

**«Πολιτικές για την ενίσχυση της πρόσβασης σε υπηρεσίες
υγείας σε υποβαθμισμένες περιοχές»**

(“Policies for Enhancing Access to Health Services in Deprived Areas”)

“The Healthy Municipality”

MIS Code: 5011021

Website: healthymunicipality.com

Deliverable 5.1.2

**Common Cross – Border Prevention Plan for Pilot
Applications**



*Αναπτυξιακή Ροδόπης
Regional Development Agency of Rodopi*

The Project is co-funded by the European Regional Development Fund and by national funds of the countries participating in the Interreg V-A “Greece-Bulgaria 2014-2020” Cooperation Programme



Table of Contents

PREFACE.....	3
DESCRIPTION OF THE PROJECT AREAS.....	4
PARTICULARITIES OF THE PROJECT AREAS.....	6
General characteristics of the target areas.....	6
Common particularities in all Municipalities of the Project Area	7
Mortality in the target areas	7
Morbidity in the target areas	8
EXISTING PRIMARY HEALTH CARE POLICIES.....	11
SWOT ANALYSIS.....	13
HEALTH PREVENTION POLICIES IN THE PROJECT AREAS.....	14
COMMON HEALTH PREVENTION PLAN.....	16
AXES AND ACTIONS OF COMMON PREVENTION PLAN FOR PILOT APPLICATION	17
APPLICATION PROCESS.....	19
TOOLS AND ITEMS TO BE FOLLOWED WHEN IMPLEMENTING THE PILOT ACTION.....	19
Communication Actions	19
Patients Cards.....	20
METHODOLOGY AND PARAMETERS FOR MONITORING AND EVALUATING THE IMPLEMENTATION OF THE PLAN AT THE LOCAL LEVEL	21
EXPECTED RESULTS FROM THE IMPLEMENTATION OF THE PILOT PREVENTION PLAN.....	23

PREFACE

The present deliverable has been prepared by the Regional Development Agency of Rodopi S.A. - Lead Beneficiary of the Healthy Municipality Project, and more specifically by its subcontractor Infodim, in the context of the project **“Policies for Enhancing Access to Health Services in Deprived Areas - The Healthy Municipality”** implemented under the INTERREG V-A Greece – Bulgaria 2014 – 2020 Cooperation Programme, with the MIS Code 5011021.

Aim of Healthy Municipality project is the design of prevention policies in the health sector as well as their pilot implementation at the level of the local government of first degree, especially in remote areas, thus contributing to the upgrading of the health services provided to the residents of these areas and to the improvement of their quality of life.

The following organizations participate as beneficiaries in the Healthy Municipality project:

- Development Agency of Rodopi S.A. (GR), Lead Beneficiary
- Aristotle University of Thessaloniki - Special Account for Research Funds - Department of Economics (GR)
- Municipality of Arriana (GR)
- Municipality of Iasmos (GR)
- Agency for Transnational Training and Development (GR)
- Regional Health Inspectorate / Haskovo (BG)
- Association of Rhodope Municipalities (BG)
- Municipality of Krumovgrad (BG) and
- Municipality of Momchilgrad (BG).

The present deliverable regards the preparation of a Common Cross Border (CB) Prevention Plan for pilot application. As in the previous phases of the Healthy Municipality project the challenges in the health sector for the local communities in the involved areas were analyzed and prevention policies to addressing them were designed, the common prevention plan pursues to raise elements of these policies to be tested on the ground in the framework of the specific project. Problems associated with the application of specific measures along with good practices should be identified, so as to help improving both methodologies and tools prepared by the Healthy Municipality project.

DESCRIPTION OF THE PROJECT AREAS

The overall project area includes 4 Municipalities, 2 in Greece and 2 in Bulgaria, as follows:

- **Municipality of Arriana (GR)**
- **Municipality of Iasmos (GR)**
- **Municipality of Krumovgrad (BG)** and
- **Municipality of Momchilgrad (BG).**

The **Municipality of Arriana** is located in the northeastern part of the prefecture of Rodopi in the Region of Eastern Macedonia and Thrace. The population of the Municipality amounts to 16,577 inhabitants according to the 2011 census. The inhabitants of the Municipality are Muslims by 95% and Christians Orthodox by 5%.

The Municipality includes both plain and mountainous areas, with extensive mountains of medium altitude. It is relatively sparsely populated, although there are several settlements with a significant number of inhabitants, despite the reduction of the total population of the Municipality in the last 20 years. The discrepancies within the Municipality are significant. The lowlands are more densely populated with the agriculture as the main occupational activity. On the contrary, in the mountainous areas the inhabitants are less and they are mainly engaged in livestock farming. In the Municipality of Arriana, the vast majority of the residents are farmers - stockbreeders - foresters, etc. (81.95%). In agriculture, the cultivation of tobacco captures an important position.

The **Municipality of Iasmos** is located in the western part of the prefecture of Rodopi. Most of the Municipality of Iasmos belongs to the northwestern mount of Rodopi, which is characterized by high altitudes and dense vegetation. The area is crossed by the stream Kompsatos, while a significant part is covered by the Lake Vistonida.

The population of the Municipality is 13,810 inhabitants according to the 2011 census. Christians and Muslims coexist in the area with their main occupations being agriculture and livestock farming. Those employed in the primary sector are clearly the vast majority, with 58.71 %. The second group is that of skilled craftsmen (11.45%), followed by the almost equal percentage group of those employed in the sector of services and sales (11.43%).

The **Municipality of Krumovgrad** is an administrative unit of the province of Kardzhali, its territory falls entirely in the Eastern Rhodopes. It is located in a semi-mountainous area.

The municipality consists of 80 settlements. Because of the peculiarities of the terrain, the settlements in the municipality are fragmented and remote. The population of the municipality in 2011 was 17,662 people. The Muslim population is very high compared to the average of the country.

The educational level of the population is low. An additional disadvantage is the lower education and qualification of young people. The unemployment rate in the municipality in 2012 was 18%.

The main problem in the municipality is the lack of sufficient water sources with quality drinking water.

Krumovgrad Municipality is heavily depending on agriculture as a source of income and employment. Tobacco is the main culture that provides livelihood to a large part of the population.

The municipality has a functioning light industry, which specializes in the production of footwear and sewn products. A small number of micro-enterprises are established in the area to produce bread, bakery products and soft drinks. The most powerful business factor in the municipality of Krumovgrad is an enterprise exploiting the gold mining area.

The **Municipality of Momchilgrad** is an administrative unit of the province of Kardzhali, it is situated in South Bulgaria and occupies the southeastern parts of the Eastern Rhodopes. The terrain is predominantly mountainous.

The municipality consists of 49 settlements, most of them with a population of less than 200 inhabitants. The overall population of the municipality is 16,263inh. (2011), with the central town of the municipality – Momchilgrad-, having a population of 7,831 inhabitants. In the municipality the relative share of the Muslims amounts to 84.8%.

Compared to the country average, the data shows a lower level of education among the population.

In recent years the number of unemployed persons in the municipality has remained relatively high. The unemployment rate (11%) is above the national average. The low value of net sales revenue per employee is an indirect indicator of lower productivity and competitiveness of the local economy and the production of the municipality.

In terms of productive sectors the tobacco and the processing industry, in particular the food and beverage industry and the textile and clothing industry, are of major importance for the economy of the municipality. Livestock breeding is one of the main activities. Plant cultivation is represented mainly by tobacco growing, while wheat and barley growing in recent years are negligible.

PARTICULARITIES OF THE PROJECT AREAS

General characteristics of the target areas

The **Municipalities of Arriana & Iasmos** are areas of small population and large dispersion in small agricultural establishments.

The population is relatively aged, especially in the Municipality of Iasmos, where (compared to the country average) the birth rate is at particularly low levels, whereas the aging index and dependency ratio are much higher. The trend of births in the Municipality of Arriana is also negative, but less intense than in the Municipality of Iasmos.

A special characteristic of both Municipalities (Arriana & Iasmos) is the low level of education, despite the relative improvement recorded in the recent years.

The proportion of illiteracy (as well as the percentage of dropping out of school) is double than the country average, as the majority of inhabitants fails to complete second grade education. The percentage of population with second and third grade education lie on 1/4 and 1/5 of the country average respectively.

The housing conditions are not good.

The decrease in the active population in both Municipalities is very high.

The two Municipalities are different from each other, with that of Iasmos having a more urban character than the Municipality of Arriana. However, both areas are particularly challenged and belong to the least developed areas of the country.

The two Municipalities have access to the Egnatia motorway. The internal network of the Municipality of Arriana presents significant problems due to the large number of streams that cross it. The respective network of the Municipality of Iasmos is in better condition, with the exception of its mountainous part.

Both municipalities of **Krumovgrad and Momchilgrad** are characterized by low mountainous terrain with predominantly forest areas.

The two municipalities are medium-sized, with a scattered settlement structure formed by a small town and numerous small villages, some of which have a very small population with a high risk of extinction. During the analyzed period 2006-2019, 2 villages in Krumovgrad and 3 in Momchilgrad were closed. About 10 villages in both municipalities are likely to be closed this decade.

Unemployment is relatively high in some settlements, due to which there is a drop out of the national health insurance system.

Especially in the villages large part of the population does not have health insurance (from 30% to 80% in some settlements).

This dispersion of the settlements and the small number of inhabitants in each of them, combined with their unclear health insurance status, are increasingly unfavorable preconditions for an efficient primary health care system.

Common particularities in all Municipalities of the Project Area

- All Municipalities are mainly representing the Muslim minority, especially the Municipality of Arriana that is almost entirely inhabited by Muslim population.
- In all municipalities (to some more and to others less), the settlements are fragmented and remote.
- The aging index is high.
- There is a low level of education.
- The unemployment is high.

The above elements indicate an area with economic and social problems, which may have serious implications for the physical and mental health of its inhabitants.

Mortality in the target areas

In Arriana & Iasmos

The most important **causes of death** in the area are circulatory system diseases, neoplasms and respiratory system diseases, which is in accordance with the nation-wide trends. Particularly in the Municipality of Arriana, deaths from diseases of the circulatory system appear in greater frequency than the country's average, followed by neoplasms and diseases of the respiratory system.

In the Municipality of Iasmos, circulatory system diseases are also the most frequent cause of death, however they remain at lower levels than in the Municipality of Arriana, along with neoplasms and respiratory system diseases.

In Krumovgrad and Momchilgrad

In the Municipalities of Krumovgrad and Momchilgrad, the most important causes of death are circulatory system diseases followed by neoplasms.

Morbidity in the target areas

According to the researches and the medical examinations carried out during the Healthy Municipality project, the main causes of morbidity in the project area are:

In the **Municipality of Arriana** the circulatory system diseases are more prevalent with sub-diseases, the Increased Blood Pressure and the Hypertension. The Diseases of the Endocrinological System follow, mainly the Non-Insulin-dependent diabetes mellitus. Diseases of the musculoskeletal system are found but in a smaller percentage. Finally, the Psychiatric - Psychological Diseases occur in the area, mainly the Depressive Feeling and the Depressive Disorder.

In the **Municipality of Iasmos**, to a greater percentage, the diseases of the circulatory system appear with sub-diseases, the Complicated Hypertension and the non complicated Hypertension. The Psychiatric - Psychological Problems follow with the most prevalent disease to be the Depression. The Diseases of the Endocrinological System occur to a lesser extent with sub-diseases the Non-Insulin Dependent Diabetes and the Hyperthyroidism.

In the Municipality of Iasmos, the medical diagnoses and examinations resulted:

- 5% with uncontrolled heart failure
- 5% with undiagnosed valvular diseases
- 5% newly diagnosed diabetes
- 10% had previously been infected with Hepatitis B and did not know it
- 2% with chronic active Hepatitis B who did not know it
- 5% with iron deficiency anemia
- 5% vitamin with B12 deficiency anemia
- 0,5% previously undiagnosed rheumatic disease
- 5% newly diagnosed pathological respiratory condition
- 0,6% with reduced respiratory function due to asthma which they did not know

However, the most impressive results of the medical examinations in the Municipality of Iasmos concern the following:

- 40% of the cases have been identified with unregulated hypertension
- 30% with known but unregulated diabetes
- 23% with vitamin D3 deficiency

In the **Municipality of Krumovgrad** a leading problem is the lipid profile disorders with a predominantly high cholesterol level among men in more than 50% of the examined subjects. This carries a high risk of cardiovascular disease, including heart attack and stroke. In the second place a significant percentage of women have elevated antithyroid microsomal antibodies - data on autoimmune glandular disease, mainly Hashimoto's thyroiditis. In the third place among women is the anemic syndrome, arising from genetic factors - the presence of thalassemia or thalassemic conditions or from poor or unbalanced nutrition. In the fourth place among men are established data for elevated liver enzymes, which is indicative of regular alcohol use and the possibility of physical and mental health damage through permanent intoxication.

In the **Municipality of Momchilgrad**, the greatest number of registered diseases is of the group of Diseases of the circulatory system. The leading disease in this group is Essential hypertension followed by Chronic Ischemic Heart Disease. In the second place are diseases from the group of Diseases of the endocrine system, eating and metabolism disorders, more cases of non-insulin dependent diabetes mellitus. In the separate laboratory blood tests were included hormonal studies for screening of Thyroid Diseases. The analysis draws attention to the great number of thyroid diseases.

From the medical-diagnostic exams very important results emerged related to **the great number of newly detected cases.**

In the Municipality of Momchilgrad, in the conducted clinical laboratory tests and examinations **306 newly detected cases of diseases or deviations in blood tests have been identified.**

In the municipality of Momchilgrad a percentage of 43% of cases of diseases has been newly detected, as following:

- **From the 497 cases of Diseases of the circulatory system: 166 were newly detected (a percentage of 33%).**
- **From the 182 cases of Diseases of the endocrine system, eating and metabolism disorders: 85 were newly detected (a percentage of 47%)**
- **From 107 cases of thyroid diseases: 81 were newly detected (a percentage of 76%)**
- **From the 16 cases of Diseases of the thyroid gland: 14 were newly found (a percentage of 87,5%)**
- **From the 10 cases of other thyroid diseases, unspecified: 8 were newly detected (a percentage of 80%)**

- From the 53 cases of non-insulin dependent diabetes mellitus 3 newly identified, (a percentage of 5,7%)
- In the conducted laboratory blood tests were identified 34 cases (8 male and 26 female), of Anemic Syndrome, of which 33 newly detected (a percentage of 97%)
- 21 newly detected cases of elevated levels of liver enzymes - ASAT, ALAT, of which 11 female cases and 10 male cases, have been identified.

The great number of the newly detected cases of diseases shows the high morbidity of the project area which is unknown and very dangerous for those suffering and which to a large extent could have been prevented.

The main causes of morbidity for all areas:

- Circulatory diseases (mainly arterial hypertension)
- Endocrine diseases (mainly non-insulin dependent diabetes mellitus)
- Thyroid diseases are more common in the 2 Municipalities of Bulgaria.
- Anemic syndrome in women and increased liver enzymes in men, are found in the Municipality of Krumovgrad.
- In the 2 Municipalities of Greece (and mainly in Iasmos) appearance of depression was identified as a finding.

The above means that chronic non-communicable diseases (CND) are the main cause of morbidity in all project areas.

Chronic non-communicable diseases (CND) are the main cause of global disease burden in the European region - 86% of 9.6 million deaths and 77% of 150.3 million DALYs (Disability-adjusted life years - the sum of potential years of life lost due to premature death and years of productive life lost due to disability).

To this disease group the World Health Organization (WHO) mainly include diseases of the circulatory system, malignant neoplasms, respiratory diseases, diabetes, mental illness, diseases of the musculoskeletal system and injuries. 1/3 of all deaths in the world are due to ischemic heart disease and stroke.

It has been proven that CND have multifactorial etiology. WHO cites seven main risk factors as the cause of most of them:

- elevated blood pressure;
- smoking;
- excessive consumption of alcohol;
- unhealthy eating habits;
- low physical activity;
- dyslipidemias;
- Overweight.

Successful intervention which targets societal and behavioral change can significantly reduce the global burden of disease, disability, and premature death caused by CND.

Prevention can be highly efficient, as well as the tool to reduce healthcare costs.

EXISTING PRIMARY HEALTH CARE POLICIES

In the **Municipality of Arriana**, the primary health services existing are the Regional and Local Medical Offices belonging to the Health Center of Sapes (close to the Municipality).

In the **Municipality of Iasmos** both the Health Center of Iasmos and Regional & Local Medical Offices are operating.

There are shortages in the medical, nursing and paramedical staff as well as in the equipment of both the Health Center and the Local Medical Offices of the 2 Municipalities, which make their work difficult.

The above shortages in personnel and equipment are also reflected in the field research, where, precisely because of these shortages, a large percentage of people with health problems do not prefer to ask for medical help at the nearest to their home public health structures.

The number of medical visits for emergencies to the Health Center is more than double than those for regular cases. The same applies for medical visits only for medical prescription (twice as many as in regular cases).

The above data first of all show the accessibility of the Health Center by its residents who, when there is an emergency, they have the possibility of access to a local public health structure. However, the data show also that residents do not use the Health Center for regular medical examinations, either because they consider that there is a lack of proper infrastructure (laboratories, equipment, etc.) and staffing (specialized staff) or because they consider other structures outside the area (the hospital, the private physicians) as better.

In general, in all the public structures, the medical visits for examination are much less than the visits only for medical prescription.

At the level of interventions in the field of health by the Local Authorities, the most important and fully acclaimed initiative with tangible results is the "Help at Home" Program addressed mainly to the elderly.

The combination, on the one hand of the many emergency incidents and the many visits for medical prescription and on the other hand the staff shortages, seem to contribute to the inability of the population to use the local public health structures for medical visits and examinations.

In the province of **Kardzhali**, where the municipalities of **Momchilgrad & Krumovgrad** are located, emergency medical care as a whole is insufficiently effective due to the difficult access.

Evaluation of the demand for specialized medical staff in outpatient care detected the need to expand the package of services in each specialization and to relocate some diagnostic and treatment services from inpatient to outpatient care.

Providers of specialized outpatient medical care are also unevenly distributed, with their concentration being predominantly in the municipal centers. This obstructs public access to this type of service, increases the number of cases with late diagnosis and complications, and increases the number of hospitalizations.

The system of hospitals (5) in the province of Kardzhali is capable of meeting the public healthcare needs of the province. However, because of the uneven distribution of pre-hospital care, the number of hospitalizations in many hospitals in the province has been increasing.

Consultations with a specialist are impossible in remote places. Patients have no access to laboratories, imaging diagnostic units, etc. and prefer to directly refer to a hospital as a single complex in which they can receive any needed medical care.

A significant proportion of the physicians, especially those in small settlements, are in retirement or pre-retirement age, and the number of young physicians is extremely low.

The large distances between small settlements and urban centers obstruct the access of inhabitants of remote and hard-to-reach settlements and neighborhoods to medical help. In most villages, people do not have direct access to primary care.

In primary outpatient care there is no established system for 24-hour admission. This increases the flow of patients to hospitals. This practice increases the number of secondary care visits and hospitalizations.

In all project areas the existing primary health care present significant shortcomings and is ineffective. However early diagnosis and treatment especially of CND is crucial for their prevention and treatment.

SWOT ANALYSIS

<p>Strengths</p> <p>The existence of the Health Center of Iasmos and of the Local Medical Offices in the Greek area, The existence of the "Help at Home" Program in the Greek area,</p> <p>The existence of the pre-hospital care in the hospitals in the Bulgarian area</p>	<p>Weaknesses</p> <p>The high level of morbidity in the area, mainly of the new detected cases after medical examinations, The low level of education of inhabitants in all areas, The low level of health culture of the inhabitants, The specific geographical location of the Municipalities of the area with its remote character, The presence of a large number of scattered villages in all areas and the difficult access to health services, especially in areas in Bulgaria, The absence of a primary health system in all areas, The absence of systematic health behavior initiatives, The lack of physicians, lack of specialists, Lack of integration of information systems such as telemedicine, Large part of the population does not have health insurance in the Bulgarian area</p>
<p>Opportunities</p> <p>The Healthy Municipality project and the tools produced by the project, The new initiatives in Greece related to health prevention (the family doctor etc), The health prevention 'pressure' of WHO, UNICEF, United Nations and other international agencies which can create incentives for reform, The European context presenting significant concepts for health prevention and mainly on NCDs, The worldwide approach on health promotion and intensifying campaigns for increasing the public's awareness of determinants of health, The Opportunities for wider application of IT (telemedicine) and the integration of IT systems that can improve the quality of services, and the operational efficiency</p>	<p>Threats</p> <p>The population ageing which means more health problems, Lack of economic resources for health systems, Environmental pollution because of the climate change and diseases occurred, Pandemics, where other diseases are necessarily sidelined</p>

HEALTH PREVENTION POLICIES IN THE PROJECT AREAS

Local Health Policy Plans as well as Disease Prevention Plans have been prepared for the Municipalities of the area **focusing on the prevention of non-communicable diseases as found to be the most common diseases in all areas of the project.**

For the 2 Municipalities of Greece

According to the Health Prevention Plan for the areas in Greece:

The Vision for both Greek Municipalities:

Improving the health and well-being of citizens and reducing the incidence of major diseases through the creation of a strong political base as well as of a commitment of cooperation with local actors.

Setting the goal, for both municipalities, of improving the health of the population and reducing its morbidity, the following goals of a local health policy emerge:

- Developing the cooperation with the health, social care and civil society units
- Awareness raising of the population on health issues and
- Training of health professionals and related social services on issues related to prevention.

However, a basic condition for a local health policy is in principle the taking of the relevant political decision by the political body of the Municipality (Municipal Council), while the coordination of the various relevant services of the Local Authorities as well as the networking of each Municipality with other relevant structures create a supportive framework for the effective implementation of local health policies.

Thematically, the **Prevention of Non-Communicable Diseases**, given their frequency of occurrence, is set in principle as the main axis of intervention of a policy in question.

Two axes of intervention emerge in this context as the main ones for achieving the above objectives: Awareness raising at the population and monitoring their health.

Indicative Actions

- Valorization- Provision of Informative - Educational Material for prevention
- Preparation and implementation of informative and educational programs for children and young people
- Preparation and implementation of informative and educational programs for adults
- Preparation and implementation of physical activity events to promote physical activity

- Preventive Blood Pressure Measurement Tests
- Preventive Tests for Measuring Diabetes
- Training of the Employees in the Health & Social Welfare Programs of Municipalities
- Utilization of the Examination Protocols of the Most Common Diseases of the area
- Utilization of the Social Media.

For the 2 Municipalities of Bulgaria

According to the Health Prevention Plan for the areas in Bulgaria:

Based on the demographic health status, the socio-economic development and analyzed data obtained from surveys on the health status of the population in the municipalities of Momchilgrad and Krumovgrad in the province of Kardzhali, the necessity is affirmed for implementing **targeted integrated measures for the prophylactics of CND through a wide range of medical activities and health services, aimed at protection and preservation of their population's health**. A strong emphasis needs to be placed on the early detection of these socially significant diseases, on limiting and preventing the risk factors for their occurrence, reducing their incidence and on their adequate and timely treatment.

In order to achieve this goal, it is necessary to engage all institutions and organizations at a regional level and their resources for the development of health policies, proving reproduction of the human resources and quality medical services for a productive and fulfilled life.

The Prevention Plan for the municipalities Momchilgrad and Krumovgrad, is based on a package of **short-term and long-term measures** and follow-up activities for the prevention and prophylaxis of CND and the promotion of a healthy lifestyle aimed at overcoming the identified problems.

SHORT-TERM MEASURES

Measure 1: Promotion of healthy lifestyle through activities for the health education of children, adolescents and youths.

Measure 2: Health education for increasing health literacy – actions targeted at the adult population, at health workers and municipal administration from the educational and social sector through acquaintance with the risk factors for chronic non-communicable diseases and the opportunities for their containment.

LONG-TERM MEASURES

Measure 1: Conducting periodic free preventive examinations and screenings – actions targeted at the population of working age (25 - 65+ years).

Measure 2: Providing living and working environments that improve the social determinants of health, equal access to medical services, living and working environments that strengthen health.

Also, proposals have been elaborated for the development of a health care system that has to respond to the expected health needs of the population for treatment and prevention activities, such as:

- **Developing urgent medical care and preventive activities in the remote areas of Krumovgrad and Momchilgrad** - Development of a system for **outpatient medical care** on the basis of a municipal medical institution, Improvement of the transport medical infrastructure
- **Improving the staffing of the municipalities with medical specialists**
- **Providing access through the possibilities of telemedicine**
- **Strengthening the hospital structure through public-private partnerships and participation of local businesses.**

COMMON HEALTH PREVENTION PLAN

Taking into account the common characteristics of the project areas in terms of morbidity and the above approaches which also present common features, a common prevention policy plan could be as follows:

The Common Vision:

Improving the health and the well-being of citizens by limiting and preventing the risk factors of Non Communicable Diseases (NCDs) through the creation of a strong policy base as well as of a commitment to work with local actors

The priorities:

- Promoting the early detection of these significant diseases
- Promoting the change in the behavior of individuals and groups to reducing morbidity from non-communicable diseases through prevention and promoting the health of the population

The Common Actions

A. Short term Actions

- **Action 1: Conducting periodic preventive examinations and diagnostics (e.g. Preventive Blood Pressure Measurement Tests, Preventive Tests for Measuring Diabetes etc.)**

- **Action 2: Valorization- Provision of Informative - Educational Material for prevention**
- **Action 3: Promotion of healthy lifestyle** through activities for the health education of children, adolescents and youths
- **Action 4: Health education for increasing health literacy** – actions targeted at the adult population, at health workers and municipal administration from the educational and social sector through acquaintance with the risk factors for chronic non-communicable diseases and the opportunities for their containment.

B. Long term Actions

Action 1: Improving staffing of the local health services with medical specialists

Action 1: Promoting telemedicine

Action 2: Providing living and working environments that improve the social determinants of health, living and working environments that strengthen health

Of course, as it is obvious, both the conducting of preventive examinations as well as the health education programs have to be also included in the long term actions.

The implementation of the above actions requires strong political will and conditions of broad consensus among political parties, the academic and professional community, and also Civil Society.

The involvement, dialogue, cooperation with institutional and academic bodies, scientific societies, Public Health policy scientists, professional associations (Public Health doctors, Public Health supervisors, health visitors), Non-Governmental Organizations etc. is a prerequisite for the creation of conditions of trust and the drafting and acceptance of plans with prospects for wider acceptance and implementation.

AXES AND ACTIONS OF COMMON PREVENTION PLAN FOR PILOT APPLICATION

The aim of the Pilot Application of the CB Prevention Plan is to test it on the ground in the four project areas involved in the project and locate difficulties and problems along with good practices.

The Pilot Application, refers to actions that correspond to the local policies for Health of the Municipalities, are, however, of immediate implementation and aim to investigating key parameters of the local health policies influencing the success of their implementation.

The Pilot Application of the Prevention Plans shall be implemented on two axes:

One axis is the carrying out of medical diagnostic exams on the most common diseases in part of the population in each area. Scope of the specific action is to monitor individuals with the most frequent diseases occurring in each Municipality, with the aim of avoiding emergency incidents. Thus, the examinations in question will have the character of a more specific investigation of the patients' condition, so that the appropriate program of prevention and monitoring of the individuals' disease to be prepared. The medical exams shall be carried out for six hundred (600) residents from each municipality. The exams shall be addressed by priority to a number of residents with a diagnosed disease related to those found to be the main ones in each Municipality or with suspicion of such.

The other axis is that of prevention where the local community is invited to participate in information, awareness raising and counseling actions with the aim to adopting a healthy lifestyle and to avoid health emergency incidents. Depending on the nosological profile of each Municipality, a series of group sessions will be implemented in each region, i.e. horizontal interventions that contribute to the prevention of diseases. These interventions aim at changing the life style of the residents via awareness raising and provision of information, while some may refer to mild group sport activities.

The Pilot Application shall focus on the non-communicable diseases, both with medical exams to monitor these diseases as well as with sessions in the population to prevent the risk factors of their occurrence in order to reduce their frequency and to timely treating them.

Filling out the patient's health card

For each medical examination carried out, the individual digital patient card prepared by the Healthy Municipality project shall be completed. The individual card will include the performed clinical and laboratory tests and their results. Physicians will also prepare a plan for the patient's further actions using the alert digital notification system which has been also prepared by The Healthy Municipality project.

Uploading on the Digital Health Platform

Individual patient health cards shall then be uploaded to the digital health platform also prepared by The Healthy Municipality project.

Report on Medical Exams for Patients Monitoring

It would be important for the project, a short report to be prepared by the physicians, related to the patient diagnoses, the follow-up of patients, their referral to specialist doctors, etc.

Report on awareness raising and counseling actions

Also, a report on the awareness raising and counseling actions, seminars, or sessions, shall be prepared including data such as: the thematic of the action, the venue, the number of participants, the age and gender of the participants etc.

APPLICATION PROCESS

The Municipalities have to prepare a relevant procurement which should be launched in accordance with the legislation of each country.

The procurement should be clear, defining:

- the required number of people who will participate,
- the number and the type of the relevant diagnostic -medical tests,
- the specialties of physicians needed,
- the way of organizing medical exams,
- the data of the patients to be collected and inserted in the patient card
- the number, place, thematic of seminars – sessions that have to be organized, as well as the specialties of the sessions' presenters and the expected number of participants.

For the organization of the medical exams and sessions to be effective, it should be taken into account that they both should be held locally, in each Municipal Community so as for the residents not to be inconvenienced.

TOOLS AND ITEMS TO BE FOLLOWED WHEN IMPLEMENTING THE PILOT ACTION

Communication Actions

For the effective implementation of the actions of the pilot application, it is necessary to raise awareness at the local population in a broad, targeted and by various means, manner.

The special characteristics of the Municipalities should be taken into account so as that:

- these municipalities belong to the least developed regions of the country, have a high percentage of illiteracy and a low level of education of the inhabitants

- these municipalities have large percentages of Muslim population, they are not fully conversant with the language of their country, and therefore the use of printed communication and informational material with texts (flyers, brochures, etc.) cannot have the effectiveness in information that such media usually have
- these municipalities have large percentages of the most vulnerable social groups in terms of health, namely the elderly.

The means that have to be deployed by the Municipalities may be the following:

- Organization of Events
- Internet & face book postings
- Posters
- TV Spots
- Press Releases
- Leaflets.

However, significant importance should be given to the informal channels of information for the mobilization of the local population. As such are certainly the mechanisms of the Municipalities, with their municipal councilors, who communicate directly with the residents. Also, other multiplier actors, such as sports clubs, cultural clubs, structures and places of social and religious gathering (mosques, churches, cafes, etc.) can be particularly useful in the dissemination of the pilot actions of the project. Also, the contribution of the staff of the Municipalities who are employed in specialized social support programs with particular emphasis on the staff of the programs e.g. for Greece "Help at Home" and "Community Centers", etc., who are in constant communication with a large number of people, could render crucial.

Patients Cards

Digital patient cards have been prepared by the Healthy Municipality project. The content of these patient cards includes data such as:

- the patient's and family's medical history
- the laboratory and **clinical** examinations
- the medications
- the treatment plans
- the messages – alerts for examinations to be made

The exact content of the patient cards should be taken into account so that patient cards to be correctly and completely filled in.

METHODOLOGY AND PARAMETERS FOR MONITORING AND EVALUATING THE IMPLEMENTATION OF THE PLAN AT THE LOCAL LEVEL

The parameters for monitoring and evaluating the effectiveness refer to the synergy of local administration and health structures and the responsiveness of local communities so that a local health prevention policy to be successfully implemented.

In this way, the cooperation between the actors of the intervention (Municipality, local health system, medical community, etc.) is monitored in order to establish the common understanding locally and to achieve the desired result.

The way of mobilizing the local population, the various social and, possibly, cultural problems that arise and possibly affect the result, the quality of the cooperation between the various actors of the action, other problems and obstacles are examined.

Another parameter that needs monitoring is the functionality of the tools developed by the project. The digital patient cards, the digital platform for registering the details of the patients, etc. are monitored to identify problems in their use.

Accordingly, in the field of informing the residents of the area and supporting them in adopting a healthy lifestyle, their response to the implemented actions is examined as well as their active participation in them.

More specifically, the parameters for monitoring and evaluating the effectiveness of the implementation of the Prevention Plan at local level should be:

With regard to the pilot applications

- Medical and diagnostic tests for patients
 - Number of diagnostic tests
 - Number of clinical exams
 - Number of people participated
 - Physicians, number per specialty
 - Results on morbidity

- Number of people who were referred for further medical tests or clinical examinations
 - Problems on organizing medical and diagnostic exams
- Group sessions
 - Number of sessions
 - Thematic of the sessions
 - Physicians (specialties) participated
 - Participants in each session (by age, sex etc)
 - Problems on organizing group sessions
- Completing examination results and the health data of patients in the digital patient health card
 - Number of patient cards completed
 - Uploading the patients' health cards on the local digital health platform created by the Healthy Municipality project

Regarding awareness raising actions

- Awareness raising actions in each Municipality (both for the medical examinations and the sessions)
 - type of actions
 - number of actions per media
 - use of informal means closer to the citizen (and which)
 - estimated number of people informed
- Problems in organizing awareness raising actions

Regarding the Municipalities and their involvement

- Involvement of the Municipalities in organizing awareness raising actions
- Cooperation actions for the implementation of pilot activities
 - cooperation with the subcontractor for the implementation of pilot activities

- cooperation with local health structures to facilitate medical exams
- Commitment of the Municipalities to apply prevention policies
 - Any institutional actions by the Municipalities

With regard to **local health structures** and their involvement

- Staff of the local health services that supported pilot prevention applications
- Facilities and equipment of the local health structures allocated for patient examinations
- Problems in supporting pilot prevention applications

With regard to **the involvement of the local population**

- The response level of the local population to participating at local prevention policies
- Their expectations and impressions from the pilot applications
- The socio-cultural problems of the local population in the application of the pilot interventions etc.

All the above parameters could be included in a relevant questionnaire to be completed by the Municipalities, the Contractors implementing the pilot prevention applications, the local population that participated in the pilot applications, so as to monitor and evaluate the pilot prevention plan in each area.

EXPECTED RESULTS FROM THE IMPLEMENTATION OF THE PILOT PREVENTION PLAN

The expected results of the pilot prevention applications concern:

- A.** The early diagnosis of the diseases, as it will be resulted from the medical examinations. This is a very important expected result as the early diagnosis of diseases can save lives.
- B.** The arrangement of the follow-up action of the patients mainly upon the alert system developed to informing the patient on subsequent examinations. It is considered an important tool primarily for prevention indicating at the same time the care of the local government for the patient – citizen.

- C.** The **activation of the local municipal structures, the local healthcare/social services** in order to improve primary medical care. The successful implementation of the pilot applications is expected to lead to periodically organizing similar initiatives for health prevention (medical examinations and sessions).
- D.** The increasing awareness of the citizens of:
- enhancing knowledge regarding personal health
 - enhancing responsible attitude towards health
 - promoting a healthy lifestyle
 - enhancing health literacy.
- E.** The increased awareness on the use of digital tools in health

The Municipalities involved in the project now have the experience of the digital health card. The implementation of the digital health card in primary care provides better information to the physicians about their patients, improving the prevention and the screening of diseases, the reduction of medication errors and the reduction of costs, etc. Besides, the digital health card and the associated to it digital Data Base is an important tool for epidemiological studies which contribute to the reduction of the morbidity and the setting up of local health policies. Finally, the digital card is also necessary in telemedicine. As telemedicine is based on the application of modern technologies, such as IT and telecommunications to serving patients remotely, the electronic health card is a key tool to this purpose, thus improving the performance of the local health system.

Monitoring the above parameters in the pilot application of the prevention actions is expected to provide useful results on the strengths and weaknesses of the local health systems which should end up with recommendations for improving the local health policy plans.

Latter is expected to both substantially contribute to improving the quality of life of the residents in some of the EU remotest and deprived areas, and beyond, while providing practical help to the local health systems to improve their performance.