Montenegro

Ministry of Health

MASTER PLAN
DEVELOPMENT OF HEALTHCARE SYSTEM OF MONTENEGRO FOR THE PERIOD 2010 - 2013

Podgorica, 2010

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ACRONYMS

ALOS	Average length of stay in hospital
GDP	Gross Domestic Product
GDP p.c.	Gross Domestic Product per capita
CBA	Cost Benefit analysis
VHI	Voluntary Health Insurance
SHI	Supplementary Health Insurance
EBHC	Evidence Based Health Care
EU	European Union
HIF	Health Insurance Fund
ISPOR	International Society for Pharmacoeconomic and Outcomes Research
CC	Clinical Centre of Montenegro
DGP	Doctor of General Practice
MoH	Government of Montenegro: Ministry of Health
MP	Master plan
NGO	Nongovernmental Organization
OECD	Organization for Economic Cooperation and Development
OTC	Over the Counter
CHI	Compulsory Health Insurance
PZT	Health Technology Assessment
PHC	Primary Health Care
STHC	Secondary and Tertiary Health Care
HO	World Health Organization
USD	American dollar
GMNE	Government of Montenegro
LHCLHI	Law on Health Care and Law on Health Insurance (2004)

1. Introduction

Master Plan Development of Health care System for the period (hereinafter in the text referred to as: MP) is a professional and political document on the basis of which the development of health care system is directed in line with the overall development of the country and it follows the guidelines of the healthcare strategy of the European Union "Together for Health": A strategic approach for the EU for the period 2008–2013[1], that was adopted by the European Council in 2007. As the basic instrument of the health care policy, MP provides conditions for efficient, rational and sustainable development of the health care system, creating the conditions for the health care system to become a part of the health integration into the EU, in accordance with universal values, goals and instruments. Overall values of the principles of universality, access to quality care, equality and solidarity are central pillars of socially-oriented European health care system in terms of higher level of social protection, social cohesion and social justice. Their main characteristics are public health care services, as an inseparable part of social services of general interest and should be considered in a similar manner.

In all countries of the world, the needs in public health care system have been increasing, more than ever, due to demographic situation, epidemiological pressure, rapid development of medical technologies for diagnosis and treatment, rising prices of drugs, especially innovative and biological, a true assessment of quality of work and greater awareness of the population. Treatment and prevention costs are growing faster than the economic base of society. It is therefore necessary to introduce adequate funding systems that will provide access to the necessary health care.

The function of the plan for health care development is to coordinate activities in society that contribute for the most part to the population health improvement. According to the definition of the World Health Organization (hereinafter referred to as : WHO) health is not only the absence of an illness, but a set of the utmost physical, mental and social well-being. As such, it depends on a number of factors from the environment, over which the individual has no impact. Due to those factors the population health is directly or indirectly linked with all endeavours and activities of the people in a society, and oftentimes it depends on the activities and events in other countries. There are hardly any areas that do not exert a certain impact on health status of the population. Every law or regulation contains certain elements that can contribute to improvement or deterioration of the population health.

The plan has a political character because political agreement is necessary regarding

[1] Source: http://register.consilium.europa.eu/pdf/sl/07/st14/ st14689.sl07.pdf

resources and decision-making methods on the status of the health care system, as an an integral part of the social system that may function only within its framework and is interdependent upon other economic and social fluctuations and developmental trends. Health care sector is not the source of expenditures, but an investment in achieving social, economic development and overall development of the society.

Basic principles of the development of the health care in Montenegro are laid down in the following national and international documents:

- The Constitution of the Republic of Montenegro;
- Targets of Health Care Policy in Montenegro by 2020 (2000);
- Strategy for Development of the Health Care System in Montenegro (2003);
- Master Plan Development for Health Care in Montenegro for the period 2005-2010;
- The Law on Health Care and the Law on Health Insurance (2004);
- The Evaluation of the Health Care Programme in Montenegro in 2008;
- Strategy of Reproductive Health;
- Mental Health Strategy;
- The International Conference on Primary Health Care, Alma Ata (1978);
- The Ljubljana Charter on Reforming Health Care, WHO (1996);
- WHO Declaration on the State of Health of World Population (1999);
- European strategy of WHO “Regional Health – 21 Targets for the 21st Century” (1999);
- The Tallinn Charter.

In the light of global goals set out in the above-mentioned documents, Montenegro joined a unique international process of health care development, through the implementation of health policy measures, from the achieved level of health and health care of the population, health needs and financial possibilities for their realization, to the achievement of set goals, and optimal preservation and improvement of health of every citizen and the whole population.

Having taken the activities on the reform of primary health care and having established the concept of the chosen doctor throughout the entire territory of Montenegro, through the development of support centres, this document defines the continuation of activities aimed at health promotion and disease prevention, emphasizes rehabilitation and the return of a convalescent or cured person to work, family or wider society as soon as possible. Citizens and their needs remain a priority, but a citizen must become a partner with a doctor and other health care workers and at the same time they must know their rights, duties and responsibilities.

Health has become an integral part of all policies: tax, labour, social policy, transport safety, ecology, agriculture and food production, education and sports, meaning that we need to do, in all the areas, as much as possible for health as the greatest wealth.

Changing unhealthy habits and styles can and must improve the quality of life of people, extend healthy life expectancy and reduce health care costs. Protection, negative stress reduction, avoidance of the use of psychoactive substances (drugs, alcohol, and cigarettes), a balanced diet, regular physical activity and hygiene are fundamental areas related to health that should be strongly supported by every modern state.

In the centre of the health care system, in addition to the citizen, reinforcement of the management structures, development of processes and detailed knowledge of the use of information and communication technologies are the most important driving-engines of the transition from a structurally based to process-based health care. The principle of integrated and interdisciplinary care, from birth to death, including palliative care must be respected in the process of a patient's treatment. Insisting on the organizational and functional connectivity will ensure better response in the process of changing expectations and demands of citizens in relation to primary health care requirements in realistic expectations, in line with national priorities. In order to provide for greater patient satisfaction, it is necessary to prepare (pre)conditions ensuring more efficient and high-quality work and motivation of health workers.

Demographic structure of population or its age structure determines the epidemiology, diseases and needs of the population. WHO and EU strongly reiterate the fact that population aging and an increase in chronic diseases directly affect the quality of life and increase in health care costs. However, it is not always logical or necessary that health care costs increase with age, much depends on the health status of the population and its need of the services. Not only is the age the factor that increases health care costs, but also the closeness to death (i.e. number of years in poor health before death). According to the findings of the most recent surveys, older persons living in high income countries remain in good health. The need for prevention, screening programmes, permanent treatment, control of chronic diseases and the use of relevant technologies will certainly rise healthcare costs, but the timely start of these activities will decrease overall costs in the future. It is assumed that root causes of rising health care costs are not so much related to aging, but to the economic growth (the rich countries spend more on health), the amount and quality of services and technological innovations related to medical equipment and medicines. Thus, the orientation toward the patient approach in a familiar environment and at the primary level where an efficient organization of various services ensures greater accessibility is required.

Long-term health care development will rely on the existing values and strategies of the health care system of Montenegro, monitoring of the EU strategy and fundamental EU legislation and with respect for specificities of health care in Montenegro. The overall health care system, ranging from public health, primary health care and, later, secondary and tertiary level should be adapted to demographic changes. All the plans and health policies should be tailored to individual patient's needs. Health care is becoming increasingly patient-cantered and the patient is the purpose of the functioning of health care system. Therefore, the activities are proposed for the division of work among different levels, with exercising strict supervision and encouraging the transfer of good practice based on evidence-based medicine (EBM), with respect to clinical guidelines and clinical methods.

The introduction of telemedicine, telepharmacy and other information systems will enable health care professionals to gain expertise and become consultants, as well as the availability of information and data, which will further enhance the quality, safety and scope of health services.

Shortening of the waiting time will be achieved through organizational changes primarily related to the planning of work and with the support of the information technologies, medical appointment scheduling at specific time, constant monitoring and upgrading of the national waiting list, as well as posting graphic and diagnostic data on the web pages.

Structural changes in the dental sector are followed by the tracking of results thereof and the introduction of innovations for its future improvement to far better oral health of the population, with special emphasis on prevention for children and youth, with constant supervision and data monitoring, in order to plan the necessary steps to improve this segment of health care.

In comparison to international data, the health care system in Montenegro faces problems of the shortage of health care workers, especially doctors[2]. Moreover, it is necessary to emphasize that the need for health care workers is relative. These needs must be based on the needs of the health care system, along with monitoring of productivity, efficiency and quality, and not only on standards.
An inseparable part of the process of improving health care is to improve the knowledge in the field of management as well as to learn how to better manage health care institutions and thus increase the limited opportunities of decision making of the management of health care institutions. Management and leadership in health sector must become a central theme of human resources development, management

[2] However, there are countries facing with even greater shortage of doctors (for example: Canada, Poland and others…) due to restrictive policy related to the number of doctors, going abroad in search for better salaries. The former phenomenon has been tracked after the EU enlargement.

of health care institutions and coordinated activities of all those included in a health care network. In addition, it is necessary to clearly determine relationships and rules between all the implementers within the network of health care institutions.
The culture of health care workers must follow the direction of improving the relationship and responsibility toward patients, the information on the necessity of the quality of work and efficient management of human, financial and material resources. It is, therefore, necessary to inform the public of the omissions, without penalties, and provide patients with the access to review the organization of work and documentation of all levels. Good relations, respect for differences and interdisciplinary teams are fundamental preconditions for a quality work, which is, along with the appearance of a new generation of information technologies, of a particular importance.

Good relations and communication with the public and informing the citizens in a friendly and understandable manner will increase public confidence in the health care system for all population groups, especially the vulnerable, and strengthen individual citizen responsibility in safeguarding their own health and the health of others.

Traditional treatment under surveillance is an additional opportunity for a patient, if so decides.

A holder of compulsory health insurance (CHI) – the Health Insurance Fund (HIF) will closely follow the current Strategic Development Plan for Health Insurance of Montenegro by 2011, and upgrade its own operational-management tasks, reduce costs and rationally assess payment service models. These models need to promote efficiency and quality improvement, with the necessary guidance to the outcome of the treatment. The introduction of an additional offer in the area of voluntary health insurance (VHI), a public-private partnership, should increase financial sustainability of health care system and access to services and faster growth, without diminution of solidarity and equity within health care systems.

The reorganization based on the principle of rationality in the secondary health care level represents a a platform for more efficient and health care of higher quality. Tertiary health care, ambulance, epidemiology and disease control will remain under the jurisdiction of the state. The state will make further efforts to strengthen organizational and human resources capacities of this institution, in order to be able to respond to international and national requirements, particularly in the field of public health and control of communicable diseases, as well as the most important mass non-communicable diseases.

Chambers and professional bodies in the health care sector will adjust to the division of professional competences and the manner of financing, and undertake the role of

introducing a system of total quality and safety. Representatives of trade unions and other social partners remain equal partners in the system of collaboration in the area of labour and wage policies, while a civil initiative was an essential factor in the planning process.

2. Master Plan Guidelines

2. 1. Vision

Building an accessible, high quality and long-term sustainable health care system, with a citizen at the centre of the system and with strengthened individual awareness and responsibility for the consequences of decisions on personal health and health of others.

2. 2. Mission

Creating conditions for promoting health in all policies for all in Montenegro, in order to safeguard and improve the health of the population on Montenegro.

2. 3. Overall goal and objectives

The overall goal is to improve positive health indicators of the population of Montenegro, and it will be attained by achieving the following objectives:

1. Completed all the activities related to primary health care reform, on the whole territory of Montenegro;

2. Established a Network of Health Institutions, as a geographical distribution of capacities of public health care institutions and concessionaires;

3. Defining a mandatory package of services for secondary and tertiary health care;

4. Introduced transparent systems of patient classification as a basis to change the system of financing, or charging according to seriousness and complexity of disease.

5. Strengthened a specialist-hospital activity, acute and non-acute hospital treatment and transferred activities into hospitals;

6. Introduced an additional offer in the area of voluntary health insurance and public-private partnership;

7. Implemented a comprehensive palliative care development programme at national level;

8. Introduced national and international clinical guidelines, established clinical guides, standards, protocols and codes of conduct based on scientific evidence.

9. Number of staff persons at secondary and tertiary health care planned according to the citizens' needs, which will be defined by national priorities, number of patients and covered gravitational areas.

2. 4. Values

- Health is the greatest value of an individual, family and an entire society, which also implies a high quality life;
- Universality: everyone must have access to good health care;
- Equity: everyone has equal opportunities for better health;
- Solidarity: everyone gives contribution to health care system according to its personal opportunities, and gets services according to personal needs;
- Involvement: active involvement of all participants in the health care system when it comes to decision making;
- Quality: ensuring a safe, integral high quality health care;
- Responsibility: we are all responsible for our own person health and health of others, resulting in active participation in health preservation and improvement;
- Confidentiality: mutual trust and respect between beneficiaries and providers of health care services, as well as among providers of health care services themselves;
- Ethical behaviour: ethical norms of behaviour in health care professions should be extended to the respect for the rights of patients and take into consideration an individual and his/her will.

3. Strategy for the Development of Health Care System

Master Plan Development for Health Care System of Montenegro for the period 2005 – 2010, was the basic document that gave a framework of development policies of the health system of Montenegro for the specified period, in which significant activities to reform the system were carried out, particularly in primary health care level. Master plan continues to guide the development of the health system, starting from the guidelines contained in this document, as well as the EU Health Strategy "Together for Health": a strategic approach to the EU for the period 2008-2013[3] and the WHO guidelines[4]..

The MP put special emphasis on reform activities conducted in secondary and tertiary health care, in order to make the health system fully implement basic values that are instilled in socially-oriented societies such as Montenegro.

A WHO Framework Strategy “Health for all” sets out the basic values for the preparation of public health policy. Equity is the first among the values, meaning that all people have equal opportunities to develop and maintain optimal health. This value, in relation to health, requires from policy makers to prioritize tasks. Health policies, which are based on the principle of equity, ensure that health care services are equally accessible to citizens, and pay special attention to the poor and other vulnerable groups and groups that live on the edge of society. The Framework Strategy “Health for All” also incorporates the closely linked value of solidarity, which implies that everyone gives contribution to health care system according to his/her own abilities and that everyone receives services according to their needs. Solidarity is a way to achieve equity, as it helps to counterbalance the unequal impact of different health determinants on access to health services. Equity and solidarity are directly related to a third value of participation. Active participation of individuals and various organizations in the health care system significantly improves the quality of public health decision making.

An Updated Policy Strategy "Health for All"[5] from 2005, even more stresses a certain direction in order to achieve optimum health of each individual and reduce inequalities in health. While health improvement necessarily requires an active role of each individual, coordinated multisectoral and intersectoral approaches, which affect health determinants, are viewed as basic preconditions for achieving better health. Everyone is responsible for the consequences of his/her own actions on health.

Health is a priority task in defining and implementing all policies and activities of the EU. The founding treaty (the Treaty establishing the European Economic

[3] Source: http://register.consilium.europa.eu/pdf/sl/07/st14/ st14689.sl07.pdf
[4]Source: A WHO Framework Strategy »Health for All«, http://whqlibdoc.who.int/publications/9241800038.pdf
[5] Source: http://www.euro.who.int/ document/e87861.pdf

Community[6]) in Article 152 stipulates that a high level of human health protection is to be ensured in the definition and implementation of all Community policies and activities.

In that area, Member States should actively participate in taking measures for the promotion, coordination and complementarity of national measures for the protection and promotion of human health, reducing the damage related to drug addiction, alcohol abuse, and especially with the fight against tobacco use, control of majority of diseases and transborder threat to health, by promoting transborder cooperation and exchange of good practice.

European health policy has been facing an important development of common challenges, particularly measures for reducing inequalities in health, adaptation to demographic changes, reducing chronic non-communicable diseases, increasing mobility of health professionals and patients, managing transborder and global health threats (risks) in order to ensure patient protection, rapid development of medical technology and the necessity of maintaining a long-term, sustainable, high quality and socially-oriented health and social systems, which will contribute to economic development and also adequately respond to the growing expectations of conscious citizens.

An approach that has been shifting the emphasis on preventive measures is an integral part of activities of each Member State to reduce the economic burden of national health systems, because health improvement and prevention will significantly contribute to reducing health care costs, and thus the financial sustainability of the system.

The EU Strategy “Together for Health": A strategic approach for the period 2008 - 2013 was adopted in late 2007. The Strategy confirmed the commitment of the EU states toward the respect for common values and principles of health policy, the provision of opportunities to exercise the rights and responsibilities of citizens to care for their health throughout the life-time, reducing inequalities in health between social groups and regions, and the investment, as a precondition for economic development and full integration of health policy in all levels, based on scientific achievements and proven methodologies of impact assessment.

The achievement of the main EU strategic objectives - good quality health in aging society, protection of citizens against health threats, a sustainable and flexible health system and the development of new technologies - mainly depends on cooperation between national policies and actions at EU level.

[6] Source: http://eur-lex.europa.eu/LexUriServ/site/sl/oj/2006/ce321/ce32120061229sl00010331.pdf

Thus, the Montenegrin Government and Ministry of Health have to make health a priority value and, as the major developmental task, prepare a set of measures to achieve optimal health of the population, reduce inequalities in health between regions and among citizen groups, promote healthy behaviour and prevention of early morbidity, improve accessibility, safety and quality of health services, invest in human capacities and modernization of health facilities.

4. A Review of the Current State of Health Care in Montenegro

Evaluations of health care programmes in Montenegro and reports of surveys conducted in Montenegro in last ten years, as well as of other reports, statements, analysis and publications of the Ministry of Health, the Public Health Institute of Montenegro (hereinafter referred to as the: PHI), the Statistical Office of Montenegro Gore (hereinafter referred to as: MONSTAT), Ministry of Finance and the Health Insurance Fund of Montenegro (hereinafter referred to as: HIF). When comparing the indicators with the countries of the European Union and European region, we used the data from the database of the WHO "Health for All "(for 2007 or the latest available).

4.1. Population

According to estimates for 2008, Montenegro has about 639.900 inhabitants[7], while according to the data from the same survey; in 2009 Montenegro had 642.200 inhabitants. Pursuant to the data from December 2008, in the HIF database of insured people, there were 641.407 of the insured registered (insurance carriers and their family members and refugees)[8]. The tendency of population aging and falling birth rate, fertility rate and natural population growth rate are the main features of the demographic situation in Montenegro from 1991 to 2007. The birth rate in 2007 was 12.44 per 1,000 inhabitants, and the death rate was 9.51 per 1,000 inhabitants, which caused a positive natural population growth rate of 2.93 per 1,000 inhabitants[9].. Since 2004, the stabilization of the birth rate and general mortality rate has been monitored. The period 1991 - 2007 was characterized by the decrease in infant mortality and natural population growth rate (due to decline of birth rate and an increase in mortality rate), along with the reduction of the value of the vital index from 2.42 to 1.31 (MONSTAT).

Percentage of those aged 65+ (12.8%) in the total population in 2008 was lower than the average in the European region (15.1%), while the percentage of young people under 14 (19.7%) was above average (17%)[10]. In 2007, the average life expectancy (life expectancy at birth) for men was 71.22 years and 76.06 years for women, which is approximately 6 years shorter than the average for EU countries. According to the population projection of MONSTAT a continued population decline has been expected by 2022[11].
The infant mortality is an important demographic indicator, but also an indicator of socio - economic conditions and a functional health service in a country. In Montenegro, the infant mortality decreased from 11.14 per 1,000 live births (1991) to 7.4 per 1,000 live births (2007). However, the value of this indicator is still above the

[7] Source: Labour Force Survey (LFS), Statistical Office of Montenegro – MONSTAT, Podgorica 2008
[8] Source: Report on the Work of the Health Insurance Fund for Compulsory health Insurance, Podgorica 2009.
[9] Source: Statistical Yearbook 2007, Statistical Office of Montenegro – MONSTAT, Podgorica 2008.
[10] Source: Women and Men in Montenegro, Statistical Office of Montenegro – MONSTAT, Podgorica 2008.

[11] Source: Statistical Yearbook 2007, Statistical Office of Montenegro – MONSTAT, Podgorica 2008.

values recorded in the EU countries (4.6 per 1,000 live births) and Euro-group A[1] (3.9 per 1,000 live births).

4.2. Social – economic situation

In Montenegro, the period after 2000 was marked by positive developments of a series of social-economic indicators, such as growth of gross domestic product (hereinafter referred to as the: GDP), relative monetary stability and increase in health care spending. However, low GDP and high unemployment are serious limiting factors for sustainable financing of the health care.
In 2002, Montenegro's GDP was EUR 2 208 per capita, and then a constant increase in this indicator was recorded by the year of 2009, when, according to MONSTAT estimates it reached EUR 5,893.44 per capita. However, it is still pretty low. Average (real) earnings recorded an increase in each observed year in the period 2004 - 2007. Thus, in 2008 real average net earnings reached EUR 338, while in the field of health and social work, real average net earnings were lower and amounted to EUR 296.
Relatively low average earnings also affected the structure of personal consumption of households by purpose. According to a Survey on Household Consumption in Montenegro, a significantly high proportion of expenditure on food and beverages, even 33.2% was recorded in 2007. Expenditures for housing, electricity and water supply were at 12%. Expenditures for health care made 4% of household consumption in 2007. Almost the entire earnings of a household were spent due to low earnings.

According to the Labour Force Survey, the unemployment rate in 2009 was at about 12.8%, which coincides with the official data of the Employment Agency of Montenegro, while the employment rate was at 51.5%. This means that the number of unemployed people was at about 31,516 by the end of June in 2009, and 218,609 employees[12]. In 2007, the unemployment rate was falling and was at about 19.4%, and in 2008 18.3%. However, the unemployment rate in Montenegro is still significantly higher than the EU average (7.2%) and in the most countries in the region (Croatia 9.6%, Slovenia 7.7%, and Bulgaria 6.9%).

4.3. The State of Health

Apart from the population aging, negative social-economic trends also influenced the health status in the last decade of the past century. The health potential of the nation has been worn out, which is why in times of socio-economic recovery, with all the difficulties that the state or society in transition brings with it, we can expect neither to bring quickly negative health indicators to an end nor to start with their likely

[1] Euro-group A (Euro-A) is the most prestigious out of five groups of European states, which are WHO members, and which are classified by the mortality rate of children 5+ and adult men aged from 15 to 59, given the fact that it compriss the states with the lowest rate of children and adults mortality rates. Euro-A group includes 27 states: Andorra, Austria, Belgium, Croatia, Cypress, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Luxembourg, Malta, Monaco, The Netherlands, Norway, Portugal, San Marino, Slovenia, Spain, Sweden, Switzerland and Great Britain.

[12] Source: The Employment Agency of Montenegro (WWW)

improvement. .

Chronic Non-Communicable Diseases

Chronic non-communicable diseases present the leading cause of illness, disability and premature dying (before reaching the age of 65) of the population of Montenegro. Ischemic (coronary) heart disease, cerebrovascular diseases, lung cancer, affective disorders (unipolar depression) and diabetes mellitus (diabetes) are chronic non-communicable diseases, which are responsible for almost two thirds of the total burden of disease[13]..

In 2007, chronic non-communicable diseases constituted almost 80% of all causes of death. Within the structure of mortality, hearth and blood vessels diseases non-communicable diseases represented more than half of all deaths (55.8%), and every sixth-deceased person (15.8%) was the victim of a malignant tumour. Out of the total number of deaths, 3.9% people died from injury and poisoning, and 2.9% from respiratory system diseases.

According to available health statistics data for 2006, the percentage of circulatory system diseases, for which the patients had hospital treatment, in the total number of diseases was in the first place (16.7% of all cases of hospital discharges), while digestive diseases, as a cause for hospitalization, were in the second place with 11.5%, followed by respiratory system diseases at 11.0%. In respect of the outpatient health care services, in the course of 2006, by far the largest number of cases registered pertained to the group of respiratory system diseases (47.2%), whereas circulatory system diseases were in the third place (6.2%), preceded by urogenital system diseases (6.8%).

The percentage of malignant neoplasm in the number of persons who were treated in hospitals is very high. With the share of 8.7% of all cases of hospital discharge, it constituted the fourth most common reason for hospitalization in 2006. Concerning the workload within the outpatient health care services during 2006, malignant neoplasm with an incidence of 0.53% was at the bottom of the scale of reasons to visit the outpatient health care services.

Risk Factors

Smoking, hypertension, hypercholesterolemia, obesity, unhealthy diet, physical inactivity, and abuse of alcohol and psychoactive substances are risk factors for numerous chronic non-communicable diseases, which most often originate from multifactor aetiology.

In Montenegro, in 2008 there were 32.7% of adult smokers (26.4% of permanent smokers and 6.3% occasional smokers); there are about 20% of permanent smokers among high school population, and 4% among the children aged 11 to 14 years. 40.8% of the adult population had hypertension or potentially could have suffered from high blood pressure, 15.1% of adults were obese, 21.2% of children and adolescents aged 7-19 years were overweight; 9.2 % of persons worked out on a daily basis and 2.3% of persons went for regular physical activities 4 to 6 times a week, while 22.2% of adults consumed alcohol on a daily basis or occasionally[14].

[13] Source: Evaluation of Health Care Programme in Montenegro in 2008, Public Health Institute of Montenegro, 2009.

[14] Source: Evaluation of Health Care Programme in Montenegro, Public Health Institute, 2009.

4.4. Health Services

The basic organizational structure of the health care system is made of a network of state health institutions and facilities in private ownership.
The state of Montenegro is the founder of all health institutions, which perform health care activities as public health institutions, established to ensure the legally established rights of citizens in the area of health care[15]. Network and capacities of health institutions were planned on the basis of standards and norms, according to the health needs of the population and capacities of health services in accordance with accepted principles of solidarity, accessibility and equity in achieving health care. The highest degree of decentralization was conducted in the area of primary health care (founding rights of health centres were transferred to local self-governments).

4.5. Capacities

The Government of Montenegro adopts the network of health institutions on the basis of the Law on Health Care, and the network of health institutions consist of the type, number, structure, capacity and geographical distribution of health facilities. The network of public health institutions is organized in three levels, primary, secondary and tertiary care. The network of public health institutions of Montenegro in 2008 consisted of 18 health centres and three health stations, seven general hospitals, three specialist hospitals, Clinical Centre of Montenegro (hereinafter referred to as the: CC), PHI and Public Pharmaceutical Institution of Montenegro.
The network of hospital capacities of public health institutions in Montenegro includes local clinics within health centres [2], general hospitals, specialist hospitals and CC.

The network of hospitals in Montenegro in secondary level encompasses the following:

- 7 general hospitals (hereinafter referred to as the: GH): GH Bar (catchment areas Bar and Ulcinj), GH Berane (catchment areas Berana, Andrijevica, Rožaje and Plav), GH Bijelo Polje (catchment areas Bijelo Polje and Mojkovac), GH Kotor (catchment areas Kotor, Tivat i Herceg Novi), OB Nikšić (catchment areas Nikšić, Šavnik and Plužine), OB Pljevlja (catchment areas Pljevlja and Žabljak), OB Cetinje (catchment areas Cetinje and Budva);
- 3 specialist hospitals (hereinafter referred to as: SH): (Specialized Psychiatric Hospital – Dobrota, SH for Orthopaedics, Neurosurgery and Neurology – Risan and SH for Lung Diseases and TBC TBC Brezovik); i
- The Clinical Center, which is an institution of tertiary level of health care, whereas it provides the services of the secondary health care level for the population of Podgorica, Danilovgrad and Kolašin.

A hospital bed is considered to be a main indicator of the status of inpatient health institutions, while the indicators of functionality are related to the hospital treated

[15] Source: The Law on Health Care, Official Gazette of the Republic of Montenegro 39/04

patients. Hospital bed capacity in 2008 was planned on the basis of norms of bed fund (i.e. number of hospital beds) in Montenegro, and given in The Master Plan Development of Health Care System of Montenegro for the period 2005 - 2010. Given the commitment to reform on funding the population needs (not resources), the hospitalization rate and average length of treatment were taken as a starting point in drafting work plans for 2008.

According to the Report on the Work of Hospital - Inpatient Health Institutions[16] on 31 December 2008, there were 2422 beds, of which there were 1115 standard beds intended for the general hospital capacity, 83 beds were in inpatient health institutions within health centres[3], 509 standard beds in specialized hospitals and 715 standard beds in the CC (in the reports of the field services, beds in GH Nikšić and GH Cetinje have still been recorded as a part of these hospitals and not of CC). In this way, 385 beds were ensured per 100,000 inhabitants, which is less than the EU average (570 per 100,000 inhabitants) and significantly less than the average in the European region, which is 668 beds per 100,000 inhabitants.

At the end of 2008, in all public institutions of Montenegro, there were 7231 workers, of which 5405 health workers and associates and 1826 (25.3%) of non-medical staff. The ratio of health workers and non-medical staff employed in all public services in the health care sector was 2.96:1 (meaning that 33.8 non-medical staff was employed per 100 health workers and associates).

Table 1: Employees of all public health institutions in Montenegro in 2008

PUBLIC HEALTH INSTITUTIONS	TOTAL OF ALL EMPLOYEES	Total number of health workers and associates	Health workers and associates														Total of health workers with primary education	Svega nemedicinski radnici
			TOTAL of health workers with university education	TOTAL of doctors + stomatologists	Doctors				Stomatologists				Pharmacists	Other health workers with university degree	Total of those with college degree	Total of health workers with secondary education		
					Total of doctors	General medicine	Undergoing specialization	Specialists	Total of doctors stomatologists	Stomatologists of general practice	Stomatologists undergoing specialization	Specialist stomatologits						
Total of HS	59	39	8	8	8	1	0	7	0	0	0	0	0	0	0	31	0	20
CC CG– Podgorica	1.918	1.406	411	364	337	0	99	238	27	3	1	23	1	46	67	928	0	512
TOTAL GH	1.630	1.180	290	281	281	0	74	207	0	0	0	0	4	5	37	852	1	450
TOTAL SH	368	276	59	54	53	0	7	46	1	1	0	0	0	5	18	199	0	92
TOTAL of HS, GH, SH AND CC	**3.975**	**2.901**	**768**	**707**	**679**	**1**	**180**	**498**	**28**	**4**	**1**	**23**	**5**	**56**	**122**	**2.010**	**1**	**1.074**
IN TOTAL PHI (Public Health Institutions) PPI (Public Pharmacist Institution)	**7.231**	**5.405**	**1.554**	**1.357**	**1.312**	**137**	**278**	**897**	**45**	**9**	**7**	**29**	**99**	**98**	**229**	**3.616**	**6**	**1.826**

Source: Evaluation of Health Care Programme in Montenegro for 2008, Public Health Institute, Center for the

[16] Source: Analysis of Capacities and Human Resources in Primary and Secondary Health Care in Montenegro for 2002, PHI 2003.

[3] In 2008, in inpatient health institutions, here were 83 functional beds in the following places: HC Mojkovac 15, HC Rožaje 40, HC Plav 15, HC Ulcinj 8 and health station Plužine 5;

Of 1312 health workers (24.3%) were physicians (of which, 67.9% were specialists of various disciplines), 45 (0.8%) dentists, 98 (1.8%) health worker associates with university education, 99 (1.8 %) pharmacists, and 3845 (71.2%) workers with college and secondary education.

Compared to 1991, there was 5.8% more employees (Table 2), but at the same time, 0.3% less than in 2003. Qualification structure of employees also changed, the percentage of non-medical (administrative - technical) staff was reduced, whereas the share of doctors and nurses got increased. This is a sign that the human resources capacities, i.e. the number of doctors and nurses per 100 000 inhabitants has been improving.

Table 2: Employees of the health sector in Montenegro in 1991, 2003 and 2008

Profile	1991	2003	2008
Doctors and specialists	917	1.139	1.312
Stomatologist s	275	265	98
Pharmacists	120	103	99
All health workers and associates	3.485	5.464	5.405
Administrative and technical personnel	1.961	1.787	1.826
All those employed in the health sector	**6.815**	**7.251**	**7.231**

Source: Analysis of capacities and human resources in primary and secondary health care in the Republic o Montenegro for 2002; Analysis of Health Activity in Montenegro in 2003, Public Health Institute of Montenegro, Evaluation of Health Care Programme in Montenegro for 2008, Public Health Institute, Centre for the Development of Health System, Podgorica, May 2009.

Still the number of doctors in the EU countries with 321 doctors per 100,000 inhabitants was significantly higher than in Montenegro (204.5 doctors per 100,000 inhabitants). The share of administrative - technical workers in the total employment, while continuously decreasing, still remained high in 2008. In 2008, it was 25.3% or 0.7% less than in 2003 (3.5% less than in 1991). The data show that there are no unemployed doctors, mostly due to the extensive employment in health care institutions.

When we only take into account the secondary and tertiary level (inpatient health institutions, GH, SH, and CC) there were 3975 workers in public institutions of Montenegro by the end of 2008. Of these, there were 2901 health workers and associates and 1074 (27.0%) of non-medical staff persons. The ratio of health workers and non-medical staff employed in the secondary and tertiary health care level in public services was 2.7:1 (meaning that 37.0 of non-medical staff were employed per 100 health workers and associates). Of health workers, 697 (24.0%) were physicians (73.3% of them specialists of various disciplines), 28 (1.0%) dentists, 56 (1.9%) health associates with university education, 5 (0.2 %), pharmacists, and 2132 (73.5%) workers with college and secondary education.

In Montenegro, it has been continuously invested in renovation and purchase of medical equipment, particularly equipment of high technological value. It is estimated that government health institutions and private practice have: two magnetic resonance imaging (hereinafter referred as the: “MRI”) (3.1 per million inhabitants), 11 apparatus for computed tomography (hereinafter referred to as the: “CT”) (17.1

per million inhabitants) of which 1 is private, 1 linear accelerator (hereinafter referred to as the: “LINAC”) (1.5 per million inhabitants) and 10 mimeographs (15.6 per million inhabitants), one of which is the private one.

In addition to state-owned health institutions, health care in Montenegro is also provided in private health institutions. According to the most recent data of the Ministry of Health, there have been 529 health care providers in Montenegro, including 169 pharmacies.

4.6. Health Care Utilization Data

During 2008, there were 1,053,317 of conducted visits to specialists departments, of which 595,709 or 56.6% were initial visits. There were 8040 visits per a specialist or 1.64 visits per an insured person.

Table 3: Number of visits, initial visits to a specialist in Montenegro in 2008.

	Health Centers	Hospitals	In total
Number of visits	380.341	672.976	1.053.317
Number of initial visits	219.449 (57,7%)	376.260 (55,9%)	595.709 (56,6%)
Number of visits/per doctor	4.754	13.196	8.040
Number of visits/per insured person	0,59	1,05	1,64

Source: Evaluation of Health Care Programme in Montenegro for 2008. PHI, Centre for the Development of Health System, Podgorica, May 2009.

Many years long development of health centres was characterized by the formation of specialist offices in many clinical disciplines, which contributed to creation of parallel polyclinic capacities - within hospitals and at the level of health centres. According to number of visits per a doctor or an insured person, there has been irrational utilization of capacities – doctors in health centres.

There have been 75,033 registered admissions to hospitals in Montenegro in 2008. Although the hospitalization rate recorded an increasing trend, and even in 2008 was at about 12.9 of hospitalized persons per 100 inhabitants, it is still significantly lower than the average in the European region (19.2) and the EU (17.9). The average length of treatment in the past 13 years was reduced to 3.69 days in 2008 and was 8.58 days, which is slightly below average in the EU (9 days). In addition, there are great differences in the average length of treatment between different types of hospitals: General Hospital (in internal wards it is 9.25 days, in gynaecology 5.95, 6.61 in surgery and 5.65 days in paediatrics wards), in SH 30.46 days (in SH Dobrota 77.29, SH Risan 15.28 and SH Brezovik 21.32 days) and CC 6.6 days. The lowest average length of hospitalization in inpatient institutions within health centres was 3.74. The longest average length of stay was in the specialist hospital (in Dobrota), which is consistent with chronically ill patients.
In 2008, there were 164 discharged patients per a doctor in GH, 115 in CC, 109 in SH (in Dobrota 92; Risan 98 and Brezovik 140). The number of discharged patients per a doctor points out to the scope of work and workload of doctors in hospitals and signifies major differences between hospitals!
Average daily bed occupancy in hospitals in Montenegro ranged from 53.84% to

89.36%. In general hospitals, average daily occupancy of beds ranged from 53.84% to 74.56% (in internal wards 74.56%, in gynecology departments 55.14%, in surgery 67.82% and 53.84% in pediatrics wards); in specialist hospitals (in SH Dobrota 104.8 %, SH Risan 80.1% and SH Brezovik 89.36%) and in Montenegro Clinical Center 72.62%. Besides specialist hospitals, the average daily occupancy is less than the EU average (76.3%), and the European average (79.1%) as well. A low level of occupancy cannot be only interpreted as a result of surplus of accommodation capacities, but a result of several factors, such as an inadequate distribution of beds in relation to current needs and a traditional manner of financing of health care institutions' capacities.
The hospital mortality rate (number of deaths per 1,000 treated persons) as an indicator of the quality of hospitals in Montenegro for 2008 totalled 18.31 (in 2007 the lethality rate was 19.96). Hospital mortality rates vary: 6.23 in inpatient clinics of health centres, 18.18 general hospitals, 18.04 in Montenegro Clinical Centre, with the highest one at 41.44 in SH Risan [4].

4.7. Financing Health Care

The financing of health care system in Montenegro is based on the principles of Bismarck social health insurance, which is funded by the contributions of employers, insured persons and other categories. [5]. According to the Law on Health Care, financing of health insurance is to be conducted from taxes (budget) for certain marginalized population groups (the unemployed, refugees, internally displaced persons). According to the Law on Health Insurance, the overall population of Montenegro is entitled to compulsory health insurance. Nearly 70% of contributions come from employees, 25% from pensioners, 3% from the unemployed and 0.1% from farmers. The fact that farmers, who participate with 0.1% of all contributions, constitute 3.25% of the population, tells us that the principle of horizontal equity is violated. This means that, as in some other countries, there are population groups that use different bases instead of gross earnings (as employees), and therefore pay less, whereas they are in the privileged position in relation to employees. Solidarity as a value is being shifted to the expense of employees, while some other categories of the population, due to unregulated base for health care, pay less even if their incomes are high. The prolongation of this situation has been going even more to the expense of employees, because more and more population will become part of the privileged categories, such as self-employed and farmers. Contributions in these categories are poorly regulated and it can result in the dropout of income due to re-categorization of the population.
In addition to compulsory health insurance funds, the budget also covers reimbursement of funds on the basis of reduction in contribution rate for compulsory health insurance, lack of funds for payment of salaries in public health institutions, financing of the activity of the Ministry of Health, which is why, it may be said that Montenegro has a mixed system of financing, especially if it is taken into

[4] In 2008, the mortality rate in Slovenian hospitals was 24.98, in general hospitals 28.8 and Clinical Centre 23.81.
[5] The contribution rate for health insurance of the employed is 9%, of which 5% is charged to the employer and 4% is charged to the insured person. The contribution rate for compulsory health insurance of agricultural insurers is 9%, while the base is 12% of an average gross monthly salary in Montenegro earned in the previous year. The rate of contribution for pensioners is 19%, and the base is the amount of pension. The Employment Agency pays contributions for the unemployed who receive unemployment benefit, at the rate of 5% of the amount of the benefit.

consideration that the existing legal provisions (the Budget Law, the Treasury system) are more appropriate for a system of budget financing of health care than for a system of insurance.

Additional sources for financing health care system in Montenegro are also direct payments of health care beneficiaries (co-payments), funds from other payments and

It is well known that liability and solidarity in health insurance provide the citizens with certain rights to health services and compensations, but their exercise is also related to their obligation of paying contributions (co-payments) in proportion to their financial abilities. Compulsory health insurance provides the insured persons with the right to health care. The Health Insurance Fund is the institution that exercises health insurance rights and ensures funds for this purpose. In addition to the CHI, the Law on Health Insurance also introduces voluntary insurance. Voluntary insurance may not be supplementary (analysis of supplementary and additional insurance, which one implies what and in what voluntary insurance must be introduced, is explained in more details in the Master Plan), but additional voluntary and should contain a package of services that are completely separate from CHI. Therefore, there is no need for the aforesaid voluntary insurance to be under the competences of the public sector - this voluntary health insurance should be within the competence of the market and private insurance companies.

In 2008, the Health Insurance Fund generated revenues at the amount of EUR 183.42 million, which is by EUR 45.04 million or 32.55% higher than the revenues generated in 2007 (EUR 138.38 million), as a result of an overall economic growth in Montenegro, more regular revenue collection and increase in the coverage of insured contribution payers. Of this, revenues from contributions for health care were at EUR 144.8 million (78.95% of total revenues), which represents a decrease compared to the preceding year (2007: 90.63%; 2006: 93.67%). The decline in the share of these revenues occurred due to reducing contribution rate for CHI from 13.5% to 12% in 2008 (10.5% in 2009), pursuant to the Law on Social Insurance Contributions[17]. The budget revenues increased from EUR 6.84 million in 2006 to EUR 11.38 million in 2007, i.e. EUR 37.09 million in 2008, in order to compensate the funds on the basis of reduced contribution rate for CHI. Namely, the share of the budget revenues in the total HIF revenues increased from 5.8% in 2006 to 20.22% in 2008. In addition to CHI funds from public sources, there was also EUR 69 million allocated in the 2008 budget, which was intended for annual financial operations of the Ministry of Health. In relation to the MoH budget in 2007, this means an increase of EUR 11.52 million or 20%.
The total expenditures of the Health Insurance Fund in 2008 were EUR 172.48, in 2007 EUR 138.52 million, and EUR 117.94 million in 2006. The HIF expenditures include health care funding of the insured persons by health care levels, and rights in health care and insurance area and other expenses. For secondary and tertiary level of health care, the 2008 expenditures constituted 45.21% of total expenditures[6]. In comparison with Slovenia (48.1%), this percentage is not extremely high. Since

[17] Source: The Law on Contributions for Compulsory Social Insurance, Official Gazette of Montenegro 13/07.
[6] Due to different definitions of secondary and tertiary level of health care in national legislations, no comparison with the EU average was possible. It was neither possible to make the comparison on the basis of the OECD database Health Data 2009.

2006, the expenditures have increased both in its absolute and relative value, because there has been no appropriate statistics and control of expenditures at hospital level.

Table 5. The share of expenditures of the Health Insurance Fund in GDP from 2004 to 2009.

Year	GDP*(in million €)	HIF expenditures**(mil. €)	HIF share in GDP
2004	1 669.80	95,58	**5.72**
2005	1.815.00	108,89	**6.00**
2006	2.148.90	117,94	**5.49**
2007	2.807.90	138,52	**4.93**
2008	3.338.00	172,48	**5.17**
2009	3.715.00	160,00	**4.31**

*****Source: Monstat (2001-2008) analysis of the implementation of economic policy of Montenegro in the first nine months (estimates for 2009)

**Source: The Report on the Work of Fund

4.8. Allocation of Financial Resources and Disbursement of Service Providers

Total health care expenditures can be divided into public and private. Public expenditures represent expenditures from public revenues (CHI and budgets). In addition, public expenditures are also investments in the health care system for the construction of infrastructure and financing of the purchase of medical equipment. Private expenditures for health care come from private sources, such as direct payments (co-payments and out-of-pocket payments) and voluntary insurance.

According to National Health Accounts in Montenegro, the overall costs for health as a GDP share constituted 7.5% in 2006 (8.0% in 2005 and 8.2% in 2004). During the period 2004 - 2006, the growth of total costs for health care was 5.9% on average in real terms, lagged behind 0.5 pp behind GDP growth. The growth of public health expenditures increased from 1.6% in 2005 to 8.4% in 2006 in real terms, although it still lagged behind GDP growth, which made 8.6% in 2006.

Private expenditures were at about 25% in 2006 (the last year with the data available) and got increased even over 9%, in real terms, in 2005 and 2006. In the process of preparation of private costs, the data on household expenditures for health care from the Survey on Household Consumption (hereinafter referred to as the: “SHC”) for 2005, 2006 and 2007 served as the main source of data for the assessment of cash consumption.

On the other hand, the result of the total costs of households on health taken from the National Survey on Health of the Population of Montenegro for 2008 was high, so that if the National Health Accounts relied upon and used this source, the total health expenditure would be somewhat at about 11% of GDP, which would be extremely high[18].

Total expenses for health care per capita in 2006 amounted to EUR 259 and U.S. $

[18] Source: Final Report on the National Health Accounts in Montenegro 2004-2006.

727 in PPP (purchasing power parity). Average total health care costs per capita in 2006 in the EU amounted to EUR 2,364 and EUR 1,279 in Slovenia.
International comparative results shows that the GDP share spent for health care in Montenegro is close to the EU average (8.2% in 2005) and close to levels in other countries of former Yugoslavia. However, this part is high compared to other countries with small and medium revenues in the region (Albania 6.5% in 2005, Romania 5.5% in 2005, Bulgaria 7.7% in 2005). Nevertheless, health care costs per capita show that Montenegro lags significantly behind the developed European countries, but it is, at the same time, higher than in some other countries in the region (Slovenia 8.3% in 2006).
In 2008, according to the HIF and Monstat, total expenditures on Compulsory Health Insurance constituted 5.17% of GDP.
The allocation of funds of compulsory health insurance and distribution of compensation to health institutions for health services delivery and for other expenses is within the HIF competence. The most important HIF expenditures are health care expenditures and represent 87.5% of all expenditures. Of which, 41.3% of total health care expenditures spent pn primary health care, 39% on secondary health care and 19% on other expenses, including other rights in health care and tertiary level. Total expenditures for medicines and medical supplies amounted to EUR 41 million or 23% of the total HIF expenses. Since 2002, the trend of reducing the spending on prescription drugs has continued. Other rights from CHI except for health care expenditures amounted to 4.2% of all expenditures, relate to compensation during temporary incapability for work over 60 days, and compensation for travel costs. Other expenses and funds for daily operations of the HIF make 8.23% of total expenditures for CHI.
Payment of health services is determined by a contract agreement with health care service providers, or by purchasing a work plan of a health institution within the funds planned in the Bill of Quantities of the HIF. The work plan contains the number and type of health services and the number and structure of employees. In order to execute the plan, a provider of health services submits reports (invoices) on completed health services in accordance with the Act of Health Insurance Fund governing billing of health services.
Capital investments in the health care system have been funded, to the greatest extent, from the state budget, followed by the budget of local self-governments, and the HIF funds and donations as well.

5. Priority development areas and goals

Priority development areas and MP goals are as follows:

5.1. Improvement and Provision of Health Care

The task of the state and its authorities is to promote policies to create conditions for achieving better health, prioritize programmes of health care services oriented to the improvement of health, health promotion and prevention, early detection of chronic diseases and the most vulnerable population and optimal functioning of a health care system, which will raise citizens awareness that health outcomes depend on their personal decisions and responsibility for their health.

In monitoring the main goal of health improvement, the following objectives were set forth:

- Giving greater priority to health education;
- Identifying and overcoming the risk factors for health, which are coming from the environment;
- Reducing morbidity and mortality from cardio-vascular diseases;
- Improving mental health;
- Reducing diseases of addiction (tobacco, alcohol, drugs);
- Overcoming health threats (communicable diseases, chemical protection, radiation protection);
- Readiness to crisis situations due to massive accidents, or communicable diseases of larger dimensions;
- Early detection of cancer and other chronic diseases;
- Improving oral health;
- Prevention of harmful working environments, occupational diseases and injuries at work.
- Reducing injuries and deaths in traffic

5.2. Health Care Activity

Health care activity requires a sustainable and stable development of the health system, harmonized with the development trends of European health, directed to a balanced increase in the efficiency and quality, the development of capacities and resources (financial, human, material) for optimal and equal access to health care. The basic premise for ensuring a good quality and efficient health care at primary, secondary and tertiary level is to integrate and connect thereof into a functional unit with clearly divided responsibilities and tasks. The role and responsibility of the founders and management of public performers must be directed towards the implementation of operations within available resources and professional guidance.

Objectives and tasks:

- modernization of the network of public health institutions (primary, secondary and tertiary levels, emergency medical care, pharmacy industry, dentistry, physical medicine and rehabilitation, laboratory medicine, non-acute hospital treatment, palliative care and long-term care) as the central protagonists and performers of health care services;
- integration of public and private sector;
- efficient delivery of health care services;
- providing safe and quality health care and supervision;
- shorter waiting lists;
- a new organization, structure, position, performance and competence of health care institutions at health care levels (beside the prominent position of the primary health care, the further reform of the health system has to be continued);
- increase rationality and expediency of the existing health capacities (personnel, facilities, equipment);
- specialization of activities by the providers of health services;
- application of modern medical technologies in accordance with international principles;
- increasing the role of nursing staff (nurses, midwifes, physiotherapists) in the takeover of new individual tasks for patient treatment (chronic, healthy pregnant women);
- increasing the efficiency of medical rehabilitation, development of non-acute care, palliative, long-term and home care service;
- more efficient performance of the integrated treatment of patients with chronic and non-communicable diseases;
- creating favourable environment around the management for an efficient and responsible management and lifelong education of health workers, especially of the middle management;
- raising employee motivation in the health care sector, rewarding the high quality work and granting more responsibility to each individual;
- positioning of chambers and professional bodies in the health care system along with performing the oversight of the efficiency of their work;
- Monitoring and control of food, water, air, land, communicable diseases, most important mass non-communicable diseases in a public health system.
- .

5.3. Health Care Financial System

Financial sustainability should become a framework strategy for achieving a long-term stability of a system. Along with the process of transposition and implementation of the Strategy for the Development of the Health System of the

EU and monitoring of prerequisites for a gradual adoption and implementation of the requirements set out in the Maastricht Treaty, which are related to the health care system, conditions for introduction of a mixed public-private system of health care need to be created very wisely.

Objectives:

- Long term financial sustainability of the system;
- Maintenance of public expenditure at the EU level,
- Increasing the efficiency of the utilization of financial resources;
- Studying of a public-private partnership.

5.4. Medicines and Medical Devices

Objectives:

- regulation of prices of medicines;
- maintain a quality selection of medicines that are safe and efficient; i;
- introducing greater control in the area of medicines and medical devices;
- increasing competition;

5.5. Investments and Standardization

An investment plan must be harmonized with the population needs, national health care priorities, in accordance with the criteria for inclusion in the network of health institutions and the consent of the Ministry of Health. Individual needs of health institutions with sufficiently used capacities, must be justified by additional analysis, international standards and evidences on investment justification.

Objectives:

- Standardized procedures and a system of investment management;
- Established structures for investment management;
- Prepared universal guidelines for space and equipment;
- Increased efficiency of utilization of international funds.

5.6. Information Technology (IT), Telemedicine

Health information system of health institutions and health insurance must reflect the needs of the health system for more efficient regulation, planning and oversight.

Objectives:

- The use of information technology as the bases for the integrated patient

treatment;
- Gradual introduction of ICT in the health system starting from a referral to the final medical report;
- Development of telemedicine.

5.7. Civil Associations

The state has to encourage the democratic development of health care by increasing participation of citizens and their representatives in decision-making on strategic issues related to health care and compulsory health insurance and permanent respect for the rights of patients throughout the health system. The MoH has involved the civil sector in all areas of work through the activities of professional national commissions (HIV, tobacco control, safe blood, communicable diseases, mental health, reproductive health and others), which are engaged in developing strategic documents and provision of expert guidance and recommendations for the development of these areas in accordance with the recommendations of the EC, WHO, CoE, PS, MAAE, UNICEF, UNAIDS and other international agencies and partners.

Objectives:

- involvement of civil society in the process of drafting legislations in the area of health care;
- participation in key decision making in the area of health;
- Collaboration with patients and their organizations.

5.8. Public Outreach

Objectives (on the basis of the Communications strategy):

- established two-way communication with the public;
- Modernized a communications plan for elementary disasters and emergencies.

6. Improving and Ensuring Health

6.1. Introduction

The issue of the powerful role of public health is in line with contemporary developments in Europe. Health promotion, prevention and care, are effective mechanisms and thus represent a prerequisite for rapid socio-economic development. Preventive health care has to be a strategic priority, a common goal and the greatest value of Montenegro. Strengthening the public health will result in health improvement of the population and the quality of life as well.

The reform includes making "healthy" public policies, strengthening the role of local communities and NGOs in preserving and strengthening health, as well as improving conditions for appropriate education and training of the personnel in the field of public health. A good quality public health is focused on an efficient reduction of health, social and economic difficulties, which cause premature mortality and morbidity. It is necessary to increase public awareness and knowledge in the field of public health, ensure rapid response of health institutions to health hazards and health promotion, and ensure disease prevention by actions based on policies and social activities. Activities are aimed at the whole population, the responsibility for the implementation of the activities lies with the Government, or the Ministry, while the Public Health Institute is an institution that is in charge of health promotion.

The role of employers is extremely important for ensuring safety in the workplace and preventing occupational diseases and injuries at work.

Therefore it is necessary to plan required..

In order to achieve better health of the population, it is also important to take in consideration measures outside the health care system, such as education, traffic safety, ecology, social policy, tax policy, lifestyle and habits. Health care has also its economic dimension, and, consequently, its growth is limited by the development of other sectors.

Programmes of other sectors that will be involved in the promotion of health care, such as education, should be carefully planned.

- **When it comes to education** the state should not only focus on educational programmes for elementary and secondary schools, but also adult education, education at workplace, as well as education within various patients' associations (such as centres of patients suffering from coronary disease, anti-cancer associations, associations for quitting smoking), and implementation of programmes for health promotion in support centres at the primary health care level, which could have significant effects.
- **Social policy area** is an area wherein the greatest efforts should be invested. Given that the long-term protection is a very complex issue, along with health care and social welfare, there needs to be prepared the Strategy for the development of appropriate forms of care provision. The population in Montenegro is still young; nevertheless it becomes older with years, so it is necessary to develop adequate capacities, because otherwise the system

would be burdened with a long-term health care.

- **Taxation policy** with lower tax rates and other exemptions may stimulate consumption of products that are beneficial to health, and affects reduction in consumption of products that are detrimental to health.
- **Traffic safety** is the area wherein the Ministry of Health will promote more consistent control and sanctions for violations of traffic regulations, as that can reduce injuries in accidents and health insurance expenses and also contribute to health improvement. It will insist on strict adherence to the regulations governing the area of transport, which can reduce the number of accidents and costs of treatments. In addition, it will insist on recourse procedure for treatment expenses**.**
- **Ecology** will proceed with a multi-sectoral approach in preserving the environment from pollution. At this point, a special attention is paid to increasing the significance of providing safe decomposition of waste substances, disposal of medical waste and other environmental pollutants.
- **Lifestyle and habits** is a very important area wherein it is necessary, through various health prevention programmes, to insist on raising awareness of personal responsibility of the citizens for their own health and the health of others and promoting healthy lifestyles.

6.2. Priorities and Guidelines for Achieving Better Health

Priority 1 A citizen with its needs at the centre of a health care system, along with the implementation of health care processes, becomes the focus of all plans and reforms.

Priority 2 Open post-graduate studies in public health.
Ministry of Health should take part in the implementation of all programmes having a direct impact on population health. In order to meet development needs in public health, it is necessary to open post-graduate studies in the field of public health, which will ensure new knowledge and progress in the health sector.

Priority 3 National programme of preventive health measures in all health institutions.
All activities within the programme of health promotion related mainly to the changing habits of the population will be coordinated by the Public Health Institute, and the programme will involve counselling centres within health centres, NGOs, humanitarian and other associations of patients, disabled persons, as well as the citizens of the local communities. Health Insurance Fund finances prevention programmes upon contracts, and this process will be extended so that it achieves the population turnout of 85% by the end of the medium-term period.

Priority 4 Strengthening the Role of the Public Health Institute. Public Health Institute of Montenegro should develop a doctrine of public health in accordance with the European guidelines and a comparable system of health monitoring, analyzing and presenting data, and establish professional bodies to create and implement policies in the field of public health. Public Health Institute will organize the training of personnel for the implementation of these activities.

Priority 5 Development and expansion of health education and training in health centres, which will support preventive programmes and efforts for increasing the responsibilities of the citizens for their own health. The content of these activities will be to transmit knowledge about risk factors, avoiding risks for contracting diseases, behaviour in certain situations with certain diseases, and with most vulnerable groups. Health education in health centres will target pregnant women, preschool and schoolchildren and youth and other vulnerable groups. It will be implemented by teams of chosen paediatricians, gynaecologists and doctors for the adults in health centre units so that each chosen doctor and nurse team provide preventive measures according to the content and the scope. Chosen dentists will also be included in the implementation of the aforesaid activities.

The Public Health Institute will prepare standardized contents and orientations for the implementation of the programmes and necessary material for the implementation of specific health campaigns and organize education of the needed personnel. Changes in the curriculum of medical schools and schools for nurses are also necessary in order to get fully competent professionals in health care, because technical competences for delivery of high quality and safe health care are not sufficient any more. Education of the existing health professionals in the field of quality and protection is a prerequisite for the implementation of the principles of quality and care in their daily work.

Priority 6 Improving women care and reducing infant mortality. In order to achieve this priority, it is necessary to attain full coverage of preventive measures, particularly of pregnant women and infants. The chosen gynaecologists will be responsible for this at the primary level, while gynaecologists of primary and secondary level will establish mutual communication and cooperation to exchange information, experiences and knowledge. Gynaecological clinic of the Clinical Centre will prepare the doctrine for promotion of health condition of pregnant women, better monitoring of their pregnancies, their living conditions and a consequent decrease in perinatal mortality rate. The goal of these measures is to reduce perinatal mortality rate in the next 5 years by at least 50%. The Strategy for Reproductive Health will serve as the basis for establishing national capacities in hospitals and harmonizing total hospital delivery capacities in line with „Baby Friendly" standards and professional work standards.

Priority 7 Health care measures for small children and children with development disorders, in line with the adopted National Action Plan for Children and measures set up as a compulsory scope and standard of care for this population in all municipalities on the basis of uniform principles. Development of centres for children with special needs organized at regional level will ensure better treatment of children and improve health care as an integral part of the overall health care of this vulnerable group.

Priority 8 Measures for treatment of the most common and gravest chronic diseases: blood circulatory and coronary diseases, cancer and diabetes. For treatment of coronary and blood circulatory diseases **the priority will be embodied in preventive programmes** in primary health care, programmes for health promotion and early detection of risk factors: high blood pressure, cholesterol, and diabetes. **Cancer prevention** will start with early detection of a condition in the primary health

care and continue with treatment at secondary and tertiary level. The possibility of prevention will be achieved by early detection in early stages of the disease and its timely treatment, particularly of breast cancer, cervix cancer, colon cancer, and upgraded professional outfitting of health institutions, health workers and enhanced accessibility of diagnostic equipment (mammography, colposcopy) and therapeutic resources for all citizens. Other chronic diseases will be dealt with in accordance with detailed screening programmes for their early detection and treatment. This will enable health services to identify risk factors as early as possible and treat patients in the most efficient way. The introduction of these programmes will be the responsibility of the PHI, while the elaboration of standardized doctrine for early detection and treatment of chronic diseases, in line with principles of gradual diagnostics and treatment, will be the responsibility of expert consulting teams acting within the Clinical Centre.

Priority 9 Programmes for health care of the elderly are of special importance, primarily treatment of chronic diseases, so that a special attention and priority will be devoted to home treatment of such patients. The Ministry of Health will propose to the Government the Strategy for Elderly Health Care and programmes for their care and treatment, which will incorporate provision of institutional and non-institutional care. These programmes will be funded form different sources: Health Insurance Fund, Social Welfare Fund, and the Budget (for social services and social welfare) and personal funds of insured persons and their families. Establishment of special old people's homes for those insured person who cannot obtain long-term care in their homes will be proposed.

Priority 10 Measures for promotion and protection of mental health and prevention of addictive diseases will be used to carry out the activities set forth in the Strategy for Mental Health Promotion. In line with the principle of mental health in the community, seven Centres for Mental Health will be opened in health centres.

Priority 11 Improved working conditions and operation of health institutions and workers. Implementation of rationalization measures in the next 5 years will improve working conditions and operations. A realistic increase in salaries of the employees in health institutions by about 20% is to be expected as well as tan increase in employee optimization in terms of the ratio between the number of health and non-medical workers and the improvement of working conditions.
Working conditions and health protection of employees will be improved, particularly in the fields of medicine with a high occupational risk (radiologists, radiotherapists, anaesthesiologists, infectologists, intensive therapy personnel and others) to the level of European standards by the number of working hours, on call duty, protection from ionizing radiation, infectious materials, hygienic conditions and work in high-risk premises (operational block and intensive therapy).
Improvement of working conditions and health protection of employees will be regulated pursuant to the Strategy for Improving Employee Health and Safety at Work (2010-2014), which provided for the establishment of public institutions for health protection of employees.

7. Major Reform Guidelines for the Development of Health Activity

7.1 Health Activity

5.1. Introduction

Taking into consideration its limited economic and human resources, Montenegro strives to project an efficient health system, whose main function will be to protect health of the population. Thus, the issue of the quality of health care is imposed as an imperative in the health care system reform. Measures and activities of health care must be based on scientific evidences, and must be safe, secure, efficient and in accordance with the principles of professional ethics. Health care reform, in addition to the population needs, should provide a high quality, accessible and economically viable health care system.

The reform of primary health care level was carried out in Montenegro, with a new way of organizing primary health care and the model of a chosen doctor as the “gate keeper”. in function of "gatekeeper". The role of health centres, which have become support centres for chosen doctors, was changed. The model of a chosen doctor was put into function throughout the entire territory of Montenegro, and the number of insured persons registered with their respective chosen doctors reaches 83%, according to the latest data available. Regional centres for mental health, children with disabilities, reproductive health and TB were established within health centres. Human resources capacities have not been increased and the standards governing human resources and labour are more favourable in municipalities with low density.

Organization of primary health care, and consequently the adoption of statutes of health centres and regulations on classification of job posts in health centres resulted in the fact that some health centres maintained inpatient clinics, certain specialist clinics and dialysis, in order to provide insured persons with better access to health care. Chosen doctors attended advanced trainings (professional advancement courses) in order to improve knowledge and skills to perform the work of chosen doctors.
Tasks of health centres are defined depending on the region they cover, size of population, principles of rationality and utilization of capacities. The established regional centres provide services to the citizens from two or more municipalities. It is planned to relocate dialysis, hospital beds and certain specialist services from health centres and integrate them in the secondary health care.

In the Master plan (2005-2010), hospital capacities are represented by catchment area approach and access to hospital beds, which represented the basis for norms (*translator’s note: standards established in certain area of health care*). The proposed norms (number of beds in Montenegro is 3.4 per 1000 inhabitants, 0.14 doctors per planned bed, 0.5 nurses, 0.3 other health workers and 0.2 non-medical workers per planned bed) have been outdated. Using the inputs through specialization, determining the number of hospital beds by departments in accordance with norms, annual work plans in connection with the number of beds and personnel and equipment for setting up the organization of general hospitals is irrational and in collision with reform trends in hospital systems.

The introduction of rigid norms and standards related to capacities and personnel cannot support these processes. For this reason, the plans must be based on the analyses of real needs of the population in order to organize an effective health care, implement financial mechanisms and incentives, so that the service providers are encouraged to introduce changes.

The existing national and international analysis pointed out to a very low hospitalization rate, lesser number of hospital beds and a low rate of bed occupancy compared to the same at the EU level. Due to the low rate of capacity utilization, it is necessary to rationalize the organization, operation and finances of hospitals in order to provide greater efficiency of this segment of health, which, as a result, does not have outnumbered employees. A prerequisite for these changes is to start from the current input over the future production and final performances in the health system, from beds over the patients to cured patient.

7.2. Directions

A continuous monitoring of demographic changes and epidemiological situation in the country is of special importance for the development of health activity. An increase in non-communicable chronic diseases, particularly cancer and cardiovascular diseases is evident. At this point, both groups together comprise almost three quarters (71.55%) of all deaths and almost a quarter (23.56%) of all hospital treatments. Population aging and increase in chronic non-communicable diseases will lead to an increased demand for health care services, even if rates of appearance of new diseases remain unchanged. In general, an integrated and good quality treatment will be necessary for patients with chronic diseases, as well as for other vulnerable population groups.

A special emphasis in the treatment of the aforesaid conditions has to be paid on the development of non-acute treatment intended for preliminary examinations of patients, which increases the ability of self-control and prevents or reduces the need for a long-term care.

Given that palliative care has been poorly developed in Montenegro, attention will be devoted to the improvement of palliative care. Thus a comprehensive programme needs to be developed for the promotion of palliative care. A policy balancing economy of scale and quality will be applied in future development of health activity. Local interests will be also taken into account, particularly those arising from differences between regions, and which are a reflection of differences in the health needs and development of health service. It is important to develop the area of professional development and standardization of health services, including the accreditation of health institutions. In the future, there should be no difference in the quality and physical access to health services due to a variety of economic opportunities of particular geographic areas. The Ministry of Health is responsible for a balanced development, which will be based on an analysis of socio-economic data and accordingly treated.

Based on new classifications of diseases in specialist-outpatient services, acute and non-acute wards, concurrently with the introduction of the IT system and training of professionals in all fields (doctors, nurses, IT specialists, and economists) service

payment system will be gradually applied depending on the level of gravity of diseases. One of the existing early developed systems (Diagnostic Related Groups or DRG, case-mix) will be applied to the acute treatment. In addition, alternative for specialist-outpatient treatment will be examined and number of hospital days kept in non-acute wards. In the implementation of this model, it is highly important to have a good strategy with the analysis of the current state and vision of goals.

One of basic prerequisites for the introduction of service payment system according to the complexity of a disease is to define the scope of services at secondary and tertiary health care level, or to define the basic package of health services. Defining the basic package is a precondition for the introduction of new models of financing.

International guidelines aimed at strengthening specialist-outpatient activities, acute and non-acute hospital treatment, shift of activity to day hospitals and more transparent system of classification of patients need to be followed at the level of secondary health care, and serve as foundations for systems of financing, which must be ultimately linked to the system of quality and safety promotion.

Outpatient services and day hospitals with capacity reorganization will be the priority. Number of health workers in the secondary health care will be planned according to the needs of the population, which will be defined through the national priorities: the number of patients and catchment areas. Productivity, efficiency and quality of their work will be monitored and compared on the basis of the following indicators: bed occupancy capacity, average length of stay (ALOS), number of hospital patients per doctor, number of hospital days per doctor, number of teams in the inpatient and outpatient health care.

Four specializations are available in general hospitals (internal medicine, surgery, paediatrics and gynaecology with obstetrics) in wards and activities[19]. The possibility of merging hospitals will be the subject of a project study. It will be necessary to determine the equipment for hospitals based on the need, and to purchase it in accordance with EBM and HTA.
Specialist outpatient health care will be the priority and it will be organized within general and specialized hospitals. Day hospitals with accompanying diagnostics will improve cooperation with the primary health care level and develop more sophisticated referral system, which will reduce the number of outpatient examinations and unnecessary hospitalizations.
Instead of investing in investments and infrastructure, a priority investment will be redirected to investments in knowledge, capacities and more advanced technology. Work plans will be prepared on the basis of the number of procedures and diagnoses. In addition, the price will be determined in advance on the basis of work plans in order to provide service providers with safer and easier planning. Development of the information system is also one of prerequisites.

[19] Six general hospitals in Montenegro have infectious disease wards and specialist for communicable diseases. During the tourist season, there is more population in need for health care services. Due to climate conditions and geographic position of the state, epidemics of communicable diseases occur more often.

Tertiary care is of significant national interest for the most complex procedures, scientific and scientific-research activities, and given in mind it is necessary to periodically check the status of tertiary care (every 5 years). In Montenegro there are Montenegro Clinical Centre and Public Health Institute at the tertiary health care level. CC also provides services at the secondary level and is in charge of a standardized medical doctrine of prevention, early detection, treatment and rehabilitation of certain diseases, injuries and conditions. Tertiary health care relies on the same principles as the secondary care, which does not include education, research and development. It is necessary to accurately separate the services provided by tertiary care, or to precisely delineate the services of secondary and tertiary level.

Pursuant to the EU perspective, the organization of tertiary health care should consider the possibility of closer cooperation, creating conditions for networking, exchange of experiences and best practice, agreement on common guidelines and improving the access to highly specialized services and expertise within the European reference networks.

Montenegro Clinical Centre provides tertiary level health care on the entire territory of Montenegro and secondary level health care in Podgorica, Kola[in and Danilovgrad. The CC overall goal is to unite health care, educational and scientific-research activities. CC's objective is to improve the total level of satisfaction of beneficiaries; earn credibility as the institution and win the trust of service beneficiaries-patients. In order to achieve greater satisfaction of patients, CC must change its internal organization in terms of delivery of higher quality services by using the latest medical equipment and operating in the best working conditions. It is necessary to modernize and upgrade all current programmes, to introduce a system for monitoring and evaluation of performance of employees, introduce standards in operating procedures, clinical guides and guidelines and conduct the accreditation of CC.

Clinical Centre as a driving-force of clinical education programmes should be in functional communication with the Faculty of Medicine over the preparation and implementation of practical and theoretical undergraduate and postgraduate education of medical professionals. When it comes to CC employees, it needs to improve medical education programmes for its personnel, to implement targeted trainings, which will provide the introduction of new diagnostic and therapeutic programmes, to fully implement the licensing of health personnel and establish a national education and training centre for cerebral-cardio-pulmonary resuscitation. CC also aims to introduce an integrated information system that will combine medical and business system.

In the future, admissions to hospital will no longer be the main activity of hospitals, where all other functions are in a subordinate position in relation to this activity. . Instead, the main activity of the hospital will be provision of health care to all patients who are in its vicinity. Health care will be provided in the most efficient manner and guided by the primary health care, in which the hospitalization, as the most expensive form of health care, will be limited to cases wherein the diagnosis and treatment cannot be done otherwise. Therefore, the scope of a treatment, which includes hospitalization, will be reduced, along with the number of beds and smaller wards for the treatment of acute cases in hospitals.

7.3. Network of Health Institutions

The network is a spatial and temporal allocation of capacities of public health institutions and concessionaires, including human, financial, spatial and other resources in order to provide optimal access of the whole population to health services and care in the primary, secondary and tertiary health care. The network includes primary, secondary and tertiary health care and should enable the geographical accessibility of health services.

Health care institutions that are established with state-owned assets should be founded based on:
• Development plan;
• Health status of the population;
• Number and age structure of the population;
• Existing number, capacity and distribution of medical institutions;
• Degree of urbanization, development and transportation connections of certain areas;
• Equal access to health care;
• Required volume of a certain level of health activity;
• State economic opportunities.

7.3.1. Secondary care

7.3.1.1. Inpatient and Outpatient-Specialist Treatment

In Montenegro, health capacities at secondary and tertiary level are not physically divided. Secondary activity includes acute hospital treatment and specialist – outpatient activity. According to international comparative analysis, the number of beds is not large, nor it is compliant with the demographic and epidemiological trends and changing needs of the population.

The reform and reorganization is needed to the existing network at the secondary level in order to achieve maximum efficiency, safety and quality of secondary health care. It is necessary to establish a day hospital, non-acute wards, palliative and long-term care.

Specialist - outpatient treatment. Referrals from primary to secondary health care depend on the current guidelines of patient treatment at the primary level, the gravity of the state of a patient, network or resources available (human, financial and material).

Trends of intensive, integrated, safe, high quality and efficient patient treatment are focused on priority development of outpatient specialist services.

In the following period, it will be also necessary to define re-deployment of doctors and health workers within the specialist activity. If it is assessed that the needs of the population in the system of public health networks are not provided for in a sufficient manner and the waiting time is longer than it is professionally acceptable, private doctors will be approached to become integrated in the network of health institutions

through concessions.

Conditions for the development of specialist-outpatient activity are as follows:
• Transparent rules of distribution of work between primary and secondary level;
• Number of outpatient treated patients (per 1000 inhabitants) for each specialty area;
• Average number of patients to be treated by a medical team per year;
• Unacceptable waiting times.

Hospital Treatment
With regard to hospital wards, the principle of specialization and combining of smaller units into larger wards in a hospital or even more hospitals from a specific region will be followed. Wards that will not be able to deliver services 24 hours a day without intermissions, in addition to all cases of emergency, and thus meet the criteria of quality, safe and effective treatment will have to network, merge, or move to specialist outpatient level. According to some international studies, optimum number of hospital beds for the effective management of a hospital ranges between 200 and 600 beds.

In order to optimize the availability of personnel, number of health workers will grow by 2% annually after 2010, while the number of non-medical workers will be reduced by 1% per year. A possibility of outsourcing certain non-medical activities will be considered through external experts or public-private partnership: administrative and technical activities.

Necessary conditions for delivery of secondary health care services:
- Ensuring a continuous work of a hospital or a ward 24 hours a day, including all the;
- meeting the criteria of quality and safe treatment along with the system of top quality and sufficient number of similar patients in a given period per an average doctor;
- Number of hospitalized or clinically treated patients (per 1,000 inhabitants) of an area for certain specialization;
- Average number of patients to be treated by a team of doctors;
- Size of the catchment area of a hospital;
- Length of waiting lists for certain health care services.

7.3.1.2. Non-acute Hospital Treatment (NAHT)

Patients are referred to non-acute hospital care after completed treatment in acute hospitals, or the patients who need prolonged treatment, rehabilitation, health care or palliative care because the patient's health condition does not allow the treatment to be conducted or would not be possible elsewhere.
NAHT presents a significant area between the acute hospital treatment and discharge from a hospital to a friendly environment or an institution of social care.

NAHT is usually charged per a hospital day with some restrictions on the duration of a treatment. NAHT forms are divided into the following programmes:
1. prolonged hospitalization with rehabilitation: for patients, who after diagnostic or therapeutic treatment, may not extend the outpatient treatment, because it would

deteriorate their condition:

- patient without the need for acute diagnostic and therapy;
- patient without the need for a complex diagnostic and treatment;
- patient with the planned long-term treatment with a greater share of health care and rehabilitation;

2. hospital health care in recovery wards: for patients who, after completed acute hospital treatment, mostly need health care, physiotherapy and further social treatment aimed at:

i. increasing self-care capabilities;
ii. performing specific health care activities, which can not be performed at home or in institutional care;
iii. stimulation of an active role of a patient in solving his/her health problems;
iv. implementing health and educational programmes for fighting diseases after the discharge;
v. greater hospital discharge safety.

7.3.1.3. Palliative Care

According to demographic and epidemiological trends, an increase in number of elderly and chronic patients and ever changing image of a traditional family has introduced a different approach to the problem of death. The obligation of taking care of the elderly, chronic and dying patients shifted from family to society and, to a largest extent, to public health system.

Palliative care for patients with advancing disease and terminally ill patients and their environment means an integrated care due to the consequences of the disease (pain, nausea, and shortness of breath, fatigue, and delirium) and psychosocial needs for a better quality of life until death. It implies suffering from malignant diseases, organ failure, neurological diseases, psychiatric diseases, HIV, etc.

At the moment, palliative care has been carried out at the primary level, through home care service, which does not meet actual needs. In the following period, in the field of palliative care, it is necessary to pay special attention to the development of educational programmes and formation of multidisciplinary teams for palliative care (physician, nurse, social worker, physiotherapist, occupational therapist, nutritionist and psychologist).

Palliative care must become an integral part of palliative care via palliative teams, palliative wards or palliative hospices. One of prerequisites thereof is a transparent financing of palliative care.

Conditions for NAHT and Palliative Care:
Due to the population aging, shortening of average length of stay in acute hospital treatment and more complex health care of chronic patients, it is necessary to open NAHT and long-term care wards within institutions and home care service. For patients in need of NAHT, long term and palliative care, ra network of multidisciplinary teams is required. It is necessary to organize health care and palliative care wards and determine funding for their work.

The goal is to ensure at least two hospitals or wards for health and palliative care by

2013. A part to bed capacities and number of days spent in hospital varies from country to country and may reach even 10%. If NAHT was introduced today, 150 beds could be set aside. Taking into consideration that the process is a long term, the 2013 estimates are realistic.

7.3.1.4. Long-term care

Long-term care as a part of an integrated patient treatment closely links health and social care and care of those in need of certain aid due to an illness, injury, disability or general disadvantage over a longer period of time in daily activities, rehabilitation, with the aim to increase self-care abilities and a long-term decrease in needs for long-term care.
Long-term care is provided to persons with physical or mental disabilities, fragile elderly and those in need of support and aid in their basic daily activities. Definitions of a long-term care in the EU differ from the standpoint of determining the length of use and profile of a beneficiary as well as the volume and types of services. In addition, the dividing line between health and social components of long-term care is very different in practice.

7.3.2. Tertiary Care

Definition of tertiary health care and the division of work between the tertiary and secondary health care, is not considered an obstacle or barrier between these two levels of health care, because tertiary and secondary level of health care must constitute an inseparable functional unit, with an unremitting flow of information and experience between health workers and associates.

Tertiary health care provides highly specialized health care with the use of the latest technologies, in the form of specialist-consultative multidisciplinary outpatient and inpatient services. Tertiary sector includes sub-specialist branches in the field of diagnostics, treatment and rehabilitation, as well as educational, scientific and research activities independently or in cooperation with the Faculty of Medicine and other faculties. Within the framework of professional support to other levels, tertiary health care includes the preparation of new methods of treatment, development of national programmes, preparation of clinical guides and guidelines and standard operating procedures of diagnostics and treatment.

Educational programmes, technical support and scientific and research activities of the tertiary level must be defined in the plan.

The status of tertiary health care has to be checked occasionally based on the defined conditions, depending on the development of technology and science, because the status of tertiary health care is not constant.
It is necessary to determine conditions for the tertiary health care, because the tertiary care relies on the same organizational principles as the secondary (inpatient and outpatient), so that health services of secondary and tertiary health care are often intertwined.

Tertiary health care is a part of public health system and cannot be conducted in private health institutions, but may be conducted within private-public partnerships. It

is available only upon referral by a chosen doctor after an earlier treatment at the secondary level.

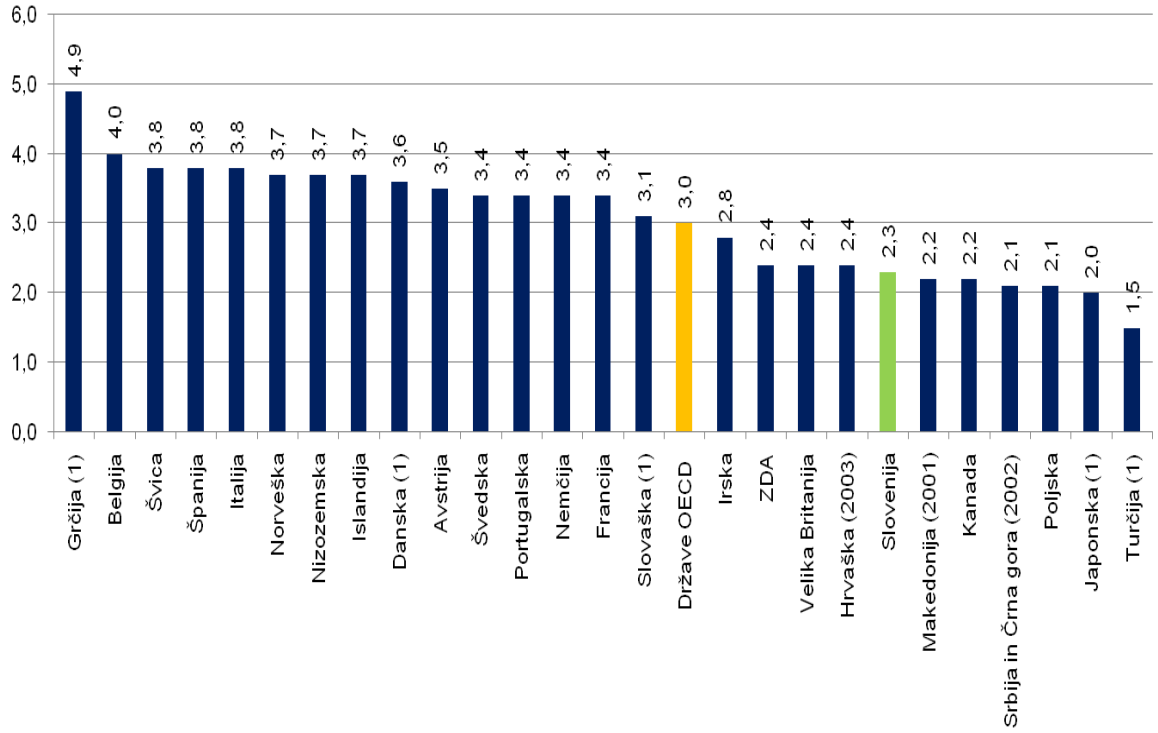
Conditions for achieving tertiary care are as follows:

- defining doctrine, guidelines and treatment protocols;
- adoption of standard operating procedures (SOP)
- quality work improvement and control;
- implementation of a continuous medical education;
- introduction of modern medical technologies;
- installed information system for tertiary health care, as well as interconnection of all levels of health care and accompanying medical branches and others;
- educational, research and scientific activity, international expert and scientific cooperation;
- keeping registers and records necessary for monitoring the status of health of the population;
- meeting the needs within the tertiary health care of at least 0.5 million of inhabitants.

7.4. Human Resources Needs in Health

Human resources are pillars of a system of health activity and represent an important segment of the entire health care system. The number of employees and their qualification structure is a reflection of a quantitative development of health activity.

One of conclusions of the Master Plan for the period 2005-2010 is that in the past decade there has been uncontrolled increase in the number of employees, without considering financial possibilities to cover the expenses of their work. This had resulted in uneven and disproportionate development of health capacities and employment. Although the data on the number of employees, as well as the number of inhabitants per employee, do not give enough information about the adequacy of health care, it was concluded that Montenegro has a surplus of staff, and this particularly applies to administrative and technical staff, even in comparison with other countries. High ratio of doctors and non-medical workers was presented (1:3:18). The MP also listed an argument related to the retraining of a number of doctors' specialists into doctors of general practice. It was pointed out to a concrete problem of surplus of specialists in dentistry. Similarly, large differences were observed among the regions per capita, which is why the accessibility of some regions is considered to be an issue.
Number of doctors is 1.97 per 1 000 inhabitants, which is far below the EU average. The share of non-medical workers is very high at 27.6%.



Graph 1. Number of doctors per 1000 inhabitants, Montenegro: 1,97. (HEALTH RESOURCES, OECD, 2007; who, Whostat, 2006)

According to the MP, wrong conclusions could be reached on the basis of the proposed personnel norms for secondary level. Montenegro Master Plan proposed the following norm: 0.14 doctors, 0.5 nurses, 0.3 other health workers and 0.2 non-medical workers per hospital bed. One team would consist of one physician, 3.57 nurses, 2.14 other health workers and 1.43 non-medical workers. When it comes to the specialist-outpatient care, doctors need to spend 0.1 of their working time on oncology and communicable diseases wards, 0.14 in paediatrics and gynaecology, 0.25 in orthopaedics and surgery wards, 0.4 in internal medicine, psychiatry and neurology and 0.5 in ophthalmology and otorhinolaryngology. It means that 42 doctors would work in specialist outpatient health care.

If the proposed norms, which were based on the number of beds, had been respected, a surplus of 157.7 doctors and a deficit in 92 nurses would have appeared in Montenegro in the secondary and tertiary levels in 2006. If an optimal bed occupancy rate was achieved, the surplus would be increased even more. These results confirm that the "norms based on inputs" are inappropriate. The analysis has a lot of ambiguities, because the number of doctors and nurses who do not work directly with patients in wards (specialist-outpatient treatment, pathology, and microbiology), the tertiary care (research, science) could not be exactly determined. The aforesaid certainly emphasizes the need to change the approach to the organization, planning and financing of secondary and tertiary care.

Modern systems plan the number of employees on the basis of outcomes and results - the number of patients together with the gravity of their condition and health care quality.

This approach could urge the introduction of more modern, international indicators

and criteria of comparison, such as the number of patients (or even patients with assigned level of treatment in terms of seriousness) per doctor or nurse.

During the last millennium, nursing has being developed as an independent profession, which delivers health care based on research and validated methodology in nursing. Nurses are the most numerous group in the health care system and their work contribute to the wellbeing of the community. A nurse is responsible for assessing, planning, enforcement and evaluation of health care that is delivered solely on the basis of the plan, which is based on nurse's diagnosis and issues identified by the nurses. The intervention must be accompanied by appropriate documentation and scientific research. Plan and interventions of nurses must ensure patient safety as well as protection of patient rights.

Directive 2005/36/EU regulating education, professional qualifications and professional title recognition, ensures patient safety during interventions in health care, enables free flow of nursing services. In the process of achieving a full EU membership, in 2009 the Government adopted the Law on HealthCare, which introduced norms in this segment of health care. The Law defines the establishment of the Chamber of Nurses, which is responsible for issuing licenses for nurses, standards and competencies for health care delivery in daily practice. This includes defining the health care and its separation from other professions in the health care system, categorization of health care with elements measuring the amount and quality of delivered health care services. This model would represent the most realistic basis for financing of health care.

7.5. Priorities and Guidelines for the Area of Health Activity

Priority 1 Continued monitoring and evaluation of the course of the reform and performance of primary health care.
A crucial step in the reform of health care is to ensure better channelling thereof toward patients and their needs. It is necessary to monitor the pace of the reform at different levels, as well as to define priority areas both at the primary and other levels in order to achieve a better quality health care for all citizens.

Priority 2 Monitoring, evaluation and control of work of the Agency for Pharmaceuticals and Medical Devices.
Agency for Pharmaceuticals and Medical Devices enables patients to achieve rapid access to new medicines and works on improving the delivery of information to all users of medicines. The Ministry of Health performs control, evaluation and monitoring of the legality of work of the Agency.

Priority 3 Re-evaluation of roles and activities of centres and support units for chosen doctors.
Centres and support units for chosen doctors are as follows: Centre for Pulmonary Diseases and Tuberculosis, Diagnostics Centre (laboratory diagnostics, X-ray and ultrasound diagnostics), Centre for Mental Health, Centre for Children with Special Needs, Centre for Education, Disease Prevention Centre.
It is necessary to carry out a continuous evaluation of activities of the centres in order to improve the quality of work and professional liaisons with secondary and tertiary levels.

Priority 4 Secondary health care will include specialist outpatient treatment, acute and non-acute inpatient treatment.

Due to the altered demographic structure and progress in medical technology, it is necessary to introduce new forms of patient care (day hospitals, non-acute care, extended hospital care, palliative care) in order to respond timely to the needs and wishes of patients.

Day hospitals are an organizational model of introducing a modern, cost-effective and multidisciplinary treatment, which will significantly improve the quality of healthcare.

Palliative medicine must be upgraded with psychological, social and spiritual care of patients and their family members in line with their desires, fears and needs.

Priority 5 Secondary health care institutions will be rationally restructured in order to meet the criteria of accessibility, efficiency, quality and safety of patients.

Merging of certain hospital services must be project-driven to achieve organizational, financial and professional interconnection in order to jointly maintain some of the existing services (emergency services, smaller wards, expensive equipment) and services (on call-duty), and eliminate duplication of capacities.

Interdisciplinary rational integration of health care processes and related geographic activities must serve as the basis for delivery of health services. It is necessary to perform the reorganization of on call duty services in hospitals based on human and material capacities of each institution for admission of patients.

For early hospital discharges and a decrease in the need of fascilities it is needed to develop non-acute hospital wards and a greater range of treatment and care at home. Such treatment will enable patients to have a longer stay at home and a better quality of life despite suffering from the disease. The fact that the elderly and sick persons will stay at home, on one side improves the quality of their life while on the other side, reduces the expenses of care in institutions, which deliver such services.

Priority 6 Health care institutions at the secondary and tertiary level will be organized in accordance with the standards and norms, based on a process, not the capacity.

Reorganization of hospitals requires establishing of standards of health care, the equipment used by health care providers, management and information. It is necessary to begin with the process of accreditation of hospitals, wards, and laboratories and verification of premises, equipment and activities. The process of accreditation should be differentiated from the process of evaluation of health care institutions. Accreditation should contribute to improving the organization and delivery of health services, reducing costs, increasing efficiency and boosting public confidence in the health care system**.**

Priority 7 Charging of health services will be made in accordance with the complexity of the patient condition.

Based on new classifications of diseases in specialist-outpatient services, acute and non-acute wards, concurrently with the introduction of the IT system and education of professionals in all fields (doctors, nurses, IT specialists, and economists) service-payment system will be gradually applied depending on the complexity of diseases. One of the existing early developed systems (DRG, case-mix) will be applied to the

acute treatment. In addition, alternative for specialist-outpatient treatment will be examined and number of hospital days kept in non-acute wards. In the implementation of this model, it is highly important to have a good strategy with the analysis of the current state, defined vision and goals.

Priority 8 A new system of top quality and safety will be introduced.
The Ministry of Health has established a special Department for Patient Quality and Safety. It is necessary to adopt the National Strategy for the Development of Quality and Safety in Health Care, initiate the process of drafting clinical guidelines and instructions, and develop a system of open reporting, monitoring and analysis with the aim to improve patient safety and risk control. Development of clinical practical guidelines can be and should be the tools for improving treatment and education and the development thereof should be under the supervision of the Department for Patient Quality and Safety.

Priority 9 Install the payment system of 'pay per performance' (PPP). The new systems of financing of treatment outcome will enable the introduction of 'pay per performance'.

Priority 10 Expansion of the network of health institutions based on the population needs.
Expansion of the network must be based on the needs of the population, clear goals of health policy and available financial resources.

Priority 11 Strong management is a prerequisite for change.
Launching studies, special courses and interactive training for middle and senior management[20]. It is necessary to establish a national database and a list of indicators for business and professional operation of the health care system. Within the competency management system, potential incentives should be tested and introduced for successful managers.
Regulatory role of the state should be improved in the area of quality and efficiency of work of service providers, capacity management, service packages, operations of organizations for health insurance and payment methods of service providers, building access points, medicine prices, public procurement and oversight. This will create conditions for increasing competition among service providers under the supervision of the state; it will introduce the method for calling public tender for programme awarding, and the service providers will submit their offers under specific conditions.
Various forms of awarding doctors and other health workers according to their contribution will enhance the professional competition, adjust earnings and enable rewarding of the quantity and quality of work. It is necessary to study the concept of a free specialist.

[20] Training in health management must comprise the introduction in management, health systems, health policy, strategic management, tools for **analysis** and decision-making, leadership, planning techniques, organization management, human resources management, management methods, methods and techniques of monitoring and evaluation, quality management, information management, change management, conflict management, risk management, project management, bookkeeping, negotiation skills, project for implementation of quality management system.

Given the limited circumstances, today's managers of health institutions play a multifaceted role. Apart from leadership skills and vision, managers in their activities should be: innovative, flexible, knowledgeable; they should cherish respect for knowledge and experience of staff at all levels of health institutions, promote teamwork and communication between departments and sections, reward teams and staff persons for quality work .

Priority 12 Institutional arrangements of forensic psychiatry.
According to the needs assessment of compulsory psychiatric treatment, Montenegro needs up to 100 beds, which are not available at this point, given that the patients, whom are pronounced security measure of compulsory care and treatment by the court, are referred to the only psychiatric institution. It is necessary to promote broader knowledge of the issues related to recognition and identification bodily injuries and basic psychiatric syndromes, as well as problems of forensic and psychiatric evaluations and implementation of security measures. Ministry of Health, Ministry of Justice and the Ministry of Interior should take part in the project.

Priority 13 To enable health institutions to charge for the services, such as, payment for accommodation in the existing social institutions for patients with extremely long periods of stay.

Priority 14 Reference, national interest and the scope of scientific research in specialized hospitals will be integrated in the criteria for the categorization thereof in terms tertiary care.

Priority 15 Establishment of an independent medical institution for health protection of the employed, as a specific aspect of protection that will improve health of the employed.

8. Financing Health Care System

8.1. Introduction

The health care system is based on the principles of Bismarck social health insurance which is funded by the contributions of employers, insured persons and other categories. The contribution rate is 12.3%. Health care of the whole population, including the unemployed and refugees and other categories is financed from the funds of compulsory health insurance that are provided from the earmarked revenues, i.e. contributions for health insurance. Missing funds are provided from general revenues of the budget.

It is well known that liability and solidarity in health insurance provide the citizens with certain rights to health services and compensations, but their exercise is also related to their obligation of paying contributions in proportion to their financial capabilities. The overall compulsory health insurance goes through the Health Insurance Fund, while the proposed voluntary health insurance should be within the competence of the market and private insurance companies. Co-payment or the share of an insured person in expenses of health care constitutes 1%.

In 2009, 59.65% of contributions come from the employed, 19.86% from pensioners, 0.28% form the unemployed and 0.21% from farmers. Judging from the aspect of contributions, the given analysis of expenditures and revenues per an insured person does not say much - in systems of solidarity contributions are to be paid in accordance with financial possibilities, while the expenses in accordance with needs. The fact that 3.25% of the population are farmers, who account for 0.21% of all contributions, tells us that the principle of horizontal equity is violated.

Analyses are developed based on financial statements of health institutions or health services provided in these institutions. The structure of expenditures of public health institutions is mainly constituted of salaries (earnings) with 47.95%.

The Master Plan by 2010 proposed certain measures, which should bring additional financial resources to the health care system and perform better control of private resources in the health care system: increase in citizen participation in the costs, introduction of new forms of voluntary insurance, introduction of private outpatient services and renting of unused capacities, processing fee damage caused by legal and natural persons, and introduction of reporting and record keeping of injuries at work and occupational diseases of active insured persons and risk categories. The possibility of competition is anticipated through private capacities.

There has been no special contribution rate for occupational injuries and diseases in Montenegro. In some Western and Central European countries, employers pay special amounts on the account of occupational injuries and occupational diseases for their employees. These revenues are used for financing health care of injured persons or those suffering from occupational diseases.

This type of revenues is different and depends on the amount of expenses allocated for risks. The enforcement of the aforesaid contribution rate represents a potential source of additional funds.

8.2. Trends of health revenues from public sources

Through the Health Insurance Fund of Montenegro, health care is financed mainly from health insurance contributions, the budget revenues and other revenues. **The revenues collected in 2008** (EUR 183.42 million) recorded an increase by EUR 45.04 million or 32.55% when compared to revenues generated in 2007 (EUR 138.38 million) as a result of an overall economic growth in Montenegro, more regular revenue collection and increased coverage of contribution payers.

In relation to the approved financial plan **for 2009**, the HIF collected more revenues for **the same year** by EUR 3.53 million or 2.23%, while the HIF realized EUR 21.39 million or (11.66%) less in comparison to the same period 2008.

Revenues from health care contributions in 2008 were at EUR 144.8 million and constituted 78.95% of total revenues of the HIF, which represents a decrease from the previous year (2007 - 90.63%; 2006 - 93.67%). A decrease in the share of these revenues was caused due to reduced contribution rate for compulsory health insurance from 13.5% to 12% in 2008 (10.5% in 2009) pursuant to the Law on Social Insurance Contributions.

Budget revenues increased from EUR 6.84 million in 2006 to EUR 11.38 million in 2007, and to EUR 37.09 million in 2008, with the aim to compensate funds on the basis of reduced contributions rates for compulsory health insurance, lack of funds for payment of salaries in public health institutions.

Namely, the share of the budget revenue in the total HIF revenues increased from 5.8% in 2006 to 20.22% in 2008. For 2009, revenues from health care contributions were at EUR 129.77 million, or 80, 09% of total revenues of the HIF, and were higher than planned by EUR 2.91 million, or 2.3%. In the same period, the budget revenues were EUR 31.81 million or 19.63% of the total revenues, and by EUR 0.17 million or 0.84% lower than it was planned.

In addition to the funds for the compulsory health insurance, there was EUR 69 million more in 2008 from public revenues allocated for financing of activities of the Ministry of Health, Labour and Social Welfare. In relation to the budget of the Ministry of Health, Labour and Social Welfare exercised in 2007, this meant an increase of EUR 11.52 million or 20%.

8.3. Trends in health expenditures from public sources

Total expenditures of the HIF in 2008 were EUR 172.48 million, in 2007 EUR 138.52 million, and EUR 117.94 million in 2006. The HIF expenditures comprise:

1. Funds for health care of insured persons by levels of health care

a. **Primary health care level** – financing of health care to the insured persons through health centres, prescription medicines and contracted services for dentistry. The share of primary health care in the total

expenditure recorded a decrease (from 38.02% in 2006 to 33.65% in 2008)., which is a result of the undertaken reform measures, cost control, tender price of medicines. However, in absolute terms these costs increased from EUR 44.84 million in 2006 to EUR 58.04 million in 2008.

b. **Secondary and tertiary health care level** – financing health care insurance through hospitals. Health care expenditures at the secondary and tertiary level (in 2008 constituted 45.21% of total expenditures), in the period 2006-2008 expenditures grew in absolute and relative terms. Still, there has been no proper control of the costs and statistics at hospital level, and in the following period this will be the subject of attention of the development of information systems in order to create conditions for the control of rational consumption and placing of these funds in the function of the insured persons.

2. Other healthcare rights (cca EUR 14.95 million in 2008) - treatment of the HIF insured persons in health institutions in Montenegro, which are outside of the system of public health care as well as in health care facilities outside of Montenegro, if they can not be successfully treated in health institutions, which are within the public health system of Montenegro.

3. Health insurance rights:

a. For procurement of orthopaedic and other aids (EUR 0.83 million),
b. For wage compensation during temporary incapability for work over 60 days (EUR 3.33 million)
c. For compensation for travel expenses of the insured (EUR 3.16 million).

4. Other expenses, which also include the funds for the work of the HIF. Of EUR 14.19 million, which refer to other expenses and funds for the HIF activities, cca EUR 9.19 million relate to the allocations for the needs of public health institutions, while the remaining EUR 5.07 million constitute the funds for the HIF activities (i.e. funds for the HIF activities constitute 2.94 % of the total HIF expenditures, while in neighbouring countries and many European countries this share ranges from 3 to 5%).

The share of the HIF expenses in GDP declines despite the growth of the HIF expenses, which is presented in the following table.

Year	GDP * (in million €)	HIF expenditures ** (million €)	The HIF share in GDP
2004	1,669.80	95.58	**5.72**
2005	1,815.00	108.89	**6.00**

2006	2,148.90	117.94	**5.49**
2007	2,807.90	138.52	**4.93**
2008	3,085.60	172.48	**5.59**
2009	3,242.00	158.49	**4.89**

* Source Monstat (2001-2008) analysis of the realization of the economic policy of Montenegro for 9 months in 2009 (estimates for 2009)

** Source: Report on operations of the HIF

Table no. 1. The share of the HIF expenses in GDP from 2004 to 2009

With the aim to overcome problems in financing of the health care system it is necessary to undertake activities to increase the revenues of the HIF in order to ensure stability in the financing of the health care system.

8.4. The priorities and guidelines related to the financing of health care system

Priority 1 Acceptance and implementation of the requirements arising from the Maastricht Treaty for the health care system as part of public spending.
Maastricht criteria, among others, include the following public financial criteria: the loss may not exceed 3% of GDP, public debt may not exceed 60% of GDP**.**

Priority 2 Implementation, monitoring and evaluation based on the methodology of national health accounts (NHA).
During 2007 and 2008, the Ministry of Health worked on the project of introduction of NHA, which were used to obtain the data for 2004, 2005 and 2006. Upon the recommendation of consultants, who worked on the introduction of NHA, it is essential that the same methodology is to be used for continuation of monitoring of health spending at the state level within public and private sectors. In particular, attention should be paid to the coverage of the private sector through the records, fiscalization and analysis of financial statements.

Priority 3 Increase in public health funds from the compulsory health insurance.
Citizens must have equal health insurance, equal access to health services and equal quality of treatment. Due to the financial sustainability and preservation of the social, Bismarck's financial model, it is necessary to keep the contributions as the main source of financing of the compulsory health insurance, with increased coverage of tax payers, damage compensation and other sources.
Increased surveillance of the tax-collection conducted by the Tax Administration may result in far better quality of treatment, based on an increase in total funds raised.
It is necessary to strengthen the autonomy of HIF and retain a majority Bismarck model, and not a mixed Bismarck – Beverage model of insurance.

Priority 4 Increase in public health funds from the state or local self-government budgets.
Possible sources of additional funds are revenues from excise duties on tobacco and alcoholic beverages and further implementation of the project; damage compensation

The enforcement of a specific contribution rate for occupational injuries and diseases is one of the potential sources of additional financial resources.

Priority 5 Increase in private health funds

In order to improve conditions of health care financing, new forms of health insurance are to be introduced.

With the introduction of new forms of health insurance, it is necessary to clearly define the services, which are covered with compulsory health insurance, so-called basic package of services for secondary and tertiary health care leve, given that this package had already been determined for the primary health care.

In making decisions about the type of insurance, even in case of private insurance it is necessary to emphasize the public interest and special care for vulnerable groups.

The introduction of new types of health insurance will be project-driven, with the realization of the recommended ratio between public and private funds to the level of EU standard 75:25.

Priority 6 The relationship between the public and the private in the health insurance system – planned introduction of public-private cooperation on the basis of analysis and the establishment of conditions for the development of voluntary health insurance.

During the privatization process, strict regulations and control of the type and quality of delivered services need to be determined.

Priority 7 Move to contractual principle of purchase of plans and work plans of health institutions in accordance with the programme for the development of health care in Montenegro.

Computerization of the system of primary health care has created conditions for the conclusion of contracts for the delivery of health services between service providers and the HIF.

The first contracts were concluded with private dental practices for the provision of dental services from primary care and oral surgery, while the preparations for the establishment of contractual relations with health care institutions is underway.

With the extension of the reform to the secondary and tertiary level of health care, the introduction of medical and business-administrative information system, which will operate as part of an integrated hospital information system (IHIS), the quality data necessary for concluding contracts at these levels of care will be gathered.

Priority 8 Create the conditions in the system so that the HIF has an active role in ordering the health services.

The introduction of an active process of concluding contracts between the HIF and service providers in order to get more efficient system and stricter control over

service providers.

With the introduction of competition among service providers the efficiency of the system will be increased. A possibility to choose providers independently introduces competition with the aim to further promote the quality and reduce costs.

Priority 9 Charging of services will be initiated in accordance with the gravity of a patient's status and adjustment to the system of compulsory health insurance.

When it comes to financing of hospitals, it is recommended to use the payment method according to the complexity of the required treatment (DRG, case-mix). Before establishing standard prices, it is necessary to introduce a system of classification for inpatient, acute and non-acute treatment.

9. Health Care Quality and Safety

The confidence of the population in the health system is based on the provision of quality and safe medical treatment. People want to know whether or not the health care they receive is based on scientific evidence and best practice and complies with standards. The vision of the state in the are of the quality and protection in health is to encourage the introduction of changes that will lead to safer and high-quality medical treatment, including an adequate accommodation and food, with the promotion of partnerships between patients, health service providers, health professionals, management of health care institutions, beneficiaries, with the respect for the principles of patient-centeredness, timeliness, efficiency and equity. The strategy for the improvement of quality and protection in health must be based on three starting points, such as: the establishment and development of systems of quality and protection in health at the state level, management, action and accountability for continuous improvement of quality and protection in health practices at the level of health care providers and **education and training in the areas of quality and protection in the health sector**. It is necessary to establish and maintain the total quality management system at all levels of health activity.

It is of essential importance to establish the department for quality within the Ministry, which will be in charge of operational monitoring, synchronization and analysis of the implementation, introduction and enforcement of continuous improvement of quality and protection of all health service providers in the area of developing health quality and protection.
All health care providers have to establish structures for monitoring and control of the improvement of health care quality. The system of financing should ensure necessary financial resources to improve the quality system and increase protection of patients.

Continuous improvement of patient quality and protection has to be based on values and needs of patients, employees and other beneficiaries, permanent professional development of individual occupational groups and medical teams, overcoming risks of health practice and evaluation of success of its performance. In order to introduce changes necessary for improvement of quality and protection, health care providers primarily need to have a certain level of culture developed, which is defined by proficiency, qualifications, and examples of good behaviour. The way of thinking of management affects behaviour and actions of employees, and the accountability for the introduction of the quality and protection methods and means must be included in the daily health activities and business operations.

All health care providers are required to introduce and use national and international clinical guidelines, establish and use clinical guides, standards, protocols, algorithms, instructions and occupational rules, which are evidence-based and supported by medical practice. It is important to ensure measurement of performance indicators, quality and protection with the implementation of the quality management system assessment. Health care providers should be encouraged to introduce the quality system that will ensure mastering of potential risks and consequences thereof, as well as the analysis of reports on exercising patient rights. Reporting systems must

ensure confidentiality, independence of complaints procedures of patients, disciplinary and judicial proceedings and get focussed on learning, corrective and preventive measures. With a constant exchange of good practice, progress will be extended to the entire health care institution, and all health care providers.

It is necessary to provide continuous professional development in the area of quality and protection of individuals and groups in all occupations at all levels of education. Education and training in the area of patient quality and protection must be integrated in programmes of all educational institutions and health programmes, and also in internal education programmes in health care institutions. Requests for education and training in the field of patient quality and protection need to be included in regular activity of health care providers.

Priority 2

9.1. Priorities and guidelines for the health care quality and safety

Priority 1 **Development** of the established Department of Quality in the Ministry of Health

Priority 2 Establishment of formal systems and structures for continuous improvement of quality management and continuous quality improvement and protection of health care providers by 2010

Priority 3 Establishment of the national system of quality and protection in health care and business indicators by the end of 2011. These indicators include, for example: the level of communicable diseases in hospitals, as well as so-called 'safety' indicators, such as: waiting in front of the office.

Priority 4 Introduction of clinical treatment guides or procedures in all hospitals, by the end of 2011, and at least two, in a regular practice for each hospital ward.

Priority 5 Introduction of one clinical guidelines of integrated clinical procedure per year for most common diseases.

Priority 6 Annual public reporting on achieving quality indicators.

Priority 7 Carrying out surveys to measure satisfaction of customers and health service providers and evaluation of the implementation of the set objectives through indicators (for example, MRSA infection in hospitals and falls from beds).

Priority 8 The system of open reporting, monitoring, analysis and improvement need to be introduced in order to improve patient safety and risk control

10. Medicines and Medical Devices

Medicines and medical devices are essential means for protection and preservation of the population health. It is necessary to continuously ensure availability of safe, high quality and effective medicines.
Biological agents and medicines for rare diseases present a particular threat to the financial sustainability of the system in the following period. It is necessary to prepare and introduce new ways of evaluating cost effectiveness, with the respect for good practice. Availability of medicines must be based on scientific knowledge and pharmacoeconomic parameters, which must be balanced with socio economic and ethical standpoint. For these reasons, it is necessary to develop or upgrade national standards for measuring general national status and introduction of new technologies from the viewpoint of costs and positive impact on human life (quality of living, productivity, socio-economic benefit) Based on the aforesaid, values of certain medicines and groups of medicines in the treatment of diseases and possible added value to new medicines should be properly defined, which should be take into consideration in determining the price of medicines financed from public funds. With these measures, it is necessary to highlight the advantages of tender procurement.

The Law Amending the Law on Medicines and the Law Amending the Law on Medical Devices have given a legal basis for the establishment of the Agency for Pharmaceuticals and Medical Devices, as well as the national regulatory body, or, technical-vocational institutions with responsibilities in the area of public health protection through the availability of effective, acceptably safe medicines as well as medicines of appropriate quality, information on medicines, control of production and trade thereof, and monitoring of side effects and deficiencies in the quality of medicines, thereby implementing regulatory control over the entire life cycle of a medicine.

The implementation of the registration process within the prescribed time period and at an appropriate professional level, in accordance with the guidelines and directives of the European Union, is a permanent challenge for the Agency for Pharmaceuticals and Medical Devices of Montenegro.

The agency has short-term priorities, and the first one is a human resources plan that will enable smooth and normal functioning of the Agency. The Agency established contacts and communications with the European Agency, as well as with neighbouring agencies, in order to provide for the exchange of data and expert opinions in the field of quality of medicines and medical devices.
It is necessary to establish and ensure adequate resources and conditions of work of the Agency for Pharmaceuticals and Medical Devices, with full functional autonomy, and to develop a functional information system, establish a system of

pharmacovigilance and nominate projects to donors.

Priorities and goals of the Agency for Pharmaceuticals and Medical Devices

GOALS	STRATEGIES
Strict implementation of EU directives in medicine registration.	• Education of the employees for the implementation of directives..
Implementation of WHO directives in pharmacovigilance.	• Education and opening of regional centres.
Reduction in medicine consumption	• Developing the information system • Drafting pharmacoeconomic analysis
Provision of accessible documents to all partners in the process of implementation of the activities of the Agency	• Launching regional information centres • Publishing newsletters • Developing websites • Communication via media • Telephone consultations • Consultative visits of the representatives of the Agency
Raising awareness of partners and clients of the importance of public health and the use of medicines	• Websites • PR campaigns • Scientific conferences for doctors, pharmacists, and managers • Establishing good marketing network
Improvement of the process of delivery of the Agency services	• Education of employees • Motivation of employees • Introduction of modern information technologies • Continuous provision of professional literature
Establishing a long-term cooperation with partners	• Transparency of processes • Respect for Deadlines • Meeting requests
Respect for world ecological standards	• Strict application of rules • Control of pharmaceutical waste • Punitive measures

Priority 1 Registration of Medicines

The process of obtaining licences for placing a medicine on the market is purely national procedure, where the agency evaluates the prescribed documentation (in the EU-CTD form) and issues a national permit. The process is transparent and harmonized with national procedures of the EU countries and the same standards for medicine safety, efficacy and quality. In order to enter the registration process

successfully and efficiently, Montenegro adopted secondary legislation harmonized with EU directives in 2009, formed the archive for the retention of documents, classified medicines, adopted the Rulebook on receipt of documents, concluded contracts with referent authorized laboratories for medicine control, established the Commission for Registration of New Medicines and appointed experts for the assessment if new medicines. In addition, continuous education of employees and external experts is required so that the smooth and normal functioning of the Agency cannot be questioned. The Agency maintains permanent communication with international organizations and national agencies of the EU and neighbouring countries.

Priority 2 Reducing consumption

The agency intends to implement the following measures:

- monitoring medicine consumption in a manner recommended by the World Health Organization;
- promoting the role of clinical pharmacist;
- Agency for Pharmaceuticals publishes the list of interchangeable medicines, which have the same amount of active ingredients and are bioequivalent
- Introducing pharmacoeconomic analysis;
- Preventing the non-compliance with the regime of the issuance of medicines and medical devices;
- becoming an official and independent source of information for pharmacists, doctors and experts;
- launching projects that will explore patient adherence to pharmacotherapy;
- Collecting and analysing the impact of medical errors.

Priority 3 Monitoring adverse effects of medicines

The Agency has organized the following activities in the field of Pharmacovigilance that have been continuously conducted:

- Established National Centre for Monitoring Adverse Affects of Medicines;
- Established regional centres for monitoring;
- Collects reports from the existing regional centres;
- Evaluates reports and sends feedback to doctors who participated in the reporting;
- Developed the data base and information service for adverse reactions and interactions;
- Releases statements, changes the requirements for licence issuance and licence revocation, orders medicine withdrawal;
- Takes part in the international system for monitoring and alerts;
- Is about to adopt the Rulebook on monitoring of adverse effects of medicines;

11. Investments and Standardization

Financing of capital facilities and procurement of equipment of high technological value for the state owned health institutions is done from the budget, while other investments are financed from the HIF and health institutions. The Ministry of Health should establish and combine plans of **spatial capacities, investment maintenance of premises and equipment renewal**, in order to monitor spending from the standpoint of trade and economy.

Any new medical technology must be based on scientific achievements in medicine and in studies in economic efficiency. According to the recommendations, it should be acted in accordance with health technology assessments (HTA), which are based on current guidelines and ensure comparability and possibility of transfer of research. ISPOR (*International Society for Pharmacoeconomic and Outcome Research*) guidelines are most commonly respected in other countries. Bearing in mind that Montenegro is a small country, it should not be expected that national analysis are developed for each new technology (whether it is about medicine or procedures), for they will be taken over from other countries. In Montenegro, the service for the development of new health technologies could be centralized in the form of the Centre for Development and Implementation of Health Technologies within the MOH or CC, for all diagnostic and other technologies that require highly specific engineering staff for the development and maintenance of the aforesaid technology.

According to the Strategy on Resolving the Problem of Medical Waste Treatment of the Montenegrin Government, hospitals have to develop centres for medical waste. Hospitals will only deal with separation (collection, separation and storage of medical waste) according to the standards. In the next phase, medical waste is converted to communal waste. Giving concessions within private-public partnerships would be the rational approach to solving this problem. If the problem is entrusted to each health institution individually, it will result in an increase in the number of non-medical workers, non-uniformed equipment for medical waste treatment, increase in costs of the equipment procurement and others

A central service for the maintenance of medical equipment in all health institutions should be established. In addition, the aforesaid service would also perform an advisory-consultative role in determining the need for technical equipment procurement and construction investment. This centre can be a part of public health system (for example within CC) or in the form of public-private partnership.

In addition to the maintenance of medical equipment, this service would manage the projects of facilities, plan investments, make tender specification for the procurement of medical equipment and plan development of health institutions in technical terms (space, installations, equipment etc.). Based on current practice, health care institutions (except CC) do not have trained engineering staff, especially for medical

equipment. It creates major problems in the operation and maintenance of a technological process and creates huge maintenance costs in health institutions at the secondary level, which have entrusted the maintenance of medical equipment to the private sector, despite the fact that technical service of CC has the capacity to independently maintain the system. Department for protection against ionizing radiation and Service for meeting all the regulations provided by the law on occupational safety should be also planned to be incorporated within this centralized service

10.1. Priorities and guidelines for investments and standardization

Priority 1 National investment plan is based on the analysis of medical and economic feasibility, and assessments on the effects of introducing new technologies.

Priority 2 Formation of the central service for the development and implementation of new health technologies and maintenance of sophisticated medical and IT equipment.

Priority 3 Solving the problem of medical waste treatment of hospitals.

12. Information and Communication Technology, Telemedicine

Development of an efficient information system must be based on an analysis of existing system and a development strategy with a clear vision and goals. It must be based on basic information infrastructure, basic sets of medical and social data, which can be used for an electronic patient record. Integration of health and social information systems in the information portal ensured quality exchange of electronic data and services, development of telemedicine and electronic control.

Based on modern information and communication technology solutions, rational centres, in particular, in a part related to diagnostics (X-ray and laboratory) may reduce the costs of equipment procurement and its maintenance, help to overcome the problem of the shortage of medical workers in certain parts of Montenegro, and most importantly, raise the quality of diagnostics throughout Montenegro. It may be possible to implement the project of teleradiology, meaning that all the records of diagnostic equipment (X-ray, mammogram, CT, MRI, angiography, WITH) would pour into one central location given that Montenegro has a good communications infrastructure and most of medical equipment is fully digitalized (In CC, diagnostic equipment in CC is fully (100%) digitized). In addition, CC has engineering staff able to run this project independently and bring it to an end.

11.1. Priorities and guidelines for information and communication technology and telemedicine.

Priority 1 Integrated Hospital Information System (IHIS).
The project should also anticipated formation of a central services, which would serve as the support to the development and implementation of SW solutions at secondary and tertiary level.

13. Nongovernmental organizations, associations and public outreach

Civil societies are becoming increasingly an essential partner and active participant in the development of health policies, as well as driving-forces of activities in the implementation of planned measures.

Non-governmental organizations (NGOs) are an important partner in the long-term treatment of patients with chronic physical and mental disorders. With the development of a psychosocial rehabilitation programme, which enables patients with mental disorders to remain socially included, the repetition rate is reduced and accordingly the number of the returnees to psychiatric institutions is decreased and the length of stay shortened as well.

Associations of patients have been increasingly taking citizens' initiatives in order to secure influence on decision making at various levels**.** Different patient associations and similar stakeholders have assumed this role. Patients' associations protect the interests of groups or individuals and establish a civil dialogue with other parts of civil society and government and cooperate thereof in decision making.

Vocational associations take care of education and professional advancement of health care providers and thus support the maintenance of high level of professionalism in their activities. At various professional meetings, symposia and congresses, members of associations are introduced with the latest achievements in the detection and treatment of various diseases. Participation in the preparation of expert recommendations, orientations and guidelines of specific areas, which serve as a useful loadstar to professionals in their work presents an unavoidable aspect of cooperation. A significant part of their work pertains to the cooperation with international professional organizations.

Trade unions, which include health workers, through their activities, tend to make the work of its members be valued in a proper way and to fight for conditions of work.**,** The existing forms of cooperation provide for the identification and resolution of individual problems that a part of civil society is facing.

To **support** publicly beneficial activities of civil society, the principles of diversity and complementarity need to be respected. In addition, when it comes to the adoption of legal and other acts in the area of health protection, it should be taken care to take all measures to encourage civil dialogue and civil society independence and mechanisms for expression and collaboration.

Effective cannels of communication are a prerequisite to meeting the vision, because

it implies an active two-way communication in the area of raising awareness about the importance of care for one's own health and services of the health care system. The communication must include professional and interested public, the target society and every citizen.

Natural disasters, emergencies, epidemics, pandemics and wars largely hamper the current communication channels, and at the same time the health of citizens is particularly vulnerable in such situations. Therefore it is necessary to prepare communications plans in emergency situations.

14. Summary

Health status of the population in Montenegro, when measured by health indicators, is at the level of the Central and Eastern European countries. According to the values of health indicators Montenegro lags behind the most EU countries, due to various impacts that the population was exposed to in the nearby past and weak economic and social situation in Montenegro. Although the general situation in the past few years has recorded a positive trend, one can not expect rapid improvement of basic health indicators.

The main problems, which were identified in the health system and which have a stronger impact on health indicators and the population health result from the fact that the secondary and tertiary health care level is dominated by the capacity and resources, while the efficiency and quality of health care were not a priority. Therefore, the system appears to be based on irrationalities, because of which the system could not function in a coordinated and integrated manner.

The main problems that need to be set as a priority to address are as follows:

1. The gap between the identified rights from health insurance and financial capabilities to meet those rights; inadequate access to health services in the public system and the need to define the basic package of services at secondary and tertiary level.
2. The structure of health care workers is inadequate and does not match the expectations and needs of citizens; there is a huge number of non-medical workers in the structure.
3. The need to improve the system of control and safety in health care, and quality of data collection.
4. The need to change the method of payment for health services - health service is funded according to capacities and not according to the needs.
5. The need to continue developing the quality information system at the secondary and tertiary level in order to obtain good quality data at the level of health, as a significant tool in the system management.
6. The integration of private and public sector in order to meet the needs of the population for fast and efficient health services.

7. The development of an active two-way communication in raising awareness about the importance of care of one's own health and needs for services in the health care system.

Although many of the objectives of the health policy during the implementation of the reform project have been achieved to a significant extent, such as the development and efficiency of the network of health institutions, especially at the primary level, with the available financial and human resources, still, it is necessary to continue monitoring, reviewing and setting new and bigger goals by taking into account the emerging needs of the population. Here, a special focus is put on the need for further continuation of reform activities at the secondary and tertiary health care level, with constant speeding up of the process of quality improvement, rationalization, optimization, resource management, transparency of funding and functional connection between the public and private health services for the better functioning of the quality health system and financial sustainability of health care.

The main goal of health policy is preservation and improvement of the population health along with sustainable health care system. It is about a permanent upgrading through continuous process of identification and analysis of the causes of problems, setting priorities and deadlines for specific activities, and the evaluation for the redefinition of certain objectives. The natural status and the evolution of health systems have been a constant upgrading and promotion.