



Cross-border HealthCare Cluster



STRATEGY OF THE CROSS-BORDER HEALTHCARE CLUSTER

Project “INTEGRATION OF EUROPEAN HEALTHCARE STANDARDS
AND INOVATIONS ON THE WAY FOR DEVELOPMENT
OF THE CROSS-BORDER HEALTH CLUSTER”

Ref: CB006.1.31.017

This project is co-funded by EU through the INTERREG-IPA

Cross border Programme



CCI No. 2014TC16I5CB006

Cross border Healthcare Cluster - CBHealth

S T R A T E G Y

CONTENT

1 PART ONE - CLUSTER ANALYSIS

1.1.	Executive Summary	3
1.2.	Introduction	4
1.3.	Overview of the health care sector in the CB region	4
1.3.1.	Health care system in Macedonia	5
1.3.2.	The healthcare system in Bulgaria	12
1.4.	SWOT analysis of the Health Care sector in the CB region	18
1.5.	The future of the health care sector in the CB region	19
1.6.	Legal and administrative regulations for establishment and development of the CB Cluster in Bulgaria and Macedonia	22
1.6.1.	Legal framework for cluster development in European countries	22
1.6.2.	Examples of cluster legal forms in certain EU countries	25
1.6.3.	Cluster definition and characteristics of the clusters in BG and MKD	27
1.6.4.	Legal framework for cluster development in Macedonia	28
1.6.5.	Legal framework for cluster development in Bulgaria	33
1.6.6.	Conclusions and recommendations	35
1.7.	Overview of the Health Care Cluster membership structure	36
1.8.	Organizational structure and stakeholders map	37

2 PART TWO - HEALTH CARE CLUSTER STRATEGY AND AN ACTION PLAN

2.1.	Need for a Cluster strategy and action plan	39
2.2.	Cluster strategy for developing Health Care Cluster	40
2.3.	Underlying concepts	41
2.4.	Innovations and Investments development	41
2.4.1.	The EU policy context of smart specialization	41
2.4.2.	The rationale of smart specialization in the health care sector	45
2.5.	Mission, vision and goals of the Health Care Cluster	49
2.5.1.	Proposed strategic fields, goals, objectives and measures for cluster development ...	50
2.6.	Action plan	52
2.7.	Marketing and tools for promotion	55
2.7.1.	Communication as instrument of modern cluster management	55
2.7.2.	Communication targets	56
2.7.3.	Marketing and communication instruments	57
2.8.	Main obstacles and challenges	62
2.9.	Conclusions and next steps	63
	Annex 1: Health Care Cluster Road Map with an action plan	65

1 Part 1: Cluster Analysis

1.1 Executive summary

In spite of the lack of many examples of clustering in the health care sector, recent researches indicate that there is an interest and a solid potential for increasing the cooperation and development of a Health Care Cluster in the CB region between Bulgaria and Macedonia. The initiative for establishing Health Care Cluster of the CB region, emerged within the project “Integration of European healthcare standards and innovations on the way for development of cross-border health cluster”, funded under 1st call for proposal within the INTERREG - IPA CBC Bulgaria – Macedonia Programme

The main idea behind setting up Health Care Cluster in the CB region is to enhance cooperation and networking between all the stakeholders in the field of health care sector in order to create synergy, develop joint projects and improve the quality of the health care services.

The institutionalizing of existing cooperation and initiative, through registration of the Health Care Cluster (CBHealth) is a good opportunity for the cluster management to set up a clear strategy with those cluster members which are committed to participate actively in designing and implementation of cluster activities.

Through a participatory process after defining the CBHealth cluster mission and vision, the cluster members have identified the following priority fields, which need to be tackled in the process of increasing the cluster effectiveness:

- A. Strengthening organizational development and improving the capacity of the cluster management
- B. Improving the individual performance of cluster members
- C. Utilizing innovative potential through strengthening regional and international cooperation
- D. Promotion of the CBHealth and creating synergy effects with tourism sector
- E. Achieving sustainability in terms of self-financing of cluster activities

The cluster strategy also proposes immediate measures for achieving the long term results for achieving sustainability, which would contribute towards developing a functional and effective cluster.

1.2. Introduction

The initiative for establishing Health Care Cluster of the CB region, emerged within the project “Integration of European healthcare standards and innovations on the way for development of cross-border health cluster”, funded under 1st call for proposal within the INTERREG - IPA CBC Bulgaria – Macedonia Programme

The Health Care Cluster aims at setting a framework for necessary actions to be taken by all cluster members in a joint effort to increase the contribution to improve the effectiveness and performance of the health care system in the CB region.

For this Cluster strategy, the following definition of clusters by Prof. Michael Porter has been used – “A business cluster is a geographic concentration of interconnected businesses, suppliers, and associated institutions in a particular field”. Clusters are considered to increase the productivity with which companies can compete, nationally and globally.

The document is divided in two parts – part one, Cluster Analysis and part two, Cluster Strategy.

The part one begins with the short background information about the health care sector in the East region in Macedonia and Blagoevgrad district in Bulgaria, which is followed by overview of the membership structure of Crossborder Health Cluster CBHealth. This section does not represent an in-depth analysis of the health care sector in both regions, but provides a general context in which Health Care Cluster will operate, based on desk research from existing documents produced by governmental institutions and international donor organizations, as well as on information gathered from direct interviews with cluster management, companies and business support organizations in this sector. The part one continues with analysis of legal and administrative framework for establishing clusters in the CB region and innovative approach of the HCC strategy, especially through smart specialization.

After giving a rationale for elaboration of cluster strategy and explaining the underlying concepts of systematic competitiveness and clusters, part two continues with defining mission, vision and strategic goals of Health Care Cluster and providing recommendations for cluster development and actions to be taken in short and long term. The Cluster strategy is supposed to serve as a solid base for achieving the goals and objectives through implementing activities outlined in the action plan. The second part of the strategy contains marketing and communication tools aimed at both, internal (cluster members) and external (potential cluster members, broad public and media) targets.

1.3. Overview of the Health care sector in the CB region

The statistical data in this strategy are taken primarily from official publications of the Ministry of Health of RM, National Statistical Institute of Republic of Bulgaria, State Statistical Office of Republic of Macedonia, Institute of Public Health of Republic of Macedonia (IPH), and from the “Health for All” database (HFA-DB) of the European Bureau of the World Health Organization. In absence of official data about

the representatives of the health care sector in the East planning region, information from the business register Zlatna kniga has been used as well, in order to estimate the size of the potential members of the Health Care Cluster. However, the limitation of the source should be taken into the consideration.

A health system according to the World Health Organisation includes all the actors and activities the primary purpose of which is to promote, improve or maintain the health of the citizens.

Organised health services, i.e. the health care system, are only one of the many factors for maintaining good health, recovering from ill health, or making the life with chronic illness easier.

Delivery of the health services to citizens

Health care in the CB region is relatively easily accessible (geographically, economically and time-wise) for the population, because it is delivered within a widespread network of health care institutions. This makes it possible for around 90% of its population to get a health service in less than 30 minutes.

Occupations found in the healthcare industry vary as much as any other industry. Professionals who have earned the most advanced educational degrees frequently work in teams with those with lesser training. In fact, some occupations in health care do not even require a two-year degree. The profile of the average worker in the health care industry is female and possesses at least some postsecondary education. The workforce does not currently face the magnitude of unemployment as is felt in some other industries.

1.3.1 Health care system in Macedonia

The health care system of the Republic of Macedonia is developed so that it becomes compatible with the EU system, thus providing for free movement of the health professionals, services and patients.

The health care system provides:

- Public health services aimed at the community, as well as health services to individuals;
- The generation of human and financial resources;
- Proper financing of the health care sector: raising and pooling of sufficient financial resources, purchasing effective and quality services from health care providers, and proper methods for paying health care providers;
- Stewardship: effective and efficient organisation and management of the health care sector.

Like in many other countries, the health care system in Macedonia is oriented towards primary health care as the basis of the system, where the first contact with the health service is made and where the majority of the health care needs of the population are satisfied.

Patients who need health care at higher level are referred by the primary health care doctor to ambulatory-policlinic treatment or hospital treatment. The network of health care institutions at secondary level is widespread, with certain differences in terms of space capacity and availability of staff and equipment. Despite the widespread network of different health care institutions, the system does not function as an integrated and coordinated system.

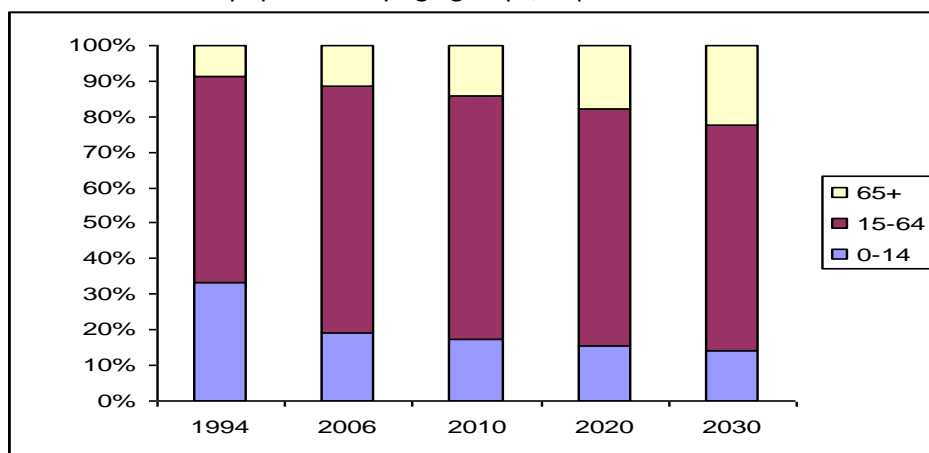
According to the Health Strategy of the Republic of Macedonia, 2010 the health care sector is faced with several challenges associated with the improvement of the health status of the population, the provision of basic benefits package, delivery of health services, public health, planning, management and development of human resources, quality assurance, health financing, and provision of a sustainable system of health care.

In some respects of health, Macedonian citizens are less healthy than the average EU citizen. One of the biggest challenges for the health care system is aging of the population

The structure of the population by age is one of the most important aspects of the population, which influence its health care system and development in general. According to age groups, the number of old population is increasing, but also its share in the total population as well. Specifically, in 1994, the share of the population aged 0 to 14 years decreased from 33.2% to 19.2% in 2006, with projections that it is continuously decreasing to, 15.4 (2020) and 14.4 percent (2030).

The estimates of the UN are that in the coming period the old population will increase to 17.9% in 2020 and 22.5% in 2030. (See: Figure 1)

Figure 1: Structure of the population by age groups, Republic of Macedonia: 2006-2030



Source: State Statistical Office of RM

As for the total number of years an average citizen can expect to live (average total life expectancy at birth), this is five years less in Macedonia than in the 15 “old” countries of the European Union (EU15): 73.5 years vs. 79.1 years (source: HFA-DB, 2003 data). As in most other European countries, Macedonian men can expect to live 5 years less than Macedonian women. Much of the difference with EU15 is explained by a higher prevalence of cardiovascular disease, partly caused by a high use of tobacco and by uncontrolled hypertension and hypercholesterolemia. Another indicator that combines life expectancy with the burden of disease is the so-called “healthy life expectancy”, i.e. the total number of years that a person can expect to live in good health, without disease or permanent disability. Healthy life expectancy in Macedonia is 67.5 years, compared to Bulgaria (66.4), (source: Global Health Observatory data 2016).

East region’s aging population will create increased demand for health care services in the future, especially in the areas of nursing and residential care

Another factor that affects overall health care system is poverty. Nearly one-third of Macedonian citizens are poor. A calculated 30.4 percent of people in Macedonia live below the poverty line (source: State Statistical Office, 2016). The population groups identified as being most at risk of poverty are the unemployed, socially impaired households, pensioners and farmers. Poverty has a serious impact on the health status of the population and on the access to health services.

Three segments comprise the health care system: primary, secondary and tertiary health care.

Primary health care

Primary health care in Macedonia is provided by different types of private and public health care organizations: doctor’s offices, health stations and health houses. Preventive, promotional and curative services are provided in the primary health care. The latter is provided by many different types of health workers and co-workers: general physicians, specialists in general medicine, pediatricians, specialists in school age medicine, gynecologists, and specialists in occupational medicine. The health workers mentioned above do not provide comprehensive primary health care except in villages with only one doctor. This system performs well in some areas (for example when providing immunization and antenatal care) and less well in others (for example non-rational prescribing, high referral rates, lack of co-ordination between various treatments, and prevailing medicaments treatment of the patients with mental health problems without paying sufficient attention to the psychosocial dimensions of the treatment). Too many patients are being seen by emergency care services or by secondary and even tertiary level physicians that could have been treated well at primary care level if the conditions there would have been better, or if gate keeping had been respected better.

As in many other transition countries, widespread privatization has taken place in the dentistry and pharmacy sectors. Many physicians have also set up private practices. At present, 607 out of 1,722 primary health care physicians (most of them

general physicians, pediatricians and gynecologists) are working in private practice (source: Ministry of Health). Private primary care physicians do not provide comprehensive primary care including all preventive services and urgent care after office hours, i.e. they do not provide continued health care. The purpose of privatization of the primary health care is to improve the quality of the health services.

Citizens covered with the compulsory health insurance are obliged to choose a doctor in the primary health care sector - in a private or public health care institution. The principle of choosing a doctor in the primary health care in Macedonia has traditionally been fragmented and depends on the age and the sex of the users. Members of one family will usually have several chosen doctors (general practitioner, gynecologist and pediatrician). A chosen doctor is not the same as family physician. In order to avoid fragmentation of the primary health care system, the Ministry of Health will aim at establishing multidisciplinary teams where the different doctors in one family will be in direct contact and cooperation.

Secondary and tertiary health care

Secondary health care is provided in specialist-consultative services, general and special hospitals, offices and institutes. Tertiary health care is provided in clinical hospitals and in the University Clinical Centre. Preventive, curative and rehabilitation health services are provided at these two levels, and health care is provided by different types of specialists and sub-specialists. There are nearly 10,000 beds in the hospital sector, or 4.8 beds per 1,000 inhabitants, which is less than the EU average (6.2 per 1,000 population). More than half of the hospital beds are in specialized or tertiary care, which is too high of a proportion. Outside Skopje, there are 15 general hospitals (secondary health care) with at least the basic specialties of internal medicine, surgery, gynecology and obstetrics and pediatrics.

Given that there are no data on regional basis, for an overview of the health care system in the East planning region, combined data from different sources will be used. In addition to data on municipality level from State Statistical Office or Institute for Public Health, information from the business register Zlatna kniga has been also used, but the limitation of the source should be taken into the consideration.

The size of the health care system in the East planning region in terms of number of hospitals, number of doctors, staff and beds is presented in the Table 1.

Table 1. General hospitals (secondary level), 2004.

General hospital	Number of inhabitants	Hospital doctors per 100.000 people	Staff with secondary school training per 100,000 people	Beds per 100,000 people
Kochani (incl. Vinica, Berovo, Delchevo, Pehchevo)	113,651	13	48	130
Stip (incl. Probishtip and Radovich)	100,239	59	176	516

Source: Institute for Public Health (IPH)

In addition there is a health gap between socio-economic groups within the East planning region, but also between the region and national averages, which are presented by several examples.

The need for an efficient health care system is especially emphasized by the unfavorable demographic trends in the region, which are presented in the Table 2

Table 2. Natural population movement in the East planning region (2012)

	Number of newborn		Number of dead		Natural growth	
	%	No	%	No	%	No
Berovo	7.5	136	13.8	251	-6.3	-115
Vinica	9.7	189	9.5	186	0.2	3
Delcevo	8.6	211	10.4	253	-1.7	-42
Kochani	8.9	430	10.6	513	-1.7	-83
Probistip	8.5	131	10.0	155	-1.6	-24
Shtip	10.6	559	11.0	578	-0.4	-19
Republic of Macedonia	11.4	23,568	9.8	20,134	1.7	3,434

Source: State Statistics Office

Table 3. Mortality rate among new-born in Macedonian 2012

	Number	Death rate (per 1000 newborn)
Berovo	3	22,1
Vinica	2	10,6
Delcevo	1	4,7
Kochani	6	13,1
Probistip	9	8,4
Shtip	5	8,9
Republic of Macedonia	184	7,8

Source: State Statistics Office

Table 4. Health care system in the East planning region (2012)

	Nr. of doctors	Nr. of inhabitants per 1 doctor	Nr. of dentists	Nr. of inhabitants per 1 dentist	Nr. of pharmacies	Nr. of inhabitants per pharmacies
Berovo	35	523.8	12	1,527.8	8	2,291.8
Vinica	30	650.9	16	1,220.4	7	2,789.4
Delcevo	47	520.9	17	1,440.1	11	2,225.5
Kochani	100	483.3	36	1,342.5	22	2,196.9
Probistip	29	534.9	11	1,410.2	6	2,585.3
Shtip	183	287.6	37	1,422.4	24	2,024.2
Republic of Macedonia	5,755	358.1	1,652	1,247.6	888	2,321.0

Source: Institute of Public Health of RM

Table 5. Health care system in the East planning region (2012)

	Number of beds	Number of beds per 1000 inhabitants
Berovo	-	-
Vinica		
Delcevo	4	0.2
Kochani	165	3.4
Probistip	6	0.4
Shtip	462	8.8
Republic of Macedonia	9,076	4.4

Source: Institute of Public Health of RM

Table 6. Health care system in the East planning region (2012)

	Doctors		Health workers with college or secondary education	
	Total	Specialists	Total	Per 1 doctor
General and clinical hospitals				
General hospitals				
Kochani	21	17	51	2.4
Probistip				
Shtip				
Republic of Macedonia	1,011	744	2,198	2.2
Clinical hospitals				
Shtip	83	42	180	2.1
Republic of Macedonia	1,011	744	2,198	2.2

Source: Institute of Public Health of RM

Table 7. Network of Health care providers in the primary health protection in the East planning region (2012)

	Health stations	Health houses	Non-hospital treatment	Locations in villages		
				Total	With permanent doctor	With part time doctor
Berovo	-	2	0	4	4	0
Vinica	-	1	1	2	2	0
Delcevo	-	1	1	4	4	0
Kochani	-	1	0	10	10	0
Probistip	-	1	1	2	2	0
Shtip	-	1	0	1	1	0
Republic of Macedonia	5	34	9	262	255	7

Source: Institute of Public Health of RM

Table 8. Network of Health care providers in the secondary health protection in the East planning region (2012)

		Doctors		Health workers with two years university and secondary education	
		Total	Specialists	Total	Per 1 doctor
Berovo	6	6	6	6	1.0
Vinica	4	5	5	6	1.2
Delcevo	8	10	10	17	1.7
Kochani	21	22	19	38	1.7
Probistip	6	6	6	5	0.8
Shtip	19	24	22	37	1.5
Republic of Macedonia	548	809	715	1,162	1.4

Source: Institute of Public Health of RM

In absence of official data about the representatives of the health care sector in the East planning region, information from the business register Zlatna kniga has been used in order to estimate the size of the potential members of the Health Care Cluster (Table 9). However, the limitation of the source should be taken into the consideration.

Table 9. Private health care providers in the East planning region

Location	Public and private health care institutions (hospitals, polyclinics, specialized health care providers (cardio, chirurgic, pulmology, etc.)	Pharmacies	Stomatology (dentists)
Berovo	9	9	6
Vinica	9	18	12
Delcevo	5	6	8
Kochani	23	45	39
Probistip	7	9	8
Pehcevo	3	3	0
Shtip	31	31	40
Total	87	121	113

Source: Business register - Zlatna kniga

Main health care services, (4 polyclinics, 6 biochemical and diagnostic laboratories, 3 pediatric, etc.), and are concentrated in Stip as the biggest urban center, while there is only one neuropsychiatric health center in Kocani

1.3.2 The healthcare system in Bulgaria

The Republic of Bulgaria, as a member state of the European Union, shares the common European policies for (achieving) the highest possible standard in its healthcare system. Bulgaria's National Health Strategy 2020 is the leading strategic document which covers in details the long-term objectives for the development of the healthcare system by 2020. After an in-depth analysis of the health-demographic indicators and the state of the health care system, the vision and priorities of the Strategy were developed to ensure improvement of citizens' health and well-being, reducing health inequalities through a comprehensive, fair, sustainable and high-quality healthcare.

The demographic situation in Blagoevgrad region, albeit slightly better than the average for the whole country, is characterized by a steady decreasing tendencies and aging of the population. Demographic indicators are influenced by general tendencies of the developed countries - reduced birth rates, decreasing number of marriages, increased urbanization – as well as tendencies from the transition countries, such as, higher mortality rates and intense external migration. The low

birth rate and high mortality rate determine the negative natural population growth over the last ten years.

Blagoevgrad Region is part of the Southwest Planning Region (NUTS 2 level). The territory of the area occupies 6 452.3 km², which represents 5.8% of the country. This administrative district is divided into 14 municipalities, 96 communities and 280 settlements. Blagoevgrad region ranks third in Bulgaria in terms of territory and sixth in population. The population in Blagoevgrad region as of 31.12.2015 is 315 577, which represents 4.4% of the population of Bulgaria. Compared to the previous year, it decreased by 11,234 (-3.56%). The structure of the urban and rural population remains 60% to 40%. There is also a tendency of increasing female (51%) to men (49%) ratio.

Table 10. Main demographic indicators for the Blagoevgrad District

Indicators	2013	2014	2015
Population as of 31.12. (Total number)	318,110	315,577	312,831
Natural increase rate (per 1 000 persons of the population) - ‰	-2.7	-3.6	-3.5
Infant mortality rate (per 1 000 live births) - ‰	7.6	6.4	5.3
Mortality rate - Total (per 1 000 population) - ‰	11.7	12.9	13.0

Source: National Statistic Institute, Bulgaria

Table 11. Main health care indicators for the Blagoevgrad District

Indicators	2013	2014	2015
Hospitals as of 31.12. (number)	12	13	13
Hospital beds in the hospital establishments as of 31.12. (number)	1,459	1,617	1,608
Physicians in health establishments as of 31.12. per 10 000 population (number)	28.8	29.8	31.5

Source: National Statistic Institute, Bulgaria

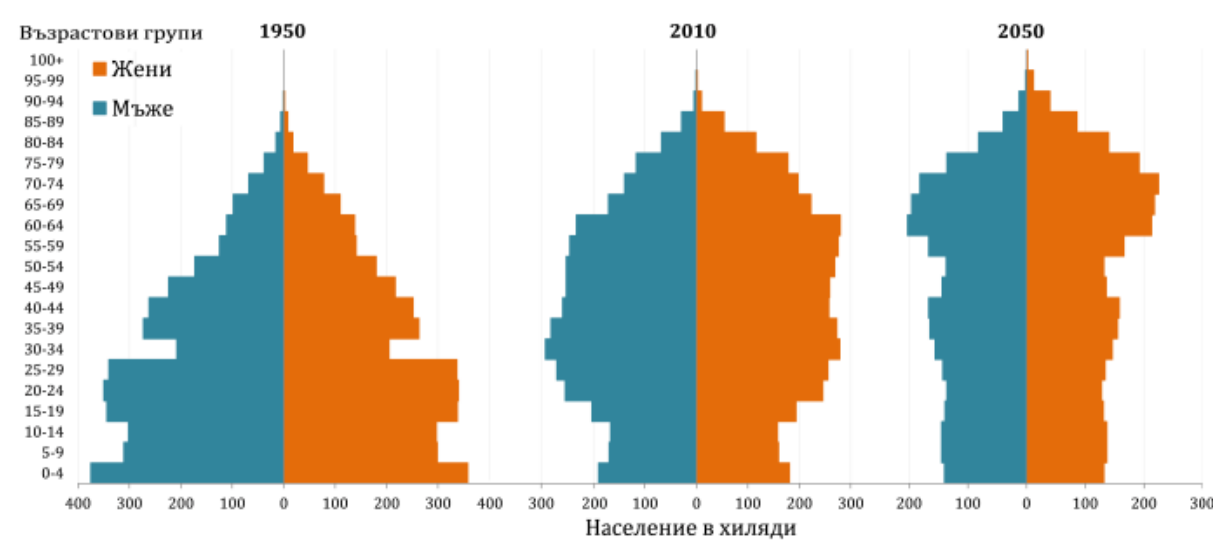
Changes in the age structure of the population reflect the demographic aging process (the insignificant increase in the number and share of the population up to the age of 15, which is 15.0% of the total population in 2015. At the same time, the relative share of the population over 65 years, reaches 21.4% in 2015. The average life expectancy in Bulgaria of 74.5 years remains lower than the EU average.

Table 12. Demographic indicators of the Blagoevgrad region

Municipalities	Population						Natural growth (1000 population)		
	Population	Male %	Female %	Urban %	Rural %	Working age %	Birth rate	Mortality	Natural growth
Republic of Bulgaria	7 202 198	49%	51%	73%	27%	61%	9,38	15,13	-5,74
Blagoevgrad region	315 577	49%	51%	60%	40%	64%	9,35	12,90	-3,56
Bansko	12 784	49%	51%	91%	9%	62%	9,15	16,43	-7,27
Belica	9 706	49%	51%	33%	67%	63%	11,23	11,75	-0,52
Blagoevgrad	76 571	48%	52%	92%	8%	67%	10,26	11,26	-0,99
Goce Delchev	30 587	49%	51%	62%	38%	64%	9,91	11,64	-1,73
Grmen	14 846	50%	50%	0%	100%	65%	11,32	9,36	1,95
Kresna	5 421	51%	49%	63%	37%	59%	6,46	21,40	-14,94
Petrich	52 328	49%	51%	54%	46%	62%	8,39	13,40	-5,01
Razlog	20 065	49%	51%	59%	41%	61%	9,67	15,20	-5,53
Sandanski	39 099	49%	51%	66%	34%	62%	9,28	13,38	-4,09
Satovca	14 829	50%	50%	0%	100%	66%	9,31	10,59	-1,28
Simitli	13 909	50%	50%	47%	53%	63%	7,41	14,45	-7,05
Strumiani	5 433	49%	51%	0%	100%	52%	9,57	21,17	-11,60
Hadzidimovo	9 613	51%	49%	27%	73%	61%	6,14	14,67	-8,53
Yakoruda	10 386	49%	51%	53%	47%	64%	8,09	12,71	-4,62

The World Bank's report on “Mitigation of the Economic Impact of Aging: Possible Options for Bulgaria in 2014” illustrates the following chart of the population of Bulgaria by groups

Figure 2: Age pyramid of the Bulgarian population by groups of women – men

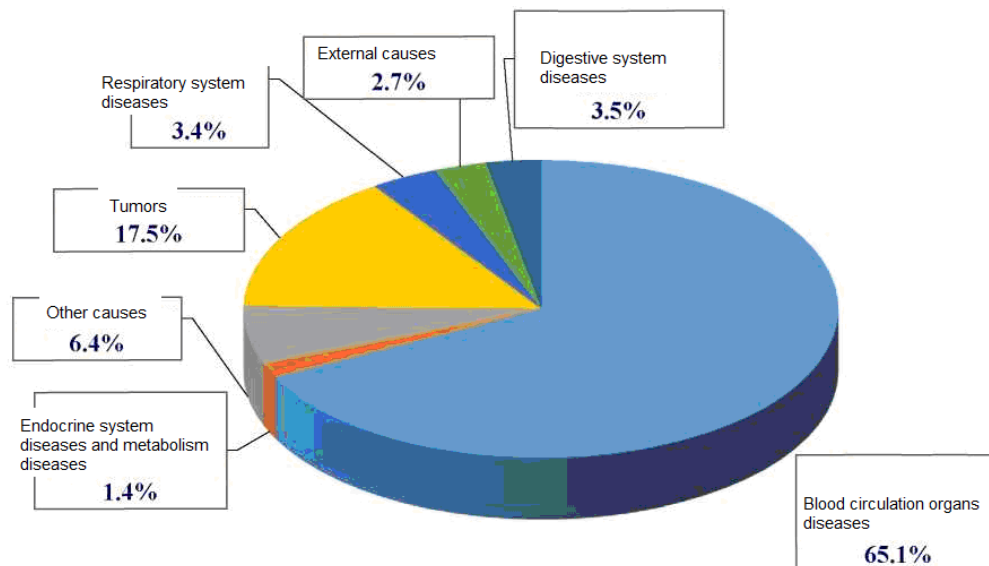


Source: World Bank Report - “Mitigating the economic impact of an aging population: options for Bulgaria”

The long-term decline in birth rates (9.2% o), which is objectively conditioned by the impact of a number of demographic, social and economic factors, remains below the EU average (10.02%), but is close to the level in most European countries. High level

of mortality – general and premature – remains a problem for both Bulgaria and the Blagoevgrad region. The tendency for mortality to be higher for men than for women and in villages rather than in cities is maintained. The indicator remains significantly higher than the EU average.

Fig. 8 Mortality rate structure by death causes in 2013



Source: Ministry of Health, NPHAC – Brief Reference Book – Health Care 2014

The analysis of the data on basic health-demographic indicators clearly shows that Bulgaria, compared to the European Union countries, is faced with serious challenges related to:

- High level of total mortality and premature mortality;
- High level of maternal and infant mortality;
- High level of disability and permanent incapacity;
- Low life expectancy in years and years in good health

The main reasons for the deteriorated health indicators are:

- Chronic non-communicable diseases, major causes of death and reduced working capacity, with the largest share of cardiovascular diseases and malignancies;
- Conditions occurring during pregnancy, childbirth, and postpartum periods; perinatal period; congenital anomalies.

The unsatisfactory results of the policies pursued so far to address these challenges against the backdrop of the deteriorating demographic situation and the presence of significant social risks for large sections of the population requires a comprehensive change in approaches to ensuring the health and well-being of Bulgarian citizens.

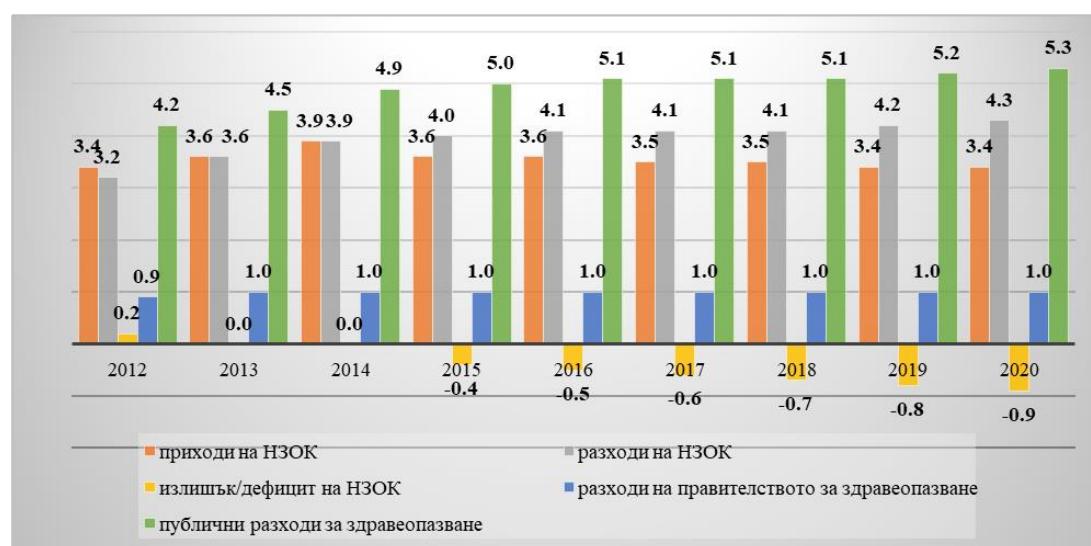
Functioning of the health system

Healthcare is one of the social systems in which there is identified need for a key reform aimed at a sustainable improvement of the health indicators of Bulgarian citizens, health promotion and disease prevention.

In 2015, the "Health 2020 Objectives" concept was adopted, which sets Bulgaria's national health goals in the field of healthcare aimed at sustainable improvement of the health of Bulgarian citizens as a key factor for sustainable growth.

Within the National Health Strategy 2020, ensuring effective mechanisms for sustainable funding of the health system is a key factor in implementing the wider reform agenda and reorienting the system to changing health needs. In recent years, rising healthcare spending has put serious challenges for governmental institutions across the globe. In many countries, the relative share of the health budget as a percentage of GDP is greater than ever. A number of health systems fail to contain costs and financial pressures make it even more difficult to achieve the right balance between needs and resources and to provide adequate social protection. The increase in costs is mainly determined by supply, including new treatment methods and technologies, and the increasing expectations and demands of people to protect against health risks and access to high-quality medical care. The main trends of the demographic situation of the population and the extraordinarily high increase in health care costs coupled with labor market and GDP trends, which mainly cause income stagnation, lead to increasing deficits in the government's share of the health budget.

Figure 3: Health, revenue and expenditure forecast for 2013-2020



Source: World Bank

According to World Bank Report 2015, demographic, epidemiological and economic trends coupled with existing structural inefficiencies in the current healthcare system pose significant challenges for the future adequate funding of health services

for the Bulgarian population. This has led to a situation where the current healthcare system does not meet the needs of the population and where, without significant reforms, the future health and financial outlook looks bleak.

Structure of the healthcare system in Bulgaria

The structure of the health system in Bulgaria reflects current policies in the healthcare system and is characterized by:

- Unequally distributed and fragmented hospital network;
- Insufficiently developed and used capacity of outpatient care leading to unequal access of the population to basic medical care, especially in hard-to-reach and remote areas;
- Disinfected and resource-poorly provided emergency assistance;
- Lack of capacity to provide services related to long-term care for people with disabilities, chronic diseases, elderly people;

Therefore, it is imperative that the healthcare system responds swiftly and expediently to these pressures by regrouping resources within individual types of health services and by seeking the best and most cost-effective solutions in the changing health needs and requirements of patients.

The number and type of hospitals in Bulgaria, the available facilities and equipment, as well as the number and structure of the medical and other professionals working in these establishments should be reorganized in order to achieve better results in terms of clinical practice, funding and quality of health services.

Strengthening the health system and focusing on people's needs from affordable and quality medical care and integrated care is the major challenge for health policy makers in the forthcoming years.

Following the National Health Map and District Health Map of the Blagoevgrad District in 2016, the structure of the health network and the provision of beds in the Blagoevgrad district is presented in the Table 13

Table 13. Structure of the provision of beds in the Blagoevgrad district

	Population	Total number active beds	Intensive	Therapeutic	Surgery	Pediatric	Other types of beds	Long-term care	Psychiatric	Physiotherapeutic
Bulgaria	7202198	35302	1717	16912	8748	4572	16240	6230	4010	6000
Blagoevgrad	315577	974	60	487	177	150	632	234	110	288

The following are medical establishments in Bulgaria categorized by activity and type:

Primary non-hospital assistance

- Individual practice for primary outpatient medical care
- Group Practice for Primary Outpatient Medical Care

Specialized non-hospital assistance

- Individual practice for specialized outpatient medical care
- Group Practice for Specialized Outpatient Medical Care
- Medical Center
- Diagnostic-consultative center
- Stand-alone medical-diagnostic laboratory
- Self-medicated laboratory

Hospital assistance

- Multiprofile hospital for active treatment
- Specialized Hospital for Active Treatment
- Hospital for long-term treatment and rehabilitation
- Hospital for long-term treatment
- Specialized Rehabilitation Hospital
- State Psychiatric Hospital

Other healthcare establishments

- Emergency Medical Center
- Center for Transfusion Hematology
- Complex oncology center
- Mental Health Centre
- Center for skin-venereal diseases
- Home for medical and social care
- Dialysis Center

1.4 SWOT analysis of the Health care sector in the CB region

SWOT analysis of the Health care sector in the CB region has been prepared by the representatives of the Health care sector from both countries, on a joint workshop in Stip in the last week of June 2017. The summary is presented in the following table

Table 14. SWOT analysis of the health care sector in the CB region

S trengths	W eaknesses
<ul style="list-style-type: none">• Good quality of human resources / skilled personnel• Improvement of medical equipment in the area of diagnostics in the last several years• Applying of new methods• Good education of medical personnel – who has access to quality training courses in the country and abroad• Good cooperation with the Faculty of	<ul style="list-style-type: none">• Insufficient budget for the health sector• Lack of human resources (personnel)• Narrow range of diagnostics for additional activities• Prolonging the technical procedures by Council for Public Procurement• Underdeveloped medical tourism (e.g.

<p>Medical sciences of “Goce Delcev” – Shtip University and South West University “Neofit Rilski” Blagoevgrad</p> <ul style="list-style-type: none"> • Efficient system of appointments (my term) for specialist exam (hour – minutes) • Centralized accounting financial system • Social health care system – health care services are available for all people, regardless of their social status • Equal treatment of public and private health care providers, when signing contracts with National Health Insurance Fund • Good communication between health care providers and business organizations and professionals in the health care sector • Good access to doctors-specialists/health care providers • A law-guaranteed patient's right to choose where to be treated (public or private healthcare); • Availability of modern equipment in the health care providers • Availability of adequate software solutions, which enable real time connection between the National Health Insurance Fund and health care providers and for electronic testing of laboratory and other results 	<p>aesthetics medical treatments).</p> <ul style="list-style-type: none"> • Lack of cooperation between Private and Public Health Organizations • Insufficient cooperation between Fund for Health Insurance and Ministry of Health • Low level of capitation • Insufficient cooperation between Trade Union, Medical Chamber and Ministry of Health in the field of collective agreements • Insufficient cooperation between Ministry of Health and Ministry of Education and Science • Lack of electronic health records of the patients • Insufficient number of working places for nurses, midwives, X-ray and clinical technicians trained in the Bulgarian universities, and in particular at the Southwest University in Blagoevgrad (only nurses have been trained there although in 2017-2018, only 8 have been given a chance to work there) • Lack of financial resources for conducting periodic in-depth training of healthcare staff • High level of bureaucracy in the public health care providers • Insufficient communication between emergency departments of public and private hospitals and Emergency Ambulance Centers • Insufficient payment of medical assistance by the National Health Insurance Fund
---	---

Opportunities	Threats
<ul style="list-style-type: none"> • Well-developed wellness tourism, especially in Bulgaria • Increasing number of tourists in Bulgaria, might be attracted to visit the CB region on Macedonian side • Increasing interest for wellness tourism in general 	<ul style="list-style-type: none"> • High level of migration as a result of lack of economic opportunities in the region • Low purchasing power of local population prevents them from engaging into wellness tourism • Health care systems on national level is not appropriate for closer CB cooperation (e.g. Bulgarian health insurance does not cover medical treatments in Macedonia)

1.5 The future of Health care sector in the CB region

The first of two key drivers that will increase the demand for health care is the aging population in the region. The second key driver is creating linkages with specific tourism segments (winter tourism, wellness, adventure tourism) which are strategic economic sectors in CB region

According to the Health Strategy of Republic of Macedonia, 2020, the analysis of the health status of the population and of the functioning of the health care system leads to the following priorities that are to be achieved by the year 2020:

- Improving the health status of the population, with special attention to vulnerable groups, and with emphasis on health promotion.
- Improving the effectiveness and efficiency of the health care system through introduction of professional management in the institutions, and structural changes in the delivery of health care services, with emphasis on primary care.
- Modernizing the system for protecting the public health according to the EU standards, with emphasis on the network of Institutes of Health Protection and occupational medicine services.
- Improving the planning and management of human resources in the health care system according to the needs.
- Establishing a total health care quality assurance system.

- Improving the health system financing by way of establishing sustainable mechanism of financing and resource allocation

According to the Concept “Objectives for health 2020” and Health Strategy of Republic of Bulgaria 2020, on the basis of the population’s health status in Bulgaria, there is specification of the following national goals and main priorities until the year 2020:

National Health goals

1. Reduction of mortality rates for children 0-1 years of age – to 6.8 per 1000 born-alive;
2. Reduction of the mortality rate for children from 1-9 years of age – to 0.24 per 1000 children;
3. Reduction of the mortality rate to 0.28 per 1000 in the case of young people 10-19 years old;
4. Increase of the work potential and reduction of mortality rates for persons in economically active groups 20-65 years old to 4.19 per 1000;
5. Increase of the average longevity of people older than 65 to 16.4 years;
6. The indicated health goals are directly related to the established problems and negative trends with regard to the health of Bulgarian citizens and provide opportunity for objective assessment of the integrated policies for their realization.

Main priorities:

In order to achieve the specified health goals the following priorities are specified:

- Provision of financial stability for the health care system;
- Change in the operation of the health care system by providing quality and results and achieving national health care goals
- Active approach for care and creation of support environments for specific and vulnerable groups of the Bulgarian population;
- Strengthening the capacity of public health;

Based on the existing documents and interviews and workshop with the representatives of the health care system the priorities are transferred into following directions they should be used as a base for organizing cluster activities) of the health care sector in the CB region:

1. Reducing the gap in health status between the CB region and other regions in Bulgaria and Macedonia, as well as with the member states of the European Union
2. Reducing the health gap between socio-economic groups within the region, aiming at improving the level of health of disadvantaged groups.
3. Ensuring better health of new-born babies, infants and pre-school children in the region
4. Improving the health of young people in order they better to fulfil their roles in society
5. Improving the health and quality of life of elderly people over 65 years

6. Improving the people's psychosocial well-being, by provision of better comprehensive services to people with mental health problems
7. Controlling, eliminating and eradicating infectious diseases of public health importance
8. Reducing the morbidity, disability and premature mortality due to major chronic diseases to the lowest feasible levels
9. Decreasing the number of injuries, disability and death arising from accidents and violence
10. Enabling safer physical environment to the population in the region, with exposure to contaminants hazardous to health not exceeding internationally agreed standards
11. Introducing and adopting of healthier patterns of living
12. Decreasing of the adverse health effects from the consumption of addictive substances such as tobacco, alcohol and psychoactive drugs
13. Enabling healthier physical and social environments at home, at school, at the workplace and in the local community
14. Ensuring better access to family- and community-oriented primary health care, supported by a flexible and responsive hospital system
15. Strengthening the capacity of the management of the health sector to provide quality health care of the population
16. Providing sustainable financing and resource allocation mechanism for the health care system, based on the principles of equal access, cost-effectiveness, solidarity, and optimum quality
17. Creating conditions for the health workers and co-workers to acquire appropriate knowledge, attitudes and skills to protect and promote health
18. Establishing health information and communication systems that will provide more effective flow and exchange of information
19. Ensuring conditions for adequate dialysis treatment for patients who are traveling
20. Improve the co-operation and efficiency of regulatory activities of the Competent Authorities through harmonization of the European Union's instruments on blood and tissues and cells used in transfusion and transplantation
21. Active participation in design of the cross border health policy, by providing proposals, opinions, declarations, etc.

1.6. Legal and administrative regulations for establishment and development of the CB Cluster in Bulgaria and Macedonia

1.6.1 Legal framework for cluster development in European countries

As far as the legal framework for the clusters development is concerned, the European law governing the clusters area, which would ultimately require the harmonization of national legislation of any member state or a country in the EU accession process, does not exist. Therefore every EU member state and non-EU

member state adopt the legislation that governs the clusters issue in a slightly different manner. In general, there is no consensus in the EU on the most appropriate and beneficial legal identity for a cluster.

Decision regarding the most suitable legal form of cluster is being usually based on the following:

- The role and functions of the cluster, cluster strategy and the type of services and products to be provided for cluster members;
- National corporate law
- EU and other funding possibilities.

Consequently, the possible legal forms for the establishment of clusters depend on the legal framework of a specific country as well as on the issue whether a cluster may benefit from a specific legal form.

Possible legal forms for the cluster establishment that are mostly characteristic in European countries are as follows:

- Business Association
- Limited liability company
- Public limited company
- Economic interest group (EIG)
- Cooperative
- Partnership
- Hybrid form

Aforementioned legal forms have been used primarily within the EU. Their individual characteristics are defined below:

- Business Association - is used when the focus of cluster organization is to provide so called “soft” services to its members, such as capacity building, networking, encouraging joint initiatives, training or up-grading cluster members’ skills and capabilities, increasing awareness through participating at conferences, organization of international conferences to make cluster known to the international community, lobbying, market intelligence or other not for profit activities. As a non-profit organization, cluster and cluster members are eligible to receive national and/or EU grants or support from international donor organizations.
- Limited liability company - Cluster organization takes this legal form if cluster members are or would like to be engaged in commercial activities. It is subject to value added tax and taxation. By using this legal form, depending on separate national legislation, the cluster can access national grants but not EU grants.

- Public limited company - With this legal entity, shares may be freely sold and traded to the public. It is not eligible for national or EU grants. This cluster legal form is very rare in transition economies
- Economic interest group - Cluster organization takes this legal form when its activities concentrate on providing “soft” services to cluster members. Cluster companies remain independent business entities. Economic interest group is registered at a court, activities and operations of cluster organization and cluster members are regulated by the founding contract/statute. It is a legal form which provides easy entry of new members into a cluster and excellent environment for open innovation. Cluster activities can be funded by national and/or EU grants. This form is quite similar with association form.
- Cooperative - The focus of this legal form is on the promotion of individual and joint economic interest of all members. Membership is voluntary and open to everyone. It can undertake commercial activities for itself but also for the members. It cannot receive the EU grants when cooperative makes profit. It is VAT liable and subject to corporate taxation.
- Partnership – With this form the cooperation is not institutionalized and remains on informal level. Formally the cluster is not a legal entity but companies enter into partnership agreement. Members can exit partnership at any time.

Business association (a non-profit organization) is the most common used legal form of clusters within the EU member states. It has been followed by limited liability company (organized with the purpose of undertaking commercial i.e. profit oriented activities) as another quite common legal form. Hybrid form is form in which some or exceptionally all cluster (association) members have been involved and own (owners as members not as association as legal entity) a limited liability company. In majority of the cases hybrid form refers to both: (i) clusters registered as association for conducting non-profit activities and (ii) business organizations primarily LLC for conduction profit oriented activities.

In a great number of countries, the manner of registration i.e. the cluster establishment and its legal form, does not exclusively depend on the national legal framework, but it also takes into consideration the cluster type, its’ business strategy, vision, mission, business objectives and its development stage. The experience with cluster development in most of the countries, both EU members and EU accession countries shows that in the initial stage, following the cluster establishment, when its members are developing the vision and mission statement, priorities, objectives, etc., cluster registration in a form of associations may be considered as a sufficient option. However, in the more mature stages of cluster development, when its members are more integrated and ready to participate in certain joint business activities and assume greater risks aimed at achieving long -

term benefits, the experience has shown that the most appropriate form of registration in this stage of the cluster development, is the registration of cluster as a business organization, i.e. limited liability company. Moreover, the experience has shown that a hybrid form of registering the cluster is also very cost – effective one, because it allows for a combination of commercial and non - commercial activities.

In fact, the key advantages of hybrid form of cluster registration are reflected in the fact that the cluster is registered both as association and business organization, i.e. implying following advantages:

- A cluster that is registered as an association may always be open for new members and in this regard there are no difficulties in registering new members. On the other hand, business organizations are faced with a more complicated procedure for altering the composition of the members of the cluster, after business organization itself has been founded, which is against basic cluster philosophy.
- Association may apply for different grants from EU, international organizations and bilateral cooperations, while a business organization and/or cooperative in most of the cases may not, and a key constraint lays in a fact that a business organization and/or cooperative are registered for the purpose of profit generation, whereas the grants/donations are not eligible to a profit - oriented entities.
- Business organization (e.g. limited liability company) is eligible or more suitable for obtaining the credit support from financial institutions, as it can provide required types of collateral for securing a loan, unlike an association;
- Operating expenses of both legal entities are shared or divided between the association and the business organization. However, at least until the grants and/or achieved profit in any case expenditures are being shared by the participating companies.

1.6.2 Examples of cluster legal forms in certain EU countries

According to the recent Europe 2020 Strategy clusters are important elements for improving the business environment, especially for SMEs. Cluster policies should not only be seen as a powerful policy instrument to promote research, development and innovation, but also as an integral part of industrial and innovation policy. Clusters have been also recognized as an instrument for regional development policies in most of the OECD countries, such as Czech Republic, Finland, Hungary, Iceland, Ireland, Japan, Luxemburg, Netherlands, Norway, Portugal, Spain, United Kingdom and United States. As aforementioned the EU member states have been frequently

using a business association as a cluster legal form. However, there are examples of other legal forms to be used.

In Austria, most often clusters are established as consortium or common interest entity. The first form does not represent a legal entity and therefore it is not able to receive the EU or public funds. It has been used at the cluster start-up phase especially as the new members can join easily. Second form is not feasible for profit companies and activities even though it can perform commercial activities if profit is retained. The common interest entity is appropriate when cluster is matured and does not need public financial support.

In Serbia and Croatia clusters could be established in either as association, LLC, Economic interest group – EIG, Cooperative and Hybrid model. Association is a legal entity after being registered at local public administration office. An admission of new members is simple, by submitting membership application or even with only by expressing interest to become member. Business association is eligible for receiving public and EU funds. LLC can be established to foster the export activities of SMEs throughout the sector's value chain and to achieve self-financing. It might be administratively difficult to obtain new members and is often perceived as a closed club of privileged members who have access to certain benefits. It also can be expensive. The LLC cannot access or bid for EU grants. Clusters are solely liable for its debts and members do not guarantee with their own assets. Economic Interest Group does not require funding capital for the establishment. The purpose is not to make profit but to provide “soft services”. Members are liable for cluster obligations with their own assets. It is eligible legal entity to attract or bid for EU grants. It is questionable whether to pay VAT and corporate tax. In Croatia cooperative is being established in compliance with Croatian Cooperative Act.³ It is subject to VAT on all services provided to cluster members. All subsidies are taxable and any other commercial profit-making legal identity, cooperative is not eligible to bid for EU grants. Within hybrid form cluster starts as an association within the first phase. However, in the cluster's growth phases some or even all members can establish LLC in order to engage in joint commercial activities. Activities of a cluster are split into two parts - association providing “soft” services, LLC (formed by some or exceptionally all members) – for commercial/profitable activities (share profit and reclaim VAT).

Denmark has three dominant cluster legal forms – a) association, b) partnership of companies, universities and RDA's as well as c) hybrid form. Association as in most of the other countries is being used during the early stages of cluster development providing “soft” services to cluster members and is eligible for national and EU grants. Partnership of companies, universities and RDAs, as cluster can be transformed into a limited liability company when the cluster enters into

implementing joint commercial activities similar to other countries as well. It is liable for VAT and taxes but not eligible for EU grants. Hybrid form in Denmark is form in which an association can be a full or partial owner of a limited liability company established by a group of cluster companies to perform commercial (for profit) activities. It is not eligible to receive public or EU grants while association is.

In Czech Republic, clusters organizations can take different legal forms as specified in the national company/business law such are civil association, business association, interest group of legal entities, Limited Liability Company, public limited company and cooperative. The dominant legal form is either business association or civil association. Both are eligible to receive national and EU grants.

The most commonly used legal form in Slovenia is a partnership of companies. It has been mostly used within the first two years of operation. Follow-up scenario is that if it is successfully operates it can transform itself into a legal form of an economic interest group. An economic interest group promotes activities that are of common interest to members, provides “soft services” and is not profit oriented. It is eligible to have access to public and EU grants. LLC and hybrid model have not been used, but however, there are some examples that a group of cluster members establishes and jointly invests into a common technology research center.

In Romania, an association or NGO is dominantly used as cluster establishment form and the main focus of cluster organization is to provide “soft services” to its members as in many other countries. Respective form is eligible for national and/or EU grants.

The key outcome of the aforementioned review of the EU countries is that clusters themselves determine the most suitable legal form, depending on various factors, such as compliance with the cluster’s strategy. Another factor is if it is the most efficient way for achieving own goal and definition of activities as profit or non-profit. Main conclusion from the EU countries review is that there is no specifically development legal framework for clusters. This confirms the suggestion from the Health Care Cluster strategy that the current legal framework is quite sufficient and beneficial for cluster development in Bulgaria and Macedonia and no new legislation for cluster development is needed.

1.6.3 Cluster definition and characteristics of the clusters in Bulgaria and Macedonia

When it comes to structuring the cluster, there are three dimensions such as follows: legal status of the cluster, cluster structure (in terms of competencies, roles and responsibilities of members in the cluster) and the systems (organization process within the cluster). Bearing in mind that the cluster development in Macedonia and

Bulgaria is still not so advanced as in developed countries, it is particularly important to review whether there is an adequate legal framework, being an essential prerequisite for its further development. Proceeding from the above, this Analysis is predominantly focused on the analysis of the current legal framework for cluster development in Macedonia and Bulgaria and possibilities of its improvement, as a prerequisite for the development of other dimensions for structuring of clusters that are related to the structure and organization of processes within the cluster.

Cluster legal forms applied within the EU are generally applicable in Macedonia and Bulgaria under their current legislation, although legal framework in both countries governing the clusters establishment is not unified. Nevertheless, the legal form for clusters establishment primarily depends on:

- Objectives of clusters;
- activities of entities in the cluster and
- funding sources i.e. cluster financing (to a large extent)

Specifically, if cluster development exclusively relies on the internal financing sources, then the legal form is not the most important one. However, when it comes to external financing sources, the legal form or the fact that a cluster is established with the objective of generating profit or if it is a non – profit organization, is pivotal in the process.

In the context of aforementioned, if a cluster was established as a non-profit organization, it is eligible for the EU funds usage as well as other donations for financing its activities/projects. However, it may receive the support through the banking loans or state aid but to a much lesser extent. On the other hand, if a cluster was established with the objective of generating profit, then it represents a business organization that may receive a loan or a state aid (fulfilling the statutory and other requirements), yet the possibility of receiving the EU and donor assistance funds is minimal or it may not be considered as a funding option at all. In compliance to the aforementioned, cluster conducting activities that are specific in a given stage of development, and with the objective of using all available external financing sources (loans, state aid, EU funds and donations), it should be registered in a certain legal form which allow both profit and non-profit activities.

It is important to emphasize that described framework is sufficient for cluster development and there's no need for drafting the new legislation.

1.6.4 Legal framework for cluster development in Macedonia

The first cluster initiatives emerged in Republic of Macedonia in the early 2000's, but the Government supports cluster development more intensively starting from 2007. Cluster policy is not an industrial policy only, but also a socio-cultural one.

The Government of Macedonia based its SME support policy on the following strategic documents: Strategy for Development of SME, Act on SME Development Support, Law on Macedonian Guarantee Agency, Law on Realisation of Handicraft Activities, and National Policy for Development of Technology. All these documents are aiming at facilitating the establishment of a favourable institutional, legislative, administrative and financial environment for setting up and development of SMEs in the country. Furthermore, the macroeconomic (political, legal, and economic) framework conditions are also fundamentally important for the overall performance of the economy.

At the national level the main institutions responsible for SME promotion are:

- Department of Entrepreneurship and Competitiveness at the Ministry of Economy, responsible for creating and overseeing the implementation of policies for SMEs;
- Agency for Promotion of Entrepreneurship of the Republic of Macedonia (APERM), responsible for implementing National SME policy;
- National Council for Entrepreneurship and Competitiveness (NECC) – it was established with a main goal of improving the business environment in the country and it serves as a platform for public private dialogue;
- Other line ministries responsible for certain aspects relating to policies for SMEs, such as the Ministry of Finance, Ministry of Education and Science, Ministry of Transport, Ministry of Labour and social politics;
- The Economic Chamber of Republic of Macedonia (FYROM) The activities are focused on improving the business climate, organizing, business meetings and lobbying for the interests of the private sector ;
- Union of Chambers of Commerce (UCC) of Republic of Macedonia (FYROM), with its five chambers (Trade, Industrial, Service, Agriculture and ICT) - it has been established in September 2004 with a mission of increasing the competitiveness of its members, improving the business climate in the country;

Main institutions for SME support at regional/local level are:

- Business incubators;
- Euro Info Centre (EICC), which provides information and assistance on matters related to business in the EU;
- Local Economic Development (LED) departments within the municipalities;
- Centres for development of planning regions – in eight planning regions;
- Providers of consulting services for SMEs;
- Business associations, etc.

Republic of Macedonia (FYROM) has adopted another strategic document - “Industry policy in Republic of Macedonia 2009 – 2020” for increasing the competitiveness of

the national industry and economy in general, through coordination the competitiveness policies in the country. The industry policy aims at contribution to more intensive development of national industry through five main areas of actions:

- International cooperation and attracting FDI
- Applied researches, development and innovations
- Eco products and services for sustainable development
- SME development and entrepreneurship and
- Cooperation in clusters and other networks

Actually, the key legal provisions enabling the establishment of clusters in Macedonia are as follows:

- Law on Associations and Foundations ("Official Gazette of the Republic of Macedonia" no. 52/2010 and 135/2011);
- Company Law

Law on Associations and Foundations as a legal basis for clusters development

As previously mentioned, grouping of physical persons and legal entities in to clusters may be achieved through a form of associations which are registered pursuant to the Law on Associations and Foundations ("Official Gazette of the Republic of Macedonia" no. 52/2010 and 135/2011). Although a cluster or agglomerations is much broader concept of association, the legal form can largely contribute to the realization of the key objectives of clusters development. Existing associations in Macedonia operate in different fields and they consist of members of which are physical persons and legal entities, i.e. entrepreneurs and business organizations. Moreover, in the context of the implementation of the Industrial policy through the Introduction of the Business Clusters, the role of existing sectoral associations or potential clusters is to provide "soft services" to its members, such as development and implementation of plans for cluster development, common marketing activities, trade fairs participation, creating a synergy effect in negotiations with the third parties, membership in international organizations, submission of applications for the use of the IPA and other EU funds, obtaining donor support, etc. Aforementioned associations are registered in compliance with the Law on Associations and Foundations, and they play a major role in the initial stages of cluster development (whose members may be farmers, entrepreneurs, business organizations, etc.), when a cluster of physical persons and legal entities engaged in similar or same activities required support of such organization for daily

communication of the cluster with third parties, following up public calls for obtaining donor support and support from the EU funds, participation in trade fairs, roundtables, developing a work plan and marketing plan for cluster, cluster web - site maintenance, etc.

The Law on Associations and Foundations, i.e. Article 1 regulates the manner of establishment and termination of associations, foundations, unions, organizational forms of foreign organizations in the Republic of Macedonia, the available assets, the supervision, the status changes and the status of organizations of public interest.

According to the Article 3 of the same law, "Organization" is any association, foundation, union, as well as any organizational form of foreign organization, and any other form of association, registered in accordance with the provisions of this Law;

According to article 5 two or more organizations may be associated in a union or in another form of association which may acquire the capacity of a legal entity by registering in accordance with this Law.

With regard to profits, article 12 stipulates that organizations cannot be established for the purpose of profit generation and they may perform activities that generate profit only if such activity is related to the goals determined by the statute. If the operations of the organizations generate profit, such profit has to be used for achieving the goals determined by the statute. The generated profit referred to in the same Article cannot be distributed among the founders, members, members of the bodies, directors, employees or any other person related thereto.

Establishment of clusters as (non-governmental) association and a non-profit membership organization according to the aforementioned Law is the best legal form for clusters development in Macedonia. The statement is especially valid in the first stage of their development as this legal form can be useful to provide "soft" services to its members, such as support to networking and specialization, training or up-grading cluster members' skills and capabilities, trade fairs participation, creating synergy effect in negotiations with the third parties, presentation of a cluster at international conferences, organization of international conferences, common marketing activities, etc.

Company Law as a legal basis for clusters development

The Company Law is the primary law regulating business activity in Macedonia. It defines the types of companies, as well as the procedures and regulations for their establishment and operations. Foreign investors receive the same treatment as local companies and therefore do not need any special approvals.

Under the Company Law, trade companies are formed as separate legal entities that operate independently and are distinct from their founders, shareholders, and managers. Depending on the type, trade companies have their own rights, liabilities, names, and registered offices. The law defines five forms of trade companies: public trade (general partnership), limited partnership, Limited Liability Company, Joint Stock Company, and limited partnership by shares.

Main forms of performing commercial activities by legal entities pursuant to the Company Law are described below.

- **Limited Liability Company** - Concerning respective phase of cluster development probably the second best solution i.e. suitable legal form for clusters is a limited liability company (LLC). LLC is one of forms to establish a profit oriented entity according to the Company Law. This form is supposed to be more adequate solution for clusters in the more mature phases and in more comprehensive business activities aimed to generate profit. According to article 167, a limited liability company may be founded by one or more natural or legal persons and the number of members of a limited liability company shall not exceed 50. The Members shall be obliged to make additional contributions and execute other obligations towards the limited liability company as stipulated by the company agreement (article 168).

A limited liability company shall be founded by a company agreement entered into between all founders. If the company is founded by a single person, the company agreement shall be replaced by a founding statement of the limited liability company drawn up by the founder. Founding of a company by gathering members or subscriptions of contributions by way of a public notice shall not be allowed.

The article 172 of the Law stipulates that the core capital of the company shall consist of the total amount of the contributions of each member. The minimum value of the core capital shall not be less than 5,000 EUR expressed in denar counter value calculated according to the average exchange rate, which is published by the National Bank of the Republic of Macedonia on the day of the payment, unless the founders agreed to calculate it according to the day when the company agreement or the founding statement of the company was signed.

- **Joint Stock Company** - According to the Company Law entities may be also registered in a form of a joint stock company, which is also possible legal form for clusters development. However, in Macedonia there is no example of cluster registered as a Joint Stock Company. A joint stock company is a company in which shareholders participate with contributions in the charter

capital that is divided into shares. The shareholders shall not be liable for the liabilities of the joint stock company. The company may have one or more shareholders.

When a company is founded without a public offering notice to subscribe for shares, the minimum nominal value of the charter capital shall be EUR 25,000 in denar counter value, according to the average exchange rate of the National Bank of the Republic of Macedonia published on the day prior to the date of adoption of the company charter or the resolution to amend the charter capital and when a company is founded successively by way of a public offering notice to subscribe for shares, the minimum nominal value of the charter capital shall be at least EUR 50,000 in denar counter-value. The nominal value of the share shall not be less than EUR 1, according to the average exchange rate for that respective currency, published by the National Bank of the Republic of Macedonia on the day prior to the date of adoption of the company charter or the resolution to amend the charter capital. The shareholders shall, under equal conditions, have equal status in the company. The shareholders are obliged to pay the nominal value of the share to the company, as well as the premium if the share is issued at a premium and to transfer the non-monetary contribution, if the share is acquired on the basis of a non-monetary contribution.

- **General Partnership** - If an individual or a group consisting of individuals or legal entities engage in commerce but fail to comply with the formation or registration requirements set forth in this Law, they shall be deemed to be an individual entrepreneur or a general partnership for purposes of relations with third parties. In both cases they are solidary for all duties with their own property. The Law defines a general partnership as a company of two or more legal or natural persons that are jointly and severally liable to creditors for the company's liabilities with their entire property. A general partnership shall be founded with a partnership agreement entered into between the founders. The founding of a general partnership shall be entered in the commercial register. The application for entry of the founding of the general partnership shall be submitted by all the partners of the general partnership authorized to represent the partnership. According to the article 116 legal relations among the partners in the general partnership shall be governed by the partnership agreement. The provisions of this law shall apply to the legal relations among the partners that are not governed by the partnership agreement. The provisions of the law on obligations regulating the partnership agreement (agreement for joint actions) shall apply to legal relations among the partners that are not governed by this law or the partnership agreement. With regard to management, each partner is

authorized to manage the general partnership. If one or more general partners are assigned by agreement of the partners to manage the general partnership, the other partners shall be excluded from such management.

1.6.5 Legal framework for cluster development in Bulgaria

In the Article 3 of the Law for Small and Medium-sized Enterprises of Bulgaria, SME are precisely defined:

- *Medium - sized enterprises* comprises enterprises that have: number of personnel fewer than 250 people; annual turnover that not exceeding 97,500,000 BGN (49,000 €) or an annual balance sheet not exceeding 84,000,000 BGN (43.000 €).
- *Small enterprises* are ones that have: number of personnel fewer than 50 people; annual turnover that not exceeding 19,500,000 BGN (10,000,000 €) or an annual balance sheet not exceeding 19,500,000 BGN (10,000,000 €).
- *Micro enterprises* are ones that have: number of personnel fewer than 10 people; annual turnover that not exceeding 3,900,000 BGN (2,000,000 €) or an annual balance sheet not exceeding 3,900,000 BGN (2,000,000 €).

Business clusters have been developing in Bulgaria rapidly during the recent years. The main reason is that there are many small companies and sole traders who cannot stand the competition of the big companies.

The development of cluster policies and projects has been continuously supported in Bulgaria through international donors throughout the 2000s (especially in the area of ICT). The first project which was financed by PHARE Program „Introduction of cluster approach and establishment of cluster model” ended successfully by the end of 2006 with 2 results:

- Development of National Cluster Development Strategy and Action plan for its implementation and
- Support formation of two clusters (MEET, 2007a)

With support from the next phase of the project – Cluster II (2007 – 2009), additional ten clusters have been supported.

The cluster policy has become more prominent in Bulgaria in the past few years, giving rise to the creation of an Association of Clusters. Bulgarian Association of Business Clusters (ABC) was established by 8 clusters in October 30th, 2009.

Having in mind that there is no legislative clusters regulation whatsoever, the clusters founders “wrapped” the clusters in the existing company/NGO forms, allowed by the Bulgarian law.

The two major business cluster forms are:

- non government organization (NGO)
- consortium

Non-government organizations (NGO)

NGO registration and activity is regulated by the Law on Non-Profit Legal Entities. A Business cluster can exist as an NGO. The major disadvantage, however, is that NGOs in Bulgaria cannot do business, they can not gain profit. So the main activity of an NGO cluster is to safeguard its members, to urge them, to act as an intermediary between its members and third parties. It also can be holder of intellectual property, it can organize conferences, organize learning courses for qualification and many more. NGOs have certain tax benefits as well

Consortium

The consortium legal entity is regulated in the Bulgarian Commercial Act. The consortium can be either a Limited Liability Company (or JSC) or Partnership. The difference between the NGO and the consortium is that the consortium can directly trade i.e. it is like an ordinary company. However consortium is used to join economic and fund powers of two or more separate companies. The joining of business powers is the essence of the business clusters.

Registration specifics

Registration process of both the NGO and the Consortium depends on the particular needs of the business partners. Each partner can participate by making money or in-kind contributions (real estate, intellectual property etc.), the shares ratio also can vary. It is crucial that before making a business cluster, the partners know what they want to achieve – what the business cluster main goals will be.

1.6.6 Conclusions and recommendations

The Health Care Cluster strategy provides an overview of the cluster definition including brief remark on other potential options, the European landscape regarding

legal forms of the clusters as well as the existing legal framework of the study. The key outcomes of the study are:

- Current legal framework in Macedonia and Bulgaria is appropriate for setting up clusters and their development;
- There is no need for a new form of laws and by-laws for cluster development in a short term period;
- The most appropriate forms within existing framework are: (i) association and (ii) limited liability company;
- Association is the most appropriate form during the initial phases of cluster development and in compliance with the potential start up strategies;
- Limited liability company is the most appropriate form for the growth phases of cluster development where growth and profit making represents the key objectives of the clusters;
- Hybrid model can be feasible and appropriate combination of different legal forms for Macedonia and Bulgaria in at least the mid-term period;
- This strategy provides recommendations without any attempt to restrict free will of interested parties if decide to use any other legal allowed form;
- Application of non-limited liability solutions for cluster establishment can be remarkable obstacle for cluster formation in Macedonia and Bulgaria due to form and profile of the potential clusters as well as division of personal and corporate/cluster property.

Given the above described characteristics of the potential legal forms for setting up clusters, the most appropriate legal form for registration i.e. establishment of the clusters within the existing legal framework of Macedonia and Bulgaria an association (as a nonprofit organization) in compliance with the Law on Associations and Foundations. However, if some of the association's cluster members have vision, energy and knowledge to engage into more complex commercial activities, it is recommended to establish a Limited Liability Company or any other form of business organization. Of course, all other forms e.g. General Partnership or Joint Stock Company, etc envisaged by the Company Law are available and feasible.

In some cases, legal form of clusters becomes combination of the first two and can be identified as the "hybrid form." This form (already existing in certain EU countries), implies that persons or companies grouped in the cluster can be registered at the same time as an association (non-profit oriented) and as a business organization (profit oriented). In other words, this "dual organizational structure" or a "hybrid form", which represents as an association and limited liability company, is the suitable recommended legal form of clusters establishing in Macedonia and Bulgaria based on the stage of development and clusters capabilities. This form has

already been implemented in some EU member states such as Croatia. This can also be important for Macedonia and Bulgaria due to the similar economic context and business environment. In other words, the above mentioned “hybrid form” means that cluster starts with its activities as an association in the first phase of its development and in the growth phase of a cluster, some or even all cluster members can establish limited liability company as the most recommended business organization form in order to engage in joint commercial activities. With a such recommended “dual structure” or a “hybrid form”, activities of a cluster are split into two parts- association providing “soft” services, and a business organization (preferably limited liability company) – formed by some members – for commercial/profitable activities which include the share of profit and reclaim of VAT).

1.7 Overview of Health Care Cluster, CBHealth membership structure

Potential members of the CBHealth Cluster are:

- a) Individual physicians and healthcare service providers (especially those up to 35 years of age) working in medical institutions in the target CB area of both countries;
- b) Private and public general and specialized treatment hospitals providing healthcare services in the target CB area of both countries;
- c) Specialized and profiled physicians (oncologists, paediatrics, cardiologists, orthopaedics, etc.) and patient branch organizations working or related to the healthcare sector in the target CB area of both countries;
- d) Universities (their medical departments) that provide higher education in medicine in the target CB area of both countries;
- e) Local and regional authorities as being the stakeholders and policy makers that steer the economic development of the regions.

The following representatives of the health care sector are potential cluster members:

- Health ordinations
- Polyclinics
- Laboratories (diagnostics and stomatology)
- Centres for public health
- Health houses
- Hospitals (general, specialised, clinic)
- Institutes (public health, transfusion, etc.)
- University clinics

- University institute
- Pharmacies
- Supporting institutions, not directly involved in the health care system (Local Self-governments, Center for Development of the East planning region, etc.)

In spite of the fact that members of the Health Care Cluster - CBHealth possess distinctive specialization profile in different areas of the health care sector, they also differ to a great extent among themselves with regard of their size, turnover, ownership structure, etc. This mixture of cluster members, with different interests, provides a great opportunity for building upon their combined strengths, but also presents a challenge for the cluster management to promote development of shared goals and designing variety of member oriented services.

1.8 Organizational structure and stakeholders map

The Health Care Cluster - CBHealth is managed by the cluster members directly or through their representatives in the following bodies:

- a) General Assembly
- b) Managing Board
- c) Monitoring Board
- d) Executive coordinator (Cluster manager)

a) The General Assembly is the highest body of the Cluster, which consists of all cluster members. The General Assembly elects the Managing board, consisting of three cluster members. It will make decisions about all the issues related to the development of the cluster and will meet on quarterly bases. Every member will have one vote. The decisions in the assembly will be made by majority vote

Main functions of the General assembly of the Health Care Cluster:

1. Changes and provides amendments for establishment and development of the cluster;
2. Decides about acceptations and dismissing of new members;
3. Elaborates program for development of the cluster, financial plan and receives reports about the development of the cluster initiative;
4. Decides about eventual changing of legal status (reregistering), about membership in other networks, as well as about setting up branch organizations in the country or abroad;
5. Decides about applying for loans and credits, setting up membership fees or other kinds of internal financing;
6. Elects and dismisses the Cluster Manager;

The highest representative of the General Assembly is the President. The President of the General Assembly is member of the Managing Board, without a right to be elected as Executive Coordinator (Cluster manager)

b) Managing Board (MB) is the highest executive body of the cluster responsible for implementing the concept for cluster association adopted by the Statute, thus being

the main driving force in achieving the defined objectives and planned activities. The Managing Board consists of 3 members, which are elected for a period of 4 years with possibility for being re-elected.

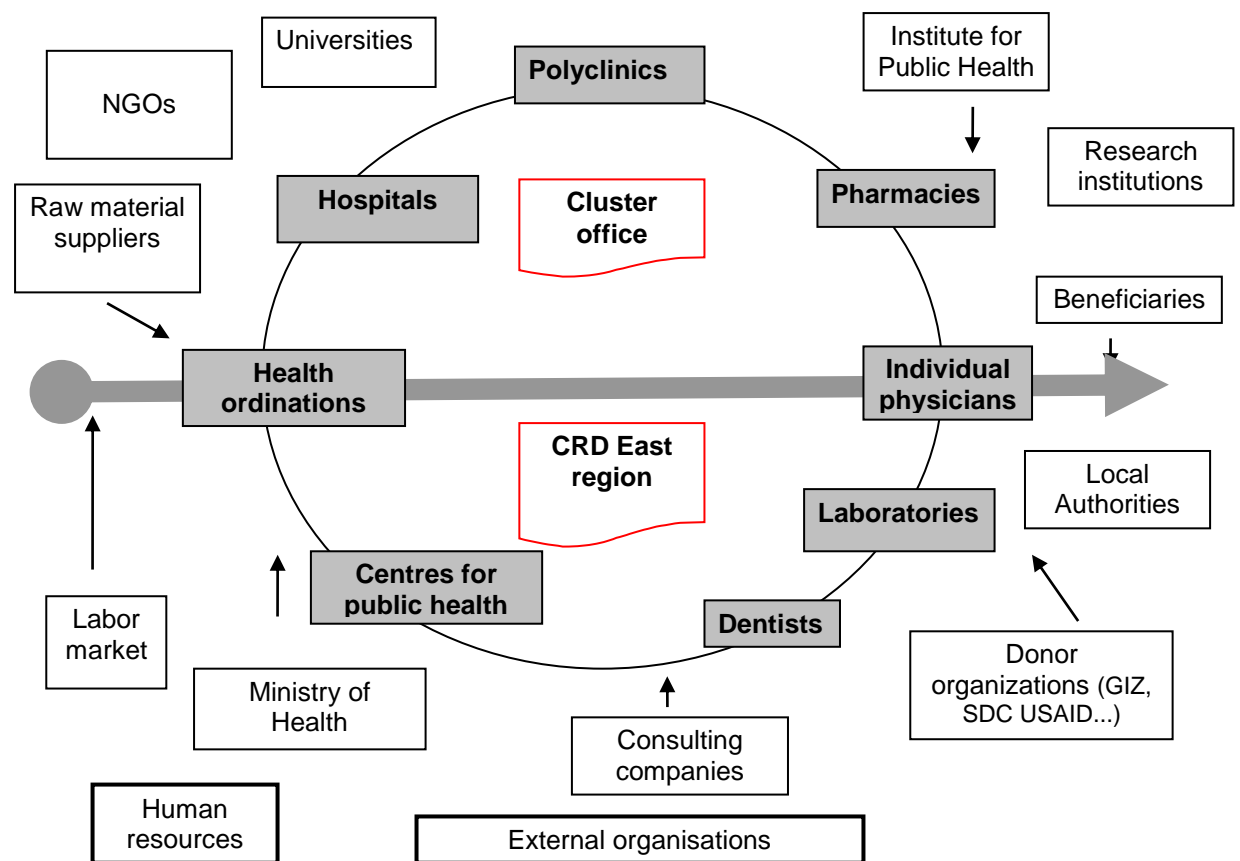
c) The Monitoring Board has three members which are elected by the General Assembly

d) Executive coordinator/Cluster manager

Functions of the Cluster Manager of the Health Care Cluster - CBHealth:

1. Takes care that the decisions of the general assembly are implemented;
2. Organizes and coordinates all activities for developing the cluster initiative;
3. Elaborates and presents to the General Assembly programs and projects for joint initiatives;
4. Plans the budget and allocates the financial resources according responsibilities defined by the law and legal acts of the association;
5. When necessary employs new personnel and prepares and signs contracts for assigning coordinators, employees and partners;
6. Organizes research, expert and consultancy activities as well as development of information systems;

Figure 3. Stakeholder map



2 Part 2: Health Care Cluster strategy and an action plan

2.1 Need for a Strategy and action plan

Cluster strategies and road maps are important with regard to applying coordinative approach in increasing the competitiveness and effectiveness of a certain cluster, as well as utilizing the opportunities arising from the EU integration process.

The future performance of the health care sector in the CB region will highly depend on successfully building up the respective institutional, technical and managerial capacities of all stakeholders – the Government, the public and private organisations and the business sector – which have to contribute to turning benefit out of the existing competitive advantages. These are in particular skilled and cheap labour, proximity to the European markets, etc. However, greater effectiveness and improved performance can be achieved only if the health sector in the CB region meets international standards in terms of productivity and quality, management and marketing efficiency backed up by an enabling macro-economic and legislative framework, appropriate economic and social infrastructure as well as efficient public and private business-oriented services.

To achieve this, appropriate national health policies need to be in place in both countries, which serve as a base for cluster support policies that aim at facilitating market and consumer oriented structures and private sector oriented institutions.

Health Care Cluster - CBHealth strategy needs to provide a base for strategic decisions and stakeholder participation in the fields of increasing cooperation, modernising the health care sector, creating synergies with other economic sectors, all of which being crucial for achieving long lasting results in the CB region.

Based on a cluster analyses and participatory cluster workshops, the cluster strategy defines

- A vision of what should and realistically could be achieved in cluster development in the long run;
- A mission with regard of how the cluster is achieving its vision
- The priority areas of cluster development e.g. with regard to economic and socio-economic development as well as the integration into international markets;
- The goals to be achieved and
- Activities (measures), which have to be implemented in order to achieve the goals set.

The cluster strategy should also serve as an instrument for efficiently coordinating implementation of cluster measures, capacity building of cluster members, the participation of the research community and last but not least donor contributions.

The cluster strategy sets the frame for cluster development, but it also recommends activities and measures to be taken, which then need to be finalized and operationalized by cluster members. The strategic frame for medium to long-term development has to be defined as detailed as necessary to enable target-oriented coordination of cluster members, but it also has to leave room for flexible re-action and adaptation of action during the implementation phase. The strategy (Phase I) thus is the prelude to the development of more detailed action plans (Phase II), in

which cluster members have proposed activities and measures and have identified concrete instruments, responsibilities and resources in a participatory and coordinated approach. The implementation (Phase III) of these action plans will then be the major challenge for all cluster members. The cluster strategy thus is the frame, in which every cluster members will have to find his place.

Once discussed, probably revised and finally confirmed by the cluster members, the implementation of a cluster strategy aims at contributing to achieving better performance of the members of the Health Care Cluster thus contributing to the overall health care sector in the CB region between Macedonia and Bulgaria in the medium to long run.

2.2 Cluster Strategy for developing the Health Care Cluster

The present cluster strategy is based on a) desk research and documentary review of the health care sectors in Macedonia and Bulgaria, b) direct interviews with representatives of health care organizations, companies and supporting institutions in the East planning region of Macedonia and Blagoevgrad District in Bulgaria and c) results from the joint workshops with potential members of the Health Care Cluster - CBHealth.

Some of the factors that hinder growth and development of the health care are not peculiar to this sector only, but also influence other sectors of the economy. Based on interviews and joint workshop with key stakeholders, in addition to strengths, weaknesses, opportunities and threats, a number of policy measures and donor support initiatives have been identified, which aim at improving the effectiveness and performance of the health care sector in the CB region.

The challenge for the cluster members of the Health Care Cluster - CBHealth is to create a market-oriented culture and set-up a network among all cluster members in view of turning benefit out of existing potentials and new opportunities.

It will not be sufficient to only focus on institutionalizing the cooperation of health care providers in the CB region, by registering the Health Care Cluster, thus the cluster strategy provides recommendations for tackling issues, such as internal communication, monitoring performance, etc., which if not dealt with, might negatively influence the cluster performance. Therefore, appropriate measures have to be designed aimed at developing strong cluster capacities that are consistent with the requirements of the target markets.

The present strategy outline does not focus on inefficient short-sighted effects but on a long-term impact on the performance of Health Care Cluster - CBHealth.

2.3 Underlying Concepts

Systemic Competitiveness

Following the concept of "systemic competitiveness", the determinants of the competitiveness of a sector can be categorised into the following four intervention levels:

- Meta level, i.e. the society's readiness for and attitude towards reforms,
- Macro level, i.e. the stability and conduciveness of macroeconomic conditions,
- Meso level, i.e. the administrative, technical, and institutional infrastructure, and
- Micro level, i.e. the readiness of enterprises for the markets.

It is not the task of a cluster strategy to analyse and recommend measures to be taken at the whole sector level, but it focuses on Health Care Cluster.

Cluster Approach

For strengthening the effectiveness of the health care sector in the CB region between Bulgaria and Macedonia a coherent, interdisciplinary and multi-sector approach is required. Since it is much more difficult for individual entities to compete on global market, building effectiveness and competitiveness needs a joint effort of cluster members assisted by supporting institutions and policies. The so-called Cluster approach proves to be a successful instrument to strengthen the performance of sub-sectors in many countries.

In the context of the cluster strategy it is proposed to define industrial clusters as following:

"A cluster is a group of geographically concentrated companies and institutions, with a distinctive specialisation profile, which work in close collaboration towards achieving same goals."

The term is used for a quite broad range of business arrangements starting from pure networking up to contractual co-operation, as for example:

- forward and backward linkages between firms;
- intensive information exchange between firms, institutions, and individuals (e.g. within associations, working groups, committees);
- joint action geared to creating local / regional / sub-sector advantages (e.g. joint input supply, joint marketing, joint research, joint innovations);
- Integration of institutions that support specific activities of the cluster (e.g. education, training, advice, research).

The success of clusters builds upon a socio-economic identity with common values and – most important – upon mutual trust.

2.4 Innovations and Investments development

2.4.1 The EU policy context of smart specialization

Due to facing major economic challenges that require an ambitious economic policy for the 21st century, the EU has set out its vision for Europe's social market economy

in the Europe 2020 strategy, which aims at confronting the structural weaknesses through progress in three mutually reinforcing priorities:

- smart growth, based on knowledge and innovation;
- sustainable growth, promoting a more resource efficient, greener and competitive economy;
- inclusive growth, fostering a high employment economy delivering economic, social and territorial cohesion.

Investing more in research, innovation and entrepreneurship is at the heart of Europe 2020 and a crucial part of Europe's response to the economic crisis. So is having a strategic and integrated approach to innovation that maximizes European, national and regional research and innovation potential.

As a part of the Europe 2020 strategy, the Commission adopted the 'Innovation Union' flagship initiative. It sets out a comprehensive innovation strategy to enhance Europe's capacity to deliver smart, sustainable and inclusive growth and highlights the concept of smart specialization as a way to achieve these goals. The 'Digital Agenda for Europe' flagship initiative is also part of Europe 2020 and aims to deliver sustainable economic growth and social benefits from Information and Communication Technologies (ICT). The Digital Agenda for Europe initiative is therefore relevant to all regions and cities, as it focuses on a key element for the design of smart specialisation strategies.

The concept of smart specialization has also been promoted by the Communication 'Regional Policy contributing to smart growth in Europe 2020'. In this document the Commission encourages the design of national/regional research and innovation strategies for smart specialization as a means to deliver a more targeted Structural Fund support and a strategic and integrated approach to harness the potential for smart growth and the knowledge economy in all regions.

Smart specialisation has also been strongly advocated by the Synergies Expert Group established by the Commission's Directorate-General for Research and Innovation. It argues that the concept is an important instrument for ensuring synergies between Horizon 2020 and the Structural Funds in the interest of capacity building and providing a stairway to excellence.

In the context of Europe 2020, smart specialization emerges therefore as a key element for place based innovation policies.

National/regional research and innovation strategies for smart specialisation (RIS3) are integrated, place-based economic transformation agendas that do five important things

1. They focus policy support and investments on key national/regional priorities, challenges and needs for knowledge-based development, including ICT-related measures;
2. They build on each country's/region's strengths, competitive advantages and potential for excellence;
3. They support technological as well as practice-based innovation and aim to stimulate private sector investment;
4. They get stakeholders fully involved and encourage innovation and experimentation;
5. They are evidence-based and include sound monitoring and evaluation systems.

The RIS3 approach is relevant to all three priorities of Europe 2020 i.e. smart, sustainable and inclusive growth. First of all, smart specialization matters because the development of an economy based on knowledge and innovation remains a fundamental challenge for the EU as a whole. Secondly, smart specialization is relevant to achieve sustainable growth, as an important innovation effort and considerable investment is required to shift towards a resource-efficient and low carbon economy, offering opportunities in domestic and global markets. Finally, smart specialisation contributes to inclusive growth between and within regions by strengthening territorial cohesion and by managing structural change, creating economic opportunity and investing in skills development, better jobs and social innovation.

This embedded role of smart specialisation in the Europe 2020 policy framework has been highlighted by the Council of the EU in its conclusions on the Innovation Union. The Council underlined 'the concept of 'smart specialisation', with each region building on its own strengths, to guide priority-setting in national and regional innovation strategies, as well as cross-border cooperation where appropriate' and invited the Commission 'to advise Member States on possible improvement of the performance of their national innovation systems and with the implementation of smart specialisation strategies'.

The RIS3 approach is also consistent with the aims and tools of the EU cohesion policy, promoting growth and jobs across EU countries and regions. It suggests a strategy and a global role for every national and regional economy, including both leader and less advanced territories. It embraces a broader concept of innovation, not only investment in research or the manufacturing sector, but also building competitiveness through design and creative industries, social and service innovation, new business models and practice-based innovation. All regions have a role to play in the knowledge economy, provided that they can identify comparative advantages and potential and ambition for excellence in specific sectors or market niches.

The concept of smart specialisation is also consistent with and supports the main reform goals of the proposals for the EU Cohesion Policy 2014-2020, published in October 2011¹⁰:

- delivering the Europe 2020 objectives of smart, sustainable and inclusive growth,
- reinforcing policy performance and focus on results,
- maximising the impact of EU funding through thematic concentration.

Indeed, smart specialisation has a strategic and central function within the new Cohesion Policy being a key vehicle for ensuring Cohesion Policy's contribution to the Europe 2020 jobs and growth agenda.

Within the new Cohesion Policy, smart specialization has been proposed as an 'ex-ante conditionality'. This means that every Member States and region have to have such a well-developed strategy in place, before they can receive EU financial support through the Structural Funds for their planned innovation measures.

In this context it is of crucial importance to understand the strong process element of smart specialisation and the eminent role the various innovation stakeholder and entrepreneurs are asked to play within that process in each Member State and Region. Their knowledge and commitment is key to identifying those priority areas and knowledge-based investments that are most likely to deliver growth and jobs in the regions. And it is not only a reinforced stakeholder involvement and strong internal connectivity that counts but smart specialisation is also pointing regions towards more strategic cross-border and trans-regional cooperation to achieve more critical potential and related variety.

Last but not least, the importance of monitoring and evaluation within these strategies should be particularly highlighted, providing the link between smart specialisation and the goal of reinforcing results orientation of the Structural Funds in general. It is not accidentally that the smart specialisation conditionality refers explicitly to the need for RIS3 strategies to include a monitoring and review system.

To choose appropriate results indicators already at the level of the smart specialisation strategy is extremely important for the cohesion policy, as it is the one of the essential keys for ensuring that all stakeholder incentives and behavioural responses are correctly aligned and that the policy can be monitored accordingly and adjusted where necessary, creating a virtuous policy learning cycle.

2.4.2 The rationale of smart specialization in the health care sector

What: Concentrating knowledge resources for economic specialization

The underlying rationale behind the Smart Specialisation concept is that by concentrating knowledge resources and linking them to a limited number of priority economic activities, countries and regions can become — and remain — competitive in the global economy. This type of specialisation allows regions to take advantage of scale, scope and spillovers in knowledge production and use, which are important drivers of productivity.

Furthermore, strategies that combine innovation with specific strengths of the national/regional economy offer a much greater chance of success. In short, Smart Specialisation is about generating unique assets and capabilities based on the region's distinctive industry structures and knowledge bases.

Why: Learning lessons from the past

Previous regional innovation strategies have often suffered from one or more of the following weaknesses:

- They lack an international and trans-regional perspective, i.e. the regional innovation and economic system is often considered in isolation.
- They are not in tune with the industrial and economic fabric of the region; there is too much public involvement in R&D which is not sufficiently business driven.
- A sound analysis of the region's assets is missing.
- There is a 'picking winner's syndrome'.
- The best performing regions are copied without consideration of the local context.

As a result, regional innovation policies have often demonstrated a lack of efficiency in identifying priorities and forms of practical cooperation between regions. This issue is even more critical in the current economic crisis where public and private financial resources are scarce.

The smart specialisation concept therefore promotes efficient, effective and synergetic use of public investments and supports countries and regions in strengthening their innovation capacity, while focusing scarce human and financial resources in a few globally competitive areas in order to boost economic growth and prosperity.

Who: Putting entrepreneurial knowledge to work

Smart specialisation addresses the difficult problem of prioritisation and resource allocation decisions by allowing entrepreneurial actors to demonstrate the most promising areas for future regional development through what has been described

as an 'entrepreneurial process of discovery. This process can reveal what a country or region does best in terms of R&D and innovation because entrepreneurial actors are best placed to know or discover what they are good at producing. This typically happens through trial and error and experimentation in new activities. Regions therefore need to pro-actively involve entrepreneurial actors in strategy design and offer more incentives for risk taking.

Entrepreneurial knowledge involves much more than science and technology. Rather, it combines and relates this to knowledge of market growth potential, likely competitors and the entire set of input and services required for launching a new business activity. The synthesis and integration of this previously dispersed and fragmented knowledge should help to create a vision for opportunities in existing or new sectors. It is this type of knowledge that needs to be activated, mobilised and supported as the main ingredient in a process of smart specialisation.

However, who has the entrepreneurial knowledge in the regional economy? It may be held by firms, which is often the case in 'advanced' regions rich in entrepreneurial experiments and discoveries. In this case, the process of smart specialisation is likely to be more evident. Yet in many other cases where industry structures and entrepreneurial capabilities are weak, it is crucial that knowledge is identified and activated elsewhere, such as in universities or public research institutes. Collaborative projects with local firms can help to reveal information about the future value of certain specialisations.

Entrepreneurial actors must therefore be understood in a broad sense to include inter alia firms, higher education institutions, public research institutes, independent innovators; whoever is best placed to discover the domains of R&D and innovation in which a region is likely to excel given its existing capabilities and productive assets. Given the importance of entrepreneurial experiments and discovery, there is no contradiction between a smart specialisation policy and one to encourage entrepreneurship. On the contrary, these two policies are mutually reinforcing; without strong entrepreneurship, the strategy of smart specialisation will fail because of a deficit in the entrepreneurial knowledge needed to feed and nurture this strategy.

How: Setting in motion regional change

Smart specialisation strategies will usually require some sort of structural change in the CB region, which could follow from one of the following not mutually-exclusive processes:

- Firstly, a transition from an existing sector to a new one based on cooperative institutions and processes, i.e. the collective R&D, engineering, and

manufacturing capabilities that form the knowledge base for development of the new activity.

- Secondly, modernisation is the technological upgrading of an existing industry, involving the development of specific applications of a Key Enabling Technology to improve efficiency and quality in an existing (perhaps traditional) sector.
- Thirdly, diversification: In such cases the discovery concerns potential synergies (economies of scope and spillovers) which are likely to materialise between an existing activity and a new one. Such synergies make the move towards the new activity attractive and profitable.
- Finally, radical foundation of a new domain: The discovery here is that R&D and innovation in a certain field can make previously low growth activities suddenly become attractive. Such radical foundation involves the co-emergence of R&D / innovation and related entrepreneurial activity.

Smart specialisation is not about creating technology monoculture and uniformity; on the contrary, it is likely to promote greater diversity. Indeed, regions can sustain multiple lines of smart specialisations (priorities). Most of the above structural changes generated by smart specialisation strategies actually involve the creation of variety, such as the transition to new activities or the diversification of existing sectors.

In particular, strategies aimed at fostering cross-sectoral or cross-border cooperation have proven to be successful in generating ideas for new innovative applications and integrated solutions. Cross-sectoral links can provide a region with the degree of originality and specialisation to differentiate itself and provide a competitive advantage vis-à-vis other regions.

Where: A role for every region

The smart specialisation concept can be used in all regions, even though some are more advanced in terms of knowledge production. However, the application of the concept in a regional context has to be approached with care because the economic and institutional context varies considerably between and within European regions.

This means that a Smart Specialisation strategy or the CB region between Bulgaria and Macedonia needs to take into account several geographically specific characteristics to help generate growth. In this respect the following points need to be considered when applying smart specialisation to the regional context:

- The entrepreneurial process of discovery will work differently in both regions: In some places the process will be quite evident due to the high density of innovators and entrepreneurs (usually core-cities). However, the process will be much harder in other locations or sub-regions characterised by low

population, a small number of sectors and large dominant firms but with few external links. In this case, links between local universities and strong public-private partnerships are the types of strategies that may be essential for smart specialisation to work.

- Identifying sectors that can achieve critical mass should take into account the 'principles of regional embeddedness and relatedness'. The first principle of 'embeddedness' refers to the existence of industries that are in tune with the relevant socio-economic conditions and can rely on a trained local labour force and a history of cooperative relations with other regional actors. Evidence shows that without displaying these characteristics, industries are much more likely to be unsuccessful in the medium term. However, by concentrating only on embeddedness, a regional development strategy may risk increasing vulnerability to changing economic conditions. Therefore, it is crucial that the second principle of 'relatedness' is also taken into consideration. This principle describes the diversification of firms into related areas based on new innovative techniques or processes. In other words, it is a strategy of diversifying within a specialisation. This allows firms to build on the skills, assets and capabilities within a region while adapting and improving on them through innovation.
- Connectivity: Smart Specialisation should link emerging knowledge based industries to other actors within and outside the region, but it does not always lead to good outcomes so needs to be assessed. Firstly, it is well known that face to face interaction in particular places can be crucial in nurturing innovation and there are many examples of regions that have used what can be described as social capital to create knowledge based growth. Nevertheless, local interaction can also be negative when it creates protectionism and rent seeking. Interaction is most beneficial between different groups and across classes and power structures. Secondly, connections to outside the region are only beneficial when ideas are internalised to the benefit of local firms. Being connected to the outside, both digitally (with ICTs) and physically (with transport infrastructure) may lead to a flow of human capital out of the region (in a process labelled 'brain-drain').
- Integration of policies at regional level: Sector-based policies alone do not address the need for links between different interventions. For example, increasing human capital through a programme to enhance skills should match the needs of emerging industries. Similarly, a strategy to increase the attractiveness of a place for investors has to take into account social, cultural and legal issues in addition to purely economic considerations. A successful strategy would therefore integrate policies that are formulated with demand side considerations, through approaches such as public-private partnerships.

Smart Specialisation as a tool for regional policy has to be carefully considered in the development of the Health Care Cluster – CBHealth of the CB region and must follow the 'place based approach' to economic development that has been promoted by both the European Commission and the OECD.

In summary the concept of Smart Specialisation in the health care sector is 'smart' for two main reasons:

- Firstly, it links research and innovation with economic development in novel ways such as the entrepreneurial process of discovery and the setting of priorities by policy makers in close cooperation with local actors.
- Secondly, this process is carried out with an eye on the outside world, forcing regions to be ambitious but realistic about what can be achieved while linking local assets and capabilities to external sources of knowledge and value chains.

However, while each regional or national strategy will share common features, the place based approach shows us that understanding the local context is crucial in their successful design.

2.5 Mission, vision and goals of the Health Care Cluster

Mapping out effective strategies to improve the current state of affairs in Health Care Cluster is very much dependent on the vision and goals set.

Mission:

Health Care Cluster enhances cooperation and networking between all the stakeholders in the field of health care sector – public institutions, business, academia and civil society - in order to create synergy, develop joint projects and provide high quality health care services

Vision:

Health Care Cluster is recognised as a significant contributor to overall improvement of the performance of the health care sector in the CB region

Cluster vision and objectives are in line with the Macedonian Health Strategy (2020), with MDGs and the following objectives of the EU Health Care Program 2014-2020:

- Promote health, prevent diseases, and foster supportive environments for healthy lifestyles
- Protect citizens from serious cross-border health threats
- Contribute to innovative, efficient and sustainable health systems
- Facilitate access to better and safer healthcare for Union citizens

2.5.1 Proposed strategic fields, goals, objectives and measures for cluster development

In order to achieve its vision and to tackle the above mentioned challenges, the Health Care Cluster might consider the following **strategic fields** or **priority areas**:

- a) Strengthening organizational development and improving the capacity of the cluster management
- b) Improving the individual performance of cluster members
- c) Innovation through strengthening cooperation
- d) Promotion of the Health Care Cluster and creating synergy effects with tourism sector
- e) Achieving sustainability in terms of self-financing of cluster activities

These strategic fields are then translated into the following **long term goals**:

- To strengthen Health Care Cluster institutionally and increase the capacity of cluster management to implement the recommended measures from the action plan in more efficient manner
- To assist cluster members to provide more quality services and to contribute more effectively towards achieving of the objectives of the EU Health Care Programme 2014-2020
- To improve cooperation and creation of networks and partnerships between Public and Private Health Organizations and research institutions, aiming at improving innovative potential of the health care sector
- To promote the Health Care Cluster - CBHealth and develop medical tourism (physical rehabilitation) in the CB region
- To strengthen the capacity of the Health Care Cluster – CBHealth to finance cluster activities with own resources or to have access to external financial support

These goals have been identified with potential members of the Health Care Cluster - CBHealth, but have to be verified at the joint workshop for initiation the

establishment of the cluster. Currently, there are more than 20 potential cluster members, representatives from public and private health service providers, universities, and supporting institutions, which have limited experience in implementing joint projects. The basic cluster structure will be established, but will need further strengthening in order to be able to support implementation of joint cluster initiatives.

The first three strategic priorities, strengthening the organization structure and capacities of the cluster management, improving the individual performance of the cluster members and strengthening external networks are seen as a precondition for improving the overall cluster effectiveness and achieving the sustainability of the cluster in the long run.

In the period of up to two years it is expected the proposed measures to lead to establishing functional cluster structures with increased number of members, which will have capacities to implement joint projects and to be open for new developments.

Besides the existing potential cluster members who expressed interest to join the cluster, in the future the cluster management will focus at attracting new representatives of the health care sector and at establishing partnerships with educational institutions, local and regional authorities and business service providers (support organisations, consultancy companies, etc.).

Taking in consideration that Health Care Cluster – CBHealth will heavily dependent on external financial and technical support in the initial stage of development, and following the assumption that financial sustainability cannot be achieved in a short period of time, CBHealth Cluster has set achieving sustainability as a long term goal. However, the cluster strategy also proposes immediate measures that contribute in achieving the long term goals and developing a functional and effective cluster.

In that stage the cluster might benefit from so called cluster agglomeration effects, such as decreasing the costs, attracting new companies in the region, improving access to labor and finance and increasing productivity.

2.6 Action plan

Long term goal 1		
To strengthen Health Care Cluster institutionally and increase the capacity of cluster management to implement the recommended measures from the action plan in more efficient manner		
Objectives	Activities	Period
Objective 1 - Skills of the cluster management in	Activity 1 - Participation of Cluster management at	

specific areas have been improved	expert forums and round tables	
	Activity 2 - Coaching sessions for cluster management (facilitation of meetings, etc.)	
Objective 2 - The cluster membership base has been increased	Activity 3 - Promotion of cluster benefits to potential new members	
Objective 3 - The cluster structure has been strengthened and visibility increased	Activity 4 - Elaboration of communication strategy	
	Activity 5 - Development of Health Care Cluster web site (with possibility for internal communication between the members)	
Objective 4 - Functional M&E system has been established	Activity 6 - Developing monitoring and evaluation system	

Long term goal 2		
To assist cluster members to provide more quality services and and to contribute more effectively towards achieving of the objectives of the EU Health Care Programme 2014-2020		
Objectives	Activities	Period
Objective 1 - Cluster members have improved their operational and business skills and have intensified their collaboration	Activity 1 - 2 workshops on identifying, disseminating and promoting the evidence-based and good practices for cost-effective disease prevention and health promotion activities	
	Activity 2 - 2 workshops on identifying and developing coherent approaches for better preparedness and coordination in health emergencies	

	Activity 3 - One workshop on innovation in public health intervention and prevention strategies	
	Activity 4 – 2 Workshops on access to cross-border medical expertise and information for medical conditions of low prevalence, high specialization or rare diseases	
Objective 2 - The linkages between the cluster members have been strengthened	Activity 5 – Organizing regular meetings on quarterly basis	

Long term goal 3		
To improve cooperation and creation of networks and partnerships between Public and Private Health Organizations and research institutions, aiming at improving innovative potential of the health care sector		
Objectives	Activities	Period
Objective 1 – Cooperation and coordination between Public and Private Health Organizations has been improved Objective 2: Partnership with research institutions have been created Objective 3: Partnership and networking with other Macedonian, Bulgarian and international clusters in the field of health care sector and other sectors (especially tourism) have been built	Activity 1 - Establishing central computer system	
	Activity 2 - Initiating joint innovative activities with the research institutions	
	Activity 3 - Attending Cluster conferences and networking events	
Long term goal 4		
To promote Health Care Cluster and develop medical tourism (physical		

rehabilitation) in the CB region		
Objectives	Activities	Period
Objective 1 - Total value of generated income of the cluster members as a result of improved services in medical tourism has been increased	Activity 1 - Elaborating in-depth analysis of the general global trends and potentials for medical tourism in the CB region	
	Activity 2 - Creating a database of health care and medical care services	
	Activity 3 - Development of campaign for the Health Care Cluster and promo material for health care services in tourism	
	Activity 4 - Participation at fairs and other events in the field of health care and medical tourism sector (to be defined in the market analysis)	
	Activity 5 - Organizing workshops for improving health care, the customer service, etc.	

Long term goal 5		
To strengthen the capacity of the Health Care Cluster to finance cluster activities with own resources or to have access to external financial support		
Objectives	Activities	Period
Objective 1 – Health Care Cluster is financing its' operational costs and part of its activities	Activity 1 - Setting up a system for collection membership fees	
	Activity 2 - Developing income generating services	

Objective 2 - Cluster members have been supported to apply for EU funds	Activity 3 - Training workshop on EU funding opportunities	
	Activity 4 - Training and advising on project proposal writing	

The development of the Health Care Cluster will depend not only on measures that are implemented in the cluster itself but also on those which are affecting other clusters on higher cluster policy level.

2.7 Marketing and tools for promotion

The Marketing plan should aim to achieve the following objectives:

- Increasing the awareness of the broader public about the activities of the Health Care Cluster
- Sensitizing all potential cluster members with the benefits of the BHealth
- Improving the visibility of the CBHealth and attracting new cluster members
- Improving the internal communication between the cluster members
- Improving communication and coordination between the CBHealth and health care institutions

2.7.1 Communication as instrument of modern cluster management

Communication is on both counts an indispensable field of action of modern cluster management:

- Perfectly organized and managed internal communication is an indispensable **prerequisite for orderly and transparent course of business** in the HCC. In this context everyday correspondence is an important communication tool as well.
- Communication **as a tool for policy implementation** contributes to increase the understanding of processes and therefore the acceptance with the people involved and affected. Active and transparent communication serves as motivation for the cluster members and strengthens their confidence to act.

General considerations of communication

Transparency

Good communication of the cluster members and stakeholders requires fundamental transparency with regard to project action. Therefore it is imperative to create the highest level of transparency possible during all phases of the decision-making process and after having taken a decision. Over a longer period of time, communication cannot hide the lack of transparency.

Keep it simple

Communication doesn't need to be complex. Many things can be well taken care of within the regular course of business. If there is a lack of funds to produce communication products, direct encounters at meetings and events are excellent occasions for a very intensive and profitable information exchange.

Seize a chance

In the context of other business processes there are often additional possibilities for communication. In the context of a meeting, for example, a site visit can be organized to which other partners are invited, possibly also the media. Thus the effort and expenses to communicate information can be significantly reduced.

Use the partners as multipliers

The cluster members and other health care providers have their own separate networks. By means of an intensive exchange of information the networks are provided with information and can be motivated, if necessary, to become active. This cooperation creates appropriate win-win situations and helps everyone to use resources effectively.

2.7.2 Communication targets

Overall target

- The HCC is recognized as an efficient instrument for improving the health care sector in the CB region

Targets for the main target groups

Internal

- The representatives of the Cluster management and the cluster members do have shared vision of HCC and common view of the priorities, objectives and activities
- The Cluster management has a sufficient overview of the potentials and funding opportunities for sustainable HCC
- The cluster members have regular exchange regarding the status of implementation of HCC activities

Broad public (Citizens)

- The citizens perceive the HCC as a tool for improving the health care sector in the CB region
- The citizens are familiar with examples of the HCC activities

Potential cluster members

- Potential cluster members (health care providers and other related institutions) are aware about benefits of HCC
- Potential cluster members are ready to enter into cooperative relations with the cluster members
- Potential members are ready to join the cluster

Media

- The media have a basic understanding of the benefits of the HCC
- The media have access to the main facts and key data of HCC
- The media know examples of the implementation of the HCC activities

2.7.3 Marketing and communication instruments

The subsequent compilation presents the possible marketing and communication instruments and their range of utilization (as regards content and target groups) after establishment of the Health Care Cluster - CBHealth. This is indicated by the allocation of priorities.

Instruments with high and urgent priority

- *Website*

Description: Vital information instrument of the HCC for implementation and communication with the broader public and documentation of cluster activities

Purpose: Ensure a generally quick access to all relevant information about the HCC, cluster activities, projects, contacts, international relationships, etc.

Target groups: All

Frequency: Continuous updating, at least on a weekly basis

Responsibility: Outsourcing and cluster management

Priority: medium

To do:

- *develop the structure of the website*
- *determine people responsible for content*
- *define the working process for the renewal*

- *Annual report*

Description: Reporting on the implementation progress of the HCC in accordance with the statutory task

Purpose: Main basic document for marketing and the communication procedure with strong formal characteristics and political legitimacy

Target groups: All

Frequency: annually

Responsibility: Cluster Management

Priority: urgent (after registering the HCC)

To do:

- *develop a content structure*
- *elaborate the report*
- *present during the Annual Assembly*

- *Meetings*

Description: Regular meetings of the cluster members; there is the need to distinguish between scheduled meetings with a fixed agenda and broader meetings with changing agendas

Purpose: Meetings are a suitable means for multilateral, mutual and in-depth exchange of information. All people involved are brought to the same level of information. At the same time there is the opportunity to discuss. The fixed agenda creates a feeling of security and simplifies the preparation work for all parties involved

Target groups: Cluster members and potential members

Priority: very high

To do:

- *determine participants*
- *schedule and announce dates*
- *define fixed agenda*

- *Fact sheets*

Description: One to two pages of graphically simple journalistic representation of the HCC and of the implementation progress
Important: fact sheets need to be understandable per se and to create access to key terms.

Purpose: Quick access to basic elements of the HCC
Increase both comprehensibility and transparency

Target groups: All
Frequency: Continuous updating
Responsibility: Cluster Management
Priority: very high
To do:

- establish a list of categories for the fact sheets
- have various units draft texts (important: for each factsheet one category only)
- journalistic texts
- distribution, upload on website, distribution to media

- *Social media campaign*

Description: Combined and concentrated use of various social media communication tools including
Purpose: Launch of a specific topic or of a specific pattern of behavior with a broad range of stakeholders
Target groups: Broad public, potential cluster members (all)
Frequency: during one to two years
Responsibility: Outsourcing
Priority: high
To do:

- assess the needs
- work out the campaign concept
- detailed planning and implementation

Instruments with medium priority

- *Newsletter*

Description: Electronically distributed newsletter with short texts (2 to 3 sentences) and with links to additional information on the website or in the intranet
Purpose: Regular information of the cluster members about current activities, events, new professional information, etc. The newsletter ensures that all cluster members are involved and interested are kept up-to-date on a regular basis and at the same time. The brief information in the newsletter should be complemented by further information on the website. This strengthens the attractiveness of the website as a central information box
Target groups: Cluster members and potential members
Frequency: monthly, more frequently if necessary
Responsibility: Cluster assistant
Priority: very high

To do:

- *to compile a list of addresses*
- *to compile and administer a topic list (inputs from meetings)*
- *monthly transmission*

- *Flyer*

Description: Multipage, appealingly designed brochure about the HCC and the organization and progress of the implementation respectively

Purpose: Versatile information instruments providing a brief overview on goals, organization and progress of the HCC

Target groups: All

Frequency: *once* (renewed after 2–3 years)

Responsibility: Cluster assistant

Priority: *medium*

To do:

- *make a concept on content*
- *text drafts by the communication unit*
- *graphic design and production*

- *Examples of cluster activities with lighthouse effect*

Description: Identify specific cluster activities that can be emblematic of the goals of the HCC and have a regional effect. Within the whole communication processes these activities should be used as reference points

Purpose: Focus on exemplary cluster activities that have a strong message and create a sense of identity

Target groups: All

Frequency: –

Responsibility: Cluster management

Priority: *medium*

To do:

- *identify cluster activities*
- *review and document the relations*
- *launch by means of media conference or media release*
- *continuous use within all communication contexts*

- *Press conferences*

Description: On-site information for national and regional media

Purpose: Increase the visibility of the HCC, direct exchange with the media, both on a personal basis and with regard to content

Target groups: Media, potential cluster members, broad public

Frequency: At least twice a year. To present both the annual report and the annual program, ideally once a year with a short excursion

- Responsibility:* Cluster management
Priority: medium
To do: – define the standard procedure
– make a check list for both the preparation and the procedure
– define content and messages to be communicated
- *Press release*
Description: Reviewed brief information for the media about the cluster related events, etc.
Purpose: Increase the media exposure and thus the visibility of the HCC
Target groups: Media, potential cluster members, broad public
Frequency: five to six times a year
Responsibility: Cluster management
Priority: medium
To do: – determine standard procedure to develop media releases
– make a check list for both the preparation and the procedure
– define content and messages to be communicated
 - *Training courses*
Description: Trainings of one to two days for cluster management and cluster members about specific cluster related issues
Purpose: Increase the personal and professional competencies and the cluster management and cluster members
Target groups: Cluster management and cluster members
Frequency: twice a year
Responsibility: Outsourcing
Priority: medium
To do: – design a training concept
– define the topics of the training courses
– research and contact lecturers
– organize social program

Instruments with low priority

- *Events*
Description: Large get-togethers allowing informal exchange of information during a topical conference, or while having a networking gathering. Possibly in combination with a media event
Purpose: Increasing awareness, informal contacts during the presentation of important findings or of model examples in combination with nurturing the social network
Target groups: Cluster members, potential cluster members, media

Frequency: once to twice a year
Responsibility: Cluster management
Priority: low
To do:
– *define the topic*
– *determine the target groups*
– *develop program and contact lecturers*
– *organize social program*
– *send out invitations*

- **Campaigns**

Description: Combined and concentrated use of various communication tools including advertising instruments (posters, advertisements in newspapers and electronic media)
Purpose: Launch of a specific topic or of a specific pattern of behavior with a broad range of stakeholders
Target groups: Broad public, media, (all)
Frequency: during one to two years
Responsibility: Outsourcing
Priority: very low
To do:
– *assess the needs*
– *work out the campaign concept*
– *detailed planning and implementation*

2.8 Main obstacles and challenges for the CBHealth

According to the analysis of the health care sector industries, as well as the interviews with the potential cluster members and support organizations, the main obstacles or weaknesses for achieving the goals and implementing recommended measures are the following:

1. Lack of appropriate business culture for maintaining strong collaboration with customers, especially with regard of soft management skills (communication, negotiation, presentation, etc.)
2. Lack of financial resources
3. Insufficient collaboration between the health care sector and education/research community – the existing forms of collaboration would greatly benefit from the implementation of structured and sector specific linkage programmes, which could bring critical assets in forms of finance, technology transfers and specialized knowledge.

4. Lack of commitment of cluster members actively to participate and contribute in designing and implementation of cluster activities.
5. Limited capacity of the cluster management to cope with challenges in the health care sector – Although the cluster management will possess sector specific knowledge, due to lack of experience with clusters, strengthening of its' capacity for providing member oriented services, improving cluster management skills and measuring the cluster performance will be needed.
6. Lack of business perspective and insufficient recognition of potential of the health care sector for employment promotion

2.9 Conclusions and next steps

Having in mind the challenges of the health care sector in general, the potential members of the Health Care Cluster are aware that organizing themselves into cluster could be one of the ways for overcoming their limitations, improving their performance and strengthening their role in the development of the health care sector in the CB region.

It should be taken into the consideration that although there is a critical mass of interested stakeholders in the health care sector to establish the Health Care Cluster - CBHealth, the existing knowledge and understanding about cluster concept among the representatives of the sector is very limited. However, the already expressed interest and proposed organisational structure, combined with the strong motivation and history of informal cooperation, provides solid base for Health Care Cluster - CBHealth to grow into a functional cluster.

In order to achieve the goals, first concerted effort of all cluster members based on a cluster strategy map is required. Initially, all cluster members need to discuss this cluster strategy, which only forms the basis for further elaboration of a mutually agreed final strategic document. Among others, the following questions have to be discussed and a consensus found:

- Do the goals and objectives as presented really meet the expectations of the cluster members, as the key players in the development of the development of Health Care Cluster?
- Are the proposed measures adequate; how can they be implemented and financed? Which rules should be applied to re-distribute financial resources for implementing the strategy?
- What is a time frame for implementing each of the proposed measures?
- Who will take the responsibility to co-ordinate, implement and monitor the measures once agreed upon?

Next steps:

- Submit the cluster strategy to all of the interested representatives of the health care sector and potential cluster members for commenting
- Set up a monitoring system through establishing ongoing feedback and co-ordination process while implementing the main measures.

The cluster strategy can become operational only with the contribution of all cluster members and relevant stakeholders and with development of respective action plans.

The implementation of necessary measures can start without delay, since the measures proposed in this strategy map can be implemented without changes in the given organisational setting of the cluster.

Annex: Health Care Cluster road map with an action plan

Mission	Health Care Cluster enhances cooperation and networking between all the stakeholders in the field of health care sector – public institutions, business, academia and civil society - in order to create synergy, develop joint projects and provide quality services				
Vision	Health Care Cluster is recognised as a significant contributor to overall improvement of the performance of the health care sector in the CB region				
Strategic area	Organizational Development	Individual performance of the cluster members	Innovation through strengthening cooperation	Promotion of the Health Care Cluster and creating synergy effects with tourism sector	Sustainability
Goals (5 years)	To strengthen Health Care Cluster institutionally and increase the capacity of cluster management to implement the recommended measures from the action plan in more efficient manner	To assist cluster members to provide more quality services and to contribute more effectively towards achieving of the objectives of the EU Health Care Programme 2014-2020	To improve cooperation and creation of networks and partnerships between Public and Private Health Organizations and research institutions, aiming at improving innovative potential of the health care sector	To promote Health Care Cluster and develop medical tourism (physical rehabilitation) in the CB region	To strengthen the capacity of the Health care Cluster to finance cluster activities with own resources or to have access to external financial support
Objectives (until 2019)	1. Skills of the cluster management in specific areas have been improved	1. Cluster members have acquired new knowledge related to EU Health Care	1. Cooperation and coordination between Public and Private Health Organizations	1. Total value of generated income of the cluster members as a result of	2. Health Care Cluster is financing part of its' operational

	<p>(Indicator: at least 8 coaching sessions and one training measures implemented for cluster management)</p> <p>2. The cluster membership base has been increased (Indicator: 100 % membership increase – baseline number of members in the reregistered cluster)</p> <p>3. The cluster structure has been strengthened and visibility increased (Indicator: number of working groups established for implementation of action plan)</p> <p>4. Functional M&E system has been established</p>	<p>Programme 2014-2020 (Indicator: Post test results after the trainings)</p> <p>2. The linkages between the cluster members have been strengthened (Indicator: At least 2 new joint cluster activities initiated)</p>	<p>has been improved</p> <p>2. Partnership with research institutions have been created</p> <p>3. Partnership and networking with other Macedonian, Bulgarian and international clusters in the field of health care sector and other sectors (especially tourism) have been built (Indicator: At least 2 new partnership agreements signed, Health Care Cluster is involved in at least one international project)</p>	<p>improved services in medical tourism has been increased (Indicator: Increase of 10 % compared to the end of 2016)</p>	<p>costs and activities (Indicator: At least 30 % of operational costs and cluster activities have been financed by own resources)</p> <p>3. Cluster members have been supported to apply for EU funds (Indicator: At least 4 project proposals submitted and at least 2 accepted)</p>
Proposed measures (activities)	<ul style="list-style-type: none"> Participation of Cluster management at expert forums and 	<ul style="list-style-type: none"> 2 workshops on identifying, disseminating and 	<ul style="list-style-type: none"> Establishing central computer system Initiating joint 	<ul style="list-style-type: none"> Elaborating in-depth analysis of the general global trends and 	<ul style="list-style-type: none"> Setting up a system for collection

	<p>round tables</p> <ul style="list-style-type: none"> • Coaching sessions for cluster management (facilitation of meetings, etc.) • Promotion of cluster benefits to potential new members • Elaboration of communication strategy • Development of Health Care Cluster web site (with possibility for internal communication between the members) • Developing monitoring and evaluation system 	<p>promoting the evidence-based and good practices for cost-effective disease prevention and health promotion activities</p> <ul style="list-style-type: none"> • 2 workshops on identifying and developing coherent approaches for better preparedness and coordination in health emergencies • 2 workshops on access to cross-border medical expertise and information for medical conditions of low prevalence, high specialization or rare diseases • Joint project design and project proposal development • Organizing regular meetings on quarterly basis 	<p>innovative projects with research institutions</p> <ul style="list-style-type: none"> • Signing MoU with international clusters in the health care and other sectors, especially tourism) • Attending Cluster conferences and networking events 	<p>potentials for medical tourism in the CB region</p> <ul style="list-style-type: none"> • Creating a database of health care and medical care services • Development of campaign for the Health Care Cluster and promo material for health care services in tourism • Participation at fairs and other events in the field of health care and medical tourism sector (to be defined in the market analysis) • Organizing workshops for improving health care, the customer service, etc. 	<p>membership fees</p> <ul style="list-style-type: none"> • Developing income generating services • Training workshop on EU funding opportunities • Training and advising on project proposal writing
--	--	--	--	--	--

This publication has been produced with the assistance of the European Union through the INTERREG-IPA Cross-border cooperation Programme CCI No. 2014TC16I5CB006.

The contents of this publication are the sole responsibility of the Bulgarian Medical Association- Branch Blagoevgrad and Public Health Foundation Clinical Hospital, Shtip, Macedonia and Public Health Foundation Clinical Hospital- Shtip, Macedonia and can in no way be taken to reflect the views of the European Union and on the Ministry of Regional Development and Public Works of Republic of Bulgaria as a Managing Authority of the Programme.



Public Health Foundation Clinical Hospital -
Shtip, Macedonia
Str: Ljuben Ivanov No.25
2000 Shtip, Macedonia
T.:+389 32 394 099, F: +389 32 605 001
www.bolnicastip.com.mk
jzuobstip@yahoo.com



Bulgarian Medical Association - Branch
Blagoevgrad, Bulgaria
Str: Brakja Miladinovi No.21
2700 Blagoevgrad, Bulgaria
T: +359 73 83 22 58
www.bls-blgrad.net
info@bls-blgrad.eu