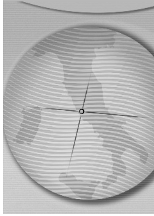


Table 2. Revenues of the Health Insurance Fund of the Republic of Macedonia in 2007 [8].

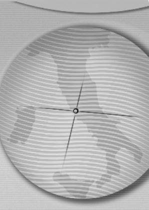
Sources of revenue	Budget plan	Actual		Structure (%)
		MKD (1000)	Eur (1000)	
1. Employee's gross salaries contributions	7,506,459	8,446,726	137,793	48.29%
2. Self employed	495,199	234,927	3,832	1.35%
3. Farmers	63,677	59,782	975	0.34%
4. Additional contributions (workers at risk)	480,577	501,695	8,184	2.87%
5. Other insured	120,875	110,012	1,795	0.63%
6. Contributions from previous years	591,783	610,202	9,954	3.49%
Total employment revenue	**9,058,736**	**9,963,345**	**162,533**	**56.96%**
7. Contributions from beneficiaries of pension	3,796,200	3,715,149	60,606	21.24%
8. Contributions for unemployed persons	2,171,262	2,145,054	34,993	12.26%
9. Contributions for social care beneficiaries				
10. Transfers from the budget of RM	74,715	69,287	1,130	0.40%
	923,548	911,383	14,867	5.21%
Total transfers	**6,965,725**	**6,840,873**	**111,597**	**39.11%**
11. Other non-taxable revenues	79,500	65,869	1,075	0.38%
12. Revenues from co-payment	471,902	396,667	6,471	2.27%
13. Transfer from previous year	0	224,501	3,622	1.28%
TOTAL REVENUE	**16,575,863**	**17,491,257**	**285,339**	**100%**

Source: Health Insurance Fund of the Republic of Macedonia (2008).

revenues (table 2). Till end of 2008 direct contributions from public and private sector wage-earners were equal to 9.2% of their monthly salaries and from January 1st, 2009, the rate was reduced to 7.5% [7]. Direct payroll contributions to the HIFM were withheld from the source (employer).

A certain percentage of the money from payroll contributions to the Pension and Disability Fund and the Employment Fund is transferred to the HIFM for health insurance coverage of the retired/pensioners, disabled and eligible unemployed persons. For pension beneficiaries, the contribution rate (14,694%) is applied to the net pension payment, while for the unemployed and for the recipients of social assistance the contribution rate of 8.6% is applied to 65% of the average net salary in the country. These funds are transferred to the HIFM by the Pension and Disability Fund, the Employment Fund, and by the Ministry of Labor and Social Policy (table 2). Farmers had to contribute 9.2% of the cadastre income till end of 2008 and 7.5% from January 1st, 2009 [7]. For the citizens with a private enterprise and their employees, the rate was 9.2% of the gross earned wages and reimbursements till end of 2008 and 7.5% from January 1st, 2009 [7]. Additional contributions for health insurance in case of injuries incurred at work and work-related diseases are set at a rate of 0.5% of the gross earned wages and reimbursements.

The general budget was also a weak source of revenue for the health sector until 1992, when financing of the most Governmental prevention



programs was shifted from HIFM to the budgetary financing. The general budget accounted 5.9% of domestic health revenues in 2002 and 5.2% in 2007, which is remarkable increase comparing with 1996 when accounted about 3.5% [2,4,5,8].

There is an ambitious tendency of the Government of Macedonia to increase the budgetary financing in order to provide health insurance for all uninsured persons and to achieve universal health insurance coverage for all citizens in Macedonia from June 1st, 2009 [9].

Revenues generated through user fees for health services and applied devices in the public health system amounted to 2,3% of domestic health revenues in 2007 (table 2).

Co-payment

The active insured persons and their family members have the obligation to co-pay, from their personal funds, a predetermined percentage of the cost of the health services provided, but not more than 20% of the total cost of the health service or drug (except for some hearing and visual (eye's) facilities and prosthetic devices). In 2001, the HIFM decided on the level of user's participation in the health care expenses, as follows: (a) 10-20% of the price of health services and of medicines at the PHC level; (b) 10-20% of the price of health services for treatment of oral and dental diseases (except prosthetic devices); (c) 10-20% of the costs of services in the specialist-consultative care and hospital treatment, including all costs for services and medicines; (d) 20% of the total expenses for approved treatment abroad; (e) 20-50% of the price of hearing and visual (eye's) facilities; (f) 20% of the costs of dental prosthetic devices; and (g) 20-50% of the price of some other prosthetic devices in accordance with the General Act issued by the HIFM.

Introducing co-payments for health care services and drugs was one of the most controversial policies employed in Macedonia after gaining independence in 1991 [2]. The 2000 Health Insurance Law continued this practice for co-payments with fixed charging scales by introducing a general principle of inversion of the level of user's charge and the price of a service or drug. It means that the co-payment rate/percentage is higher for the lower price services, but not more than 20% of the service/drug price, and the opposite, lower co-payment rate for the higher price services/drugs.

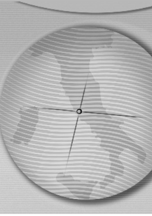
There is no co-payment for health care services in the following cases: (a) follow-up of the health status of the insured by the physician of choice and for emergency medical services on call; (b) users who receive permanent social assistance, persons placed in an institution for social protection or in another family, except for medicines prescribed at the PHC level and for the treatment abroad; (c) psychiatric patients placed in psychiatric hospitals and persons with mental retardation without parent's care; (d) insured who, during the calendar year, have paid user charges for specialist-consultative and hospital treatment (except for medicines prescribed at the PHC level and for treatment abroad) accumulating to over 70% of the average income per month in the country in the previous year; (e) additional exemptions, in accordance with some special health care programs with social dimensions and treatment of certain debilitating, costly, and often life-threatening diseases (rheumatic fever, progressive nervous and muscle diseases, cerebral paralysis, multiple sclerosis, cystic fibrosis, epilepsy, penfigus, lupus erithematodes, infectious diseases - list of about 20 diseases, drug-addiction and alcoholism, up to 30 days, chronic dialysis, conditions after transplantation of the organs, malignant diseases, hemophilia and diabetes, hormones for growing-up the children and compulsory immunization); (f) prosthetic, orthopedic and other devices for children up to the age of 18; (g) women in relation to pregnancy and delivery; (h) infants, up to one year of age; (i) blood donors who voluntary have donated blood more than 10 times; and persons exempted by some special regulations (war-disabled persons or families of soldiers who were killed in action).

User participation in health care expenses have eliminated overuse of services, but have raised fewer funds than expected, contributing less than 5% of the revenues of health care providers. They also raise questions of equity.

There are also informal (under the table) payments, which extent is difficult to assess. It is believed that this practice is common for surgeons to levy further, informal payments from their patients.

Payment to the health care providers

According to the Law on Health Insurance [1], health care organizations and the HIFM are obliged to plan the necessary funds for providing health care services and realization of the benefits to health care to the insured coming from the obligatory health insurance. Each year, the HIFM prepares a plan and program for health services to be financed from the obligatory health insurance. Moreover it determines criteria, by the General Act, for contracting with health care organizations and for the ways of payment to the providers of health care services.



According to the Law in Health Insurance, there are three basic methods of payment to the providers for health services: (a) capitation; (b) fee-for-service; and (c) programs for certain kinds of health services. In addition to that, the HIFM determines some other criteria for coverage of emergency medical services for the entire population, home visits by nurses (patronage) to pregnant women and babies regardless of the status of insurance, providing continuous health care (24 hours), etc. The Law does not make any difference between public and private health care providers in relation to the possibilities for contracting with the HIFM in order to provide equal financial conditions and incentives for efficient performance in delivering health care for both types of providers.

The majority of doctors and other health care professionals in the public health sector are paid a salary on scales negotiated by the Union of Health Care Workers and the Ministry of Health. Some of the physicians in the private sector at PHC level, starting from 1999, were paid based on the principle of capitation. In 2007, after the performed transformation of public health institutions and privatization of chosen physician, the method of capitation for doctors is applied for health services payment at PHC level.

During the last ten years fully-trained physicians received a monthly salary of between 12000 and 18000 MKD (200 to 300 Euro) (5). This situation improved slightly by increasing the net salary of doctors and other health workers in 2007 by 17.5% and increasing the value of the points for calculating the capitation for physicians at the PHC level [8]. Nevertheless, when you consider that the value of the consumer basket for food and drinks for a four-member family for April 2009, calculated by the State Statistical Office upon the market prices, was about 12.730,oo MKD, there is a clear incentive to seek alternative sources of income.

Revenues and expenditures of the health insurance fund

Obligatory health insurance is the main source for health care revenues. The revenues of the HIFM are used to fund the programs for which the Fund is responsible and to finance the government's share of the health insurance costs for those additionally enrolled in the program, who are not Fund insurees and the health care costs for them are covered by the state budget. Direct contributions by employers and workers for health insurance were 52.9% of the total HIFM revenues in 2007 (table 2). In addition, their contributions to pension and unemployment schemes include components that are used for health insurance for persons who are retired, unemployed, disabled veterans or recipients of social (welfare) benefits. These amounts, which were about 33.9% of the HIFM revenues, are paid by the State Funds for Pension, Unemployment, and other social programs. HIFM revenues from the general budget in 2007 amounted to 5.21%. The Ministry of Finance sets the budgets for the Ministry of Health's vertical programmes, and examines and approves budgets for the HIFM.

Expenditures of the HIFM for contract health care services in 2007 accounted for about 90.7% of the total expenditures. Salary reimbursements for sick leave and maternity leave compensations accounted for another 6,7% (table 3). The structure of the expenditures on health care services of the HIFM in 2007 is presented in table 4. Outpatient services (at the PHC level and outpatient specialist-consultative health care services including medicines from the HIFM List of medicines) accounted for about 65.0% and hospital care/services for 32.1%. The proportion of GDP recorded as spent in the formal health care system appears to be about 6,5% in 2008. But, in the context of remarkable inflation figures vary and the GDP figure also has to be treated with caution. Nearly all health expenditure (more than 95%) is reported by HIFM to be in the public sector but this figure seems overestimated as some analysts point out that out-of-pocket payments for health services and medicines contribute about 25% of overall health expenditures. Total revenue for the HIFM in 2007 totalled 17,491,257 MKD while total expenditures equated to 16,425,001 MKD, leaving a positive balance of 1,066,256 MKD [8].

Current trends in health care and provider payment reform

In spite of a rapid growth in expenditure over the last ten years and the accumulation of significant debts by public health care institutions and the HIFM, the health system does not appear to have significantly improved access to basic health services and remains inefficient and inequitable. Resource distribution was concentrated in secondary and tertiary care, particularly in the capital city of Skopje, while access to basic services in some rural parts of the country is still limited and of poor quality. Available efficiency indicators of the public health care institutions are below EU norms. Prices paid for pharmaceuticals by the HIF in Macedonia were significantly higher than prices obtainable through international competitive procurement. Health care reforms undertaken in 1990's have proved unsustainable, and have in practice largely been abandoned or revised. The development and implementation of policies and

Table 3. Expenditures of the Health Insurance Fund of Macedonia, 2006 and 2007 [8].

Expenditures	2006	2007		Structure 2007 (%)
	MKD (1000)	MKD (1000)	Eur (1000)	
Contract health care services	14,710,787	14,891,325	242,925	90.66%
Pay checks leases and compensations for social insurance from the employers	169,094	190,617	3,110	1.16%
Payment of compensations for sick leave from HIFM	496,592	537,848	8,774	3.27%
Compensations for maternity leave from HIFM	605,098	591,869	9,655	3.60%
Other operational expenditures	127,006	29,999	489	0.18%
Capital expenditures	63,711	76,184	1,243	0.46%
Other expenditures	108,106	107,159	1,748	0.65%
Total Expenditures	16,280,394	16,425,001	267,945	**100%**

Source: Health Insurance Fund of the Republic of Macedonia (2008).

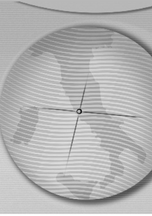
Table 4. Structure of the Health Care Services Expenditures of the Health Insurance Fund of Macedonia, 2006 and 2007 [8].

Health care expenditures	2006	2007		Structure 2007 (%)
	MKD (1000)	MKD (1000)	Eur (1000)	
Outpatient services (PHC)	4,781,845	5,051,195	82,401	33.92%
Specialist-consultative health care services	4,247,093	4,628,756	75,510	31.08%
Hospital health care services	5,162,261	4,785,826	78,072	32.14%
Treatment abroad	194,518	113,916	1,858	0.76%
Orthopedic gadgetry and aids	320,771	307,209	5,012	2.06%
Other health care services	4,300	4,424	72	0.03%
TOTAL	14,710,789	14,891,325	242,925	**100%**

Source: Health Insurance Fund of the Republic of Macedonia (2008).

plans for reform have been hampered by weak capacity in the state health sector agencies (the Ministry of Health, the HIFM and the Republic Institute for Health Protection.), and the lack of data and information systems for surveillance, monitoring and analysis. The result of this situation is that Macedonia has been slower to undertake health care reform than many EC countries [5,8,10].

Adoption and enforcing the new Health Insurance Law and separation of the HIFM from the Ministry of Health were key and the most successful implemented reform processes suggested by the international consultants of The World Bank. The HIFM is now centralized, hospitals are in practice subject to detailed Ministry of Health and HIFM controls. Technical efficiency has improved as the average length of stay in hospitals has decreased. Public providers are in practice paid on the basis of global budget contracts. PHC reform has increased patient choice through patient enrolment and capitation-based payment to physicians. The capitation is calculated on the basis of numbers of



insured persons that have chosen a certain physician as their own primary care physician, the determined number of points for each category of population group and the determined value of each point. Additional incentive is provided for physicians' practices that are located in remote rural areas. The invoicing for provided health services is undertaken once per a month, that is 70% of the calculated amount of capitation, whereas the remaining 30% of calculated monthly amounts of capitation is invoiced after each quarter, based on the results presented in the quarterly reports in accordance with the aims determined in the contracts. The manner of payment for primary dental care services is regulated by a special rulebook, according to which the method of capitation is used [8,10].

Public health institutions in 2007 were paid on the basis of public bid and the interest shown by health institutions responsible for providing health care at all levels, and signed contracts for the first time of all public health institutions (total number of 115 contracts) with the HIFM on the basis of appropriate legal acts. The relations between the HIFM and the health institution responsible for providing health care services to insured persons have been regulated in these contracts, as well as the manner of payment, responsibilities and rights of agreed parties and other issues related to the mutual relationships between the agreed parties. Private health institutions delivering primary and specialist-consultative health care are paid on the basis of signed contracts with the HIFM. At the beginning of 2007, the HIFM signed a total of 2,203 contracts with private health institutions responsible for primary and specialist-consultative health care (1,979 for PHC and 224 for specialist-consultative health care). In 2007, 2,654 physicians had active facsimiles as chosen physicians that have been working with the HIFM: 1,206 in general medicine, 78 in occupational medicine, 167 in small and preschool children health care, 61 in school medicine, 132 in health care of women over 15 years of age, and 1,010 in dentistry [8].

The second World Bank financed a project for continuation of the health care reforms in Macedonia (The World Bank, 2004) which was initiated in 2003 and approved in 2004 with the following specific objectives: 1) to upgrade Ministry of Health and HIFM capacity to formulate and effectively implement health policies, health insurance, financial management and contracting of providers; and 2) to develop and implement an efficient scheme for restructuring of hospital services with emphasis on developing day-care services and shifting to primary care [10]. The expected improvement in primary care and increased access to essential health services, especially for the poor and uninsured, would help bring further reductions in infant mortality and improvement in other health status indicators, which in turn would help the country meet its Millennium Development Goals. Health financing and reform of the payment to health care providers are of high importance within the ongoing health care reform in Macedonia. It is expected that the new introduced methods of payments for all doctors in 2007 at the PHC level (capitation) and in 2009 (January 1st) at the hospital sector (global budgeting, DRGs), as well as the tendency toward the universal health insurance coverage for the entire population, will lead to improved equity, increased efficiency and quality of health care in hospitals and higher efficacy of the overall health care system.

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