

Interreg Greece-Bulgaria eHealth Monitoring



European Regional Development Fund

REPORT

“MAPPING AND IDENTIFICATION ACTIVITIES – DATA COLLECTION”



Project: „Improving Healthcare Access through a Personal Health Monitoring System“/eHealth Monitoring/

Funded by the Interreg V-A “Greece-Bulgaria 2014-2020” Cooperation Programme co-funded by the European Regional Development Fund (ERDF) and national funds of the participating countries

Deliverable: D3.5.1 Mapping and identification activities - data collection

Beneficiary: Municipality of Kirkovo

Subcontractor: “Advanced Business Consulting” Ltd

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I. OVERVIEW OF PROJECT “IMPROVING HEALTHCARE ACCESS THROUGH A PERSONAL HEALTH MONITORING SYSTEM”

Project “Improving Healthcare Access through a Personal Health Monitoring System”/eHealth Monitoring/ is implemented under Grant contract B2.9a.11/31.10.2017 funded by the Interreg V-A “Greece-Bulgaria 2014-2020” Cooperation Programme co-funded by the European Regional Development Fund (ERDF) and national funds of the participating countries.

The project is implemented under Priority axis 4 – “A Socially inclusive cross-border area” investment priority 9a “Investing in health and social infrastructure which contributes to national, regional and local development, reducing inequalities in terms of health status, promoting social inclusion through improved access to social, cultural and recreational”.

The main objective of this project is to develop a personal mobile healthcare system on the base of the mobile video supporting device allowing ambulant patients:

- remote monitoring of the patient’s state
- patient’s continuous self control
- live contact from any place and any time with professional medical staff through modern communication network.

The main objective of the project is to facilitate the access to healthcare services in territories and populations that currently are not sufficiently serviced due to both geographical and mobility reasons (remote areas, elderly people, people with disabilities etc).

The project includes six work packages:

- WP 1 Project management and coordination;
- WP2 Communication and dissemination;
- WP 3 Policy integration;
- WP4 Joint monitoring system;
- WP5 Information, training and awareness raising.

Project partners:

- Lead beneficiary Centre of caring and solidarity of Komotini municipality
- Beneficiary 2 Central Union of Municipalities in Greece
- Beneficiary 3 Democritus University of Thrace - Department of Economics - Special Account for Research

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- Beneficiary 5 Municipality of Kirkovo
- Beneficiary 5 Association „EURORADAR“

II. CONTENT AND AIMS OF THE REPORT

This report summarizes the work under Art. 1, (1) of Contract № 272 / 01.07.2019, signed between the Municipality of Kirkovo and Advance Business Consulting OOD.

The document is part of the implementation of Work Package 3 "Political Integration", result 3.5.1 "Mapping and identification- data collection".

In addition, the report aims to assist the project partner 5 Municipality of Kirkovo in selecting a target group within Work Package 4 "Joint Monitoring System", result D4.5.1 "Delivery, installation of equipment".

III. METHODOLOGY

Various information sources were used to develop this report, including:

- Existing strategic documents, analyzes and studies covering the territory of Kirkovo municipality, Kardzhali district
- Public statistical information from official sources - National Statistical Institute (NSI), registers of the Ministry of
- Education and Science, Registers of the Regional Health Inspectorate (RHI), Kardzhali Social Assistance Directorate (SSA), Labor Office Directorate (LBD),

The methods for analyzing the information included:

- Descriptive analysis;
- Content analysis;
- Comparative analysis;
- Expert analysis.

IV. MUNICIPALITY OF KIRKOVO – GENERAL CHARACTERISTICS AND PROFILE

Historical profile, geographical location and territory

Municipality of Kirkovo was established on March 26, 1914 as a rural municipal administration of Kirkovo, Gyumyurjin district. Numerous administrative-territorial reforms lead it to regional subordination to Smolyan, Krumovgrad, Momchilgrad. After September 9, 1944, it was transformed into the Kirkovo Village Municipal

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People's Council. In 1956 the municipality was annexed to the District of Kardzhali, and after 1979 it existed as the Kirkovo Settlement System. Since 1987, the municipality unites the three settlement systems Kirkovo, Podkova and Benkovski (Municipal Development Plan of the Municipality of Kirkovo 2014-2020).

Municipality of Kirkovo is located on the territory of Kardzhali District and is one of the 57 municipalities in the South Central Region (NUTS 2). Kirkovo Municipality is second in population and third in territory in Kardzhali District.

Kardzhali District occupies an area of 3,209.1 sq. Km in the southeastern part of the Republic of Bulgaria, which represents 2.9% of the territory of Bulgaria. Located in the South Central region. It borders on the west with Smolyan region, on the north with Haskovo and Plovdiv regions, on the south and southeast with the state border of the country with the Hellenic Republic (Regional Strategy for Development of Kardzhali District for the period 2014-2020, 2017).

The administrative-territorial boundaries of Kardzhali district include seven municipalities - Ardino, Djebel, Kirkovo, Krumovgrad, Kardzhali, Momchilgrad and Chernoochene.

Table 1: Area of the municipalities in Kardzhali district, 2019

Region/ District / Municipality	Area (km2)
South central region	22 365,1
Kardzhali district	3 209,1
Ardino	338,8
Dzhebel	229,1
Kirkovo	537,9
Krumovgrad	843,3
Kardzhali	574,7
Momchilgrad	358,1
Chernoochene	327,1

Source: National Statistical Institute

The data in Table 1 reveal that the largest area is Krumovgrad municipality (843.3 sq. Km), followed by Kardzhali municipality (547.7 sq. km) and Kirkovo municipality (537.9 sq. km).

Table 2: Number of settlements in Kardzhali district, 2019

Region/ District / Municipality	Number of settlements	Cities	Villages
South central region	1 300	54	1 246
Kardzhali district	468	5	463
Ardino	52	1	51

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Dzhebel	47	1	46
Kirkovo	72	-	72
Krumovgrad	80	1	79
Karzdhali	118	1	117
Momchilgrad	49	1	48
Karzdhali district	50	-	50

Source: National Statistical Institute

Today the municipality consists of 73 settlements, covering an area of 538 sq. Km. and inhabited by 21,582 people (as of 31.12.2012, NSI), placing it second in population and third in territory in the district of Kardzhali.

The municipality of Kirkovo includes the village of Kirkovo, the village of Apriltsi, the village of Benkovski, the village of Bregovo, the village of Valchanka, the village of Varben, the village of Varli dol, the village of Gorno Kirkovo, the village of Gorno Kapinovo, the village of Gorski izvor, the village of Grivyak, village of Dedets, village of Delvino, village of Djerovo, village of Dobromiritsi, village of Dolno Kapinovo, village of Domishte, village of Drangovo, village of Druzhintsi, village of Dryanova Glava, village of Dyulitsa, village of Eroвете, village of Zavoya, the village of Zagorski, the village of Zdravchets, the village of Kayaloba, the village of Kitna, the village of Kozlevo, the village of Kosturino, the village of Kran, the village of Kremen, the village of Krilatitsa, the village of Kukuryak, the village of Karchovsko, the village of Lozengradtsi, The village of Malkoch, the village of Medevtsi, the village of Metlichina, the village of Metlichka, the village of Mogilyane, the village of Maglene, the village of Nane (as of 31.12.2016 it has 0 inhabitants, but has not yet been deleted), the village of Orlitsa , Ostrovets village, Plovka village, Podkova village, Preseka village, Parventsi village, Parvitsa village, Rastnik village, Samodiva village, Samokitka village, Svetlen village, Sekirka village, Sredsko village, Stareishino, Starovo village, Stomantsi village, Strizhba village, Tihomir village, Fotinovo village, Hadjiysko village, Tsarino village, Chavka village, Chakalarovo village, Chichevo village, Chorbadjiysko village, Shipok village , the village of Shoptsi, the village of Shumnatitsa, the village of Yakovitsa and the village of Yanino.

V. DEMOGRAPHIC CHARACTERISTICS

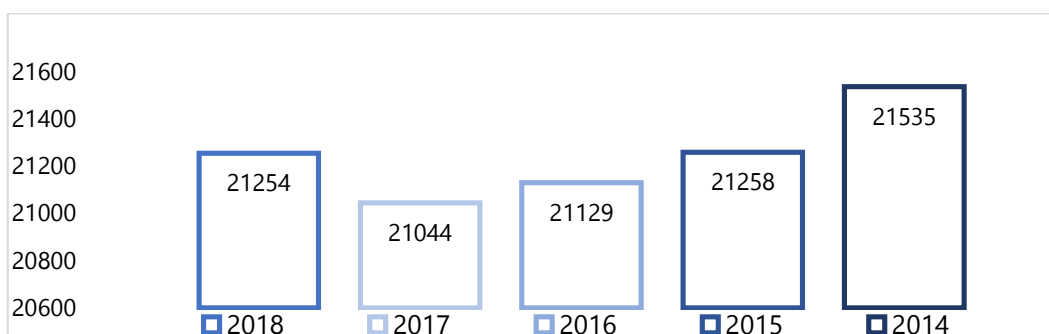
Number and dynamics of the population

According to the data of the National Statistical Institute, as of 31.12.2018, 21,044 people live in the municipality of Kirkovo, of which 10,527 men and 10,517 women. Figure 1 presents the number of population in the municipality in the period

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2011 - 2017 and reveals the declining population, which is due to two main factors - negative natural growth and mechanical growth.

Figure 1: Population on the territory of Kirkovo Municipality during the period 2011 - 2018



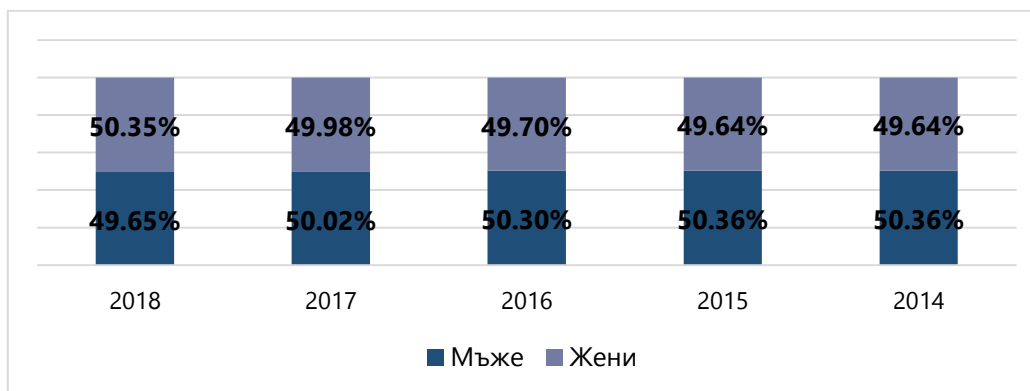
Source: National Statistical Institute

The average population density in Kirkovo Municipality is 43.5 people per sq. km. For comparison, the average population density in Bulgaria is 70.3 people per sq. km, while the EU average is 112 people per sq. km.

Gender structure of the population

According to the gender structure, the ratio between men and women in the municipality of Kirkovo has hardly changed over the years, ie. these figures are approximately the same, although their absolute value changes. For example, NSI data as of 31.12.2018 show that 10,553 men and 10,701 women live in the municipality.

Figure 2: Dynamics in the ratio of men and women on the territory of Kirkovo Municipality during the period 2011 - 2018.



Source: National Statistical Institute

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Birth rate, natural increase, mortality

The movement of the population is natural and mechanical. Natural movement (reproduction) is a process of continuous generational change. Indicators of natural movement are: birth rate, mortality and natural increase.

Birth and death rates

The number of live births on the territory of Kirkovo Municipality in the period 2016-2018 is 515. As of 31.12.2018, 187 live births were registered, which is 23.53% more than in 2016. The number of deaths is permanent (303 in 2018, 317 in 2017 and 2016). The statistics are presented in the following table:

Table 3: Live births, deaths and natural increase by sex on the territory of Kirkovo Municipality for the period 2016 - 2018.

	2018			2017			2016		
	Live births	Deaths	Natural increase	Live births	Deaths	Natural increase	Live births	Deaths	Natural increase
Man	98	162	-5,45 ‰	84	164	-6,27 ‰	69	162	-8,23 ‰
Woman	89	141		101	153		74	155	

Source: National Statistical Institute

Natural increase

The natural increase, reflecting the difference between live births and deaths on the territory of Kirkovo Municipality is negative throughout the period under review. The natural growth rate at the end of 2016 is negative - 8.23 ‰. In the next two years there is a positive trend in the natural growth rate, as in 2017 its value was -6.27 ‰, and in 2018. - -5.45 ‰.

The number of men born for the period 2016-2018 increased in 2018 to 98 from 84 in 2017 and 69 in 2016. The number of dead men in each of the three years is almost twice as high as in live births. In 2016, the number of male deaths was 162, after which their number increased to 164 persons in 2017 and decreased to 162 male deaths in 2018. In 2016, 74 female children were born, in the following 2017 - 101 children, and in 2018 their number is 89 live-born girls. The number of women who died in the three years studied was also approximately equal. In 2016, 155 women died, in 2017 the number slightly decreased to 153, then in 2018 it decreased to 141 women who died.

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These trends lead to a decrease in the relative values of natural growth over the years, which in turn leads to an aging population.

Age structure

In the present part an analysis is made for the structure of the population for the period 2014 - 2018. in the municipality.

According to NSI data, as of 31.12.2018, 59% of the population falls into the category of able-bodied population (12,511 people), followed by the group of persons over working age (pensioners) (5,801 people) - 28%. Persons under working age are 2,942 or 14% of the population.

Table 4: Population in below, in and above working age as of 31.12.2018. on the territory of Kirkovo Municipality

	Total	Man	Women
Below working age	2 942	1 472	1 470
In working age	12 511	6 750	5 761
Above working age	5 801	2 331	3 470

Source: National Statistical Institute

CONCLUSION ON THE SECTION

The current demographic situation in the Municipality of Kirkovo is characterized by a continuing decline and aging of the population, increasing birth rate and maintaining a high level of overall mortality and negative natural increase.

- In the period 2011 – 2018 the population in the Municipality of Kirkovo the tendency to decrease the population. Gradually, positive trends are imposed in the demographic development of the municipality, which is expressed in slowing down the rate of population decline and positive values of mechanical growth.
- As of 31.12.2018 the distribution in the gender structure of the population is balanced, with a small predominance of women (50.35%) compared to men.
- The natural growth rate at the end of 2018 is negative -5.45 ‰. In the last three years there has been a positive trend in the natural growth rate in the municipality of Kirkovo.

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- Unlike the natural one, which throughout the period has negative values, the mechanical growth on the territory of Kirkovo municipality has a positive value in 2018.
- There is a tendency of continuing aging of the population. It is expressed in a decrease in the relative share of the working age population and an increase in the share of the working age population during the studied period 2014 - 2018.
- The number of live births and the total birth rate are increasing.

VI. HEALTH CARE

Mortality and leading causes of mortality in the Municipality of Kirkovo in 2018

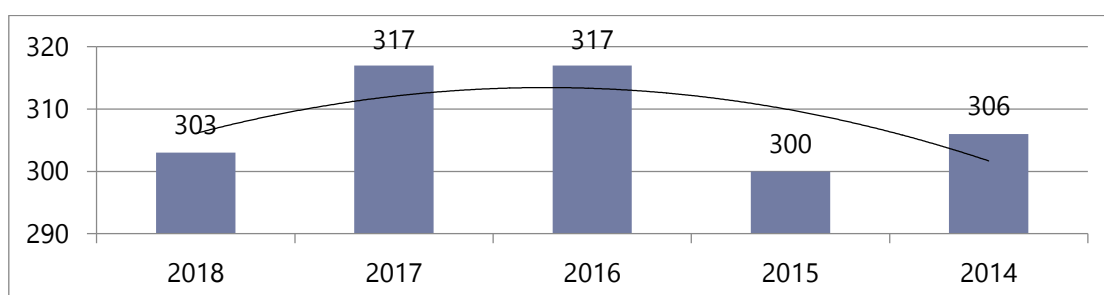
According to data of the National Statistical Institute as of 31.12.2018, in the Municipality of Kirkovo the mortality rate is 14.25 ‰. This indicator puts the municipality in third place in Kardzhali District in the negative statistics. It is highest in the Municipality of Ardino - 15.0 ‰, followed by the municipalities: Chernoochene - 14.67 ‰, Kirkovo - 14.25 ‰, Krumovgrad - 13.58 ‰, Momchilgrad - 12.92 ‰, Djebel and Kardzhali - 11 ‰.

Figure 6 shows the number of deaths in the Municipality of Kirkovo in the period 2014 - 2018. In 2014 the number of dead is 306, as in 2015. their number decreases by 6 people. In 2016 and 2017 there is an increase in the number of deaths to 317, which fell significantly in 2018. of 303 persons.

The increase in mortality forms the negative natural increase - minus 5.45 ‰. The difference in the values of the indicators mortality and birth rate forms as a result a drastic decrease in the natural increase minus 5.45 ‰.

There is no registered infant mortality on the territory of Kirkovo municipality.

Figure 6: Number of deaths on the territory of Kirkovo Municipality in the period 2014 - 2018



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Statistics on deaths by cause is the main source of information for analyzing the health status of the population. National statistics do not have data on the causes of death at the municipal level. According to the Health Report 2018 of the National Statistical Institute, the structure of mortality by causes in the district of Kardzhali is revealed. The leading causes continue to be circulatory diseases (65%) and neoplasms (14.2%), followed by symptoms, signs and abnormalities found in clinical and laboratory studies, not elsewhere classified (11.33%), respiratory diseases system (3.72%), diseases of the digestive system (2.94%) and external causes of morbidity and mortality (2.71%)

Diseases of the circulatory system are the first leading cause of death in the district of Kardzhali with an average of 806 deaths per 100,000 population in 2018. The main diseases of the circulatory system are (1) cerebrovascular diseases, (2) ischemic heart disease, (3) acute myocardial infarction.

Malignant diseases are the second leading cause of death in the district - an average of 175 deaths per 100,000 population in 2018. Among the major diseases in this class are malignant neoplasms of (1) the trachea, bronchi and lungs, (2) stomach, (3) the large intestine, (4) the pancreas.

The statistical data show that the main chronic non-communicable diseases - cardiovascular diseases, malignant neoplasms, chronic respiratory diseases and diabetes are the cause of over 80% of deaths in the district of Kardzhali.

Medical institutions

There are no hospitals on the territory of Kirkovo municipality. The nearest hospitals, which serve the population of Kirkovo municipality are MHAT in Momchilgrad, Kardzhali and Zlatograd.

There is a medical institution for outpatient care - an independent medical diagnostic laboratory, registered in 2013 according to NSI data for the study period. The health care is provided by medical institutions for outpatient care, as the registered individual practices for primary medical care in 2018. are 7 in the village of Fotinovo, the village of Kirkovo, the village of Benkovski (2 practices), the village of Chorbadijsko, D. Kapinovo and the village of Chakalarovo. The individual practices for primary dental care are 15 in the village of Kirkovo (4 practices), the village of Benkovski (3 practices), the village of Chakalarovo, the village of Podkova (2

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practices), the village of Tihomir, the village of Chorbadijsko (2 practices), with Fotinovo and the village of Drangovo.

On the territory of the municipality there are two branches for emergency medical care in the village of Kirkovo and the village of Chorbadijsko, and to the branch for emergency medical care - Kirkovo two outsourced mobile teams have been opened in the village of Fotinovo and Benkovski.

There are 11 health offices open to the schools and kindergartens on the territory of the Municipality, in which 10 nurses and 2 paramedics work.

Pharmacies

There are 5 pharmacies on the territory of Kirkovo municipality - in the villages of Chakalarovo, Kirkovo, Fotinovo, Benkovski, Chorbadijsko and 2 drugstores in Kirkovo and Tihomir, which supply the population with medicines.

Medical experts

The number of medical specialists on the territory of the municipality is 35, of which 9 doctors, 14 dentists, 12 medical specialists (including 10 nurses and 2 paramedics).

The qualifications of senior and mid-level medical staff are insufficient. There is a high turnover among doctors. The main burden, especially in the branches, is borne by the medical staff. To improve the quality of emergency medical care, it is necessary to provide resources, increase the qualification of staff, readiness for rapid response to accidents, disasters and catastrophes in accordance with European standards (District Development Strategy of Kardzhali District for the period 2014-2020).

Given the number and age structure of the population, doctors and dentists are insufficient and they are not able to provide effective pre-hospital health care to the population.

The large distances between small settlements make it difficult for the population to access medical care in remote and inaccessible settlements and neighborhoods. Some of the residents in the villages do not really have access to primary medical care.

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CONCLUSION ON THE SECTION

- As of 31.12.2018, the mortality rate in the municipality of Kirkovo is 14.25 ‰, placing the municipality in third place in the district of Kardzhali in the negative statistics, after the municipalities of Ardino and Chernoochene.
- There is no registered infant mortality on the territory of Kirkovo municipality.
- Leading causes continue to be circulatory diseases (65%) and neoplasms (14.2%), followed by symptoms, signs and abnormalities found in clinical and laboratory studies not elsewhere classified (11.33%), respiratory system (3.72%), diseases of the digestive system (2.94%) and external causes of morbidity and mortality (2.71%).
- Over 80% of deaths occur as a result of major chronic non-communicable diseases - cardiovascular disease, malignancies, chronic respiratory diseases and diabetes.
- The large distances between small settlements and urban centers make it difficult for the population to access medical care in remote and inaccessible settlements and neighborhoods. Emergency care is generally ineffective due to difficult access.
- Given the number and age structure of the population, doctors and dentists are insufficient and they are not able to provide effective pre-hospital health care to the population.
- The availability of centers for public support and social services and care in the district is not enough.

VI. MAPPING AND IDENTIFICATION ACTIVITIES – DATA COLLECTION

Identification activities

Within Work Package 4 "Joint Monitoring System", delivery D4.5.1 under the project „Improving Healthcare Access through a Personal Health Monitoring System"/eHealth Monitoring/, beneficiary 5 Kirkovo Municipality will purchase 40 sets containing (1) biosensors and (2) User Mobile Unit (UMU) (patients) and (3) Expert Mobile Unit (EMU) (doctors, medical specialists) for monitoring the health status of persons on the territory of the municipality.

The successful implementation of the activity requires the identification of 40 individuals, users who will be provided with (1) biosensors, to measure heart rate,

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oxygen saturation, blood pressure (systolic and diastolic) and physical activity (number of steps and duration of sleep) and (2) mobile units for consumers (patients).

The development of social services in the municipality play an important role in the process of prevention and social inclusion of vulnerable groups. The Law on Social Assistance and the Regulations for its implementation define the role of social services in helping the population to lead a dignified life, to protect people from risks related to their social integration and to support reintegration in cases of existing risks, to reduce the risks of social isolation and marginalization of certain groups in society.

In the framework of the present study, Advance Business Consulting Ltd. conducted an analysis that outlined certain risk socio-economic factors (Table 5) which in turn lead to the identification of the target group of the project and its specific categories.

Table 5 Factors causing risk for the population of Kirkovo municipality

<i>Low income</i>
<i>Age - an increase in living alone among the elderly, in need of daily support, especially in isolated small towns, with extremely limited access to health care and services</i>
<i>A person with a disability</i>
<i>Presence of one or more chronic diseases of the face (cardiovascular diseases, malignant neoplasms, chronic respiratory diseases and diabetes)</i>
<i>Family structure - complete or incomplete family, large families</i>
<i>Belonging to vulnerable communities that are in social isolation</i>
<i>Low education (including illiteracy), lack of professional qualifications, which lead to unequal position on the labor market</i>
<i>Unemployment among people of working age</i>
<i>Place of residence - remoteness and isolation of the settlement</i>

Income is the main factor increasing the risk of falling into the group of the poor. This is related to the economic activity of people and their participation in the labor market. Unemployed people with limited income opportunities are most seriously affected. The social cost of unemployment is expressed in loss of income

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and deterioration of the living standard of the family, loss of qualifications (especially among the long-term unemployed), unwillingness to maintain a high professional level.

Access to employment is most restricted for several specific groups of unemployed: - people with low education, people over the age of 55, people with disabilities of working age, as well as people from remote and hard-to-reach settlements. People with disabilities continue to be a risk group in the labor market.

The structure and number of members in a household are also directly reflected in the formation of risk groups. This determines to a large extent the income and the distribution of expenses between them. The structure of households also plays a significant role due to the fact that most people with social problems rely on their relatives, as social assistance and services do not solve the problems they face and do not compensate for the risks they face.

With regard to the *health factor*, the following risk groups can be identified: (1) persons with physical disabilities, (2) persons with chronic diseases and / or serious health problems.

The territorial structure of the municipality includes 73 settlements, some of which are sparsely populated (Table 3), which leads to difficulties for the population to use health and social services. The remoteness and isolation of the settlement creates difficult access to health and social services, forming the following risk groups in the municipality: (1) Lonely elderly people, (2) Persons with disabilities living in remote settlements, (3) families with low and / or without income.

The analysis made in the present study defines the target group of the project "Improving access to health services through a personal health monitoring system": **(1) people with disabilities, (2) elderly people in need of care, (3) single people in small, remote settlements, without access to social and health services, (4) persons suffering from chronic diseases.**

The identified specific categories of target noise are in accordance with:

- The demographic and socio-health analysis set out in this report,
- Application form of the project "Improving access to health services through a personal health monitoring system",
- Strategic goal 1 "Raising the standard of living through competitive education and training, creating conditions for quality employment and social inclusion and ensuring affordable and quality health care", the National Development Program "Bulgaria 2020",

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- Strategic goal 2 "Social cohesion and reduction of regional disparities in the social sphere by creating conditions for development and realization of human capital", National Strategy for Regional Development 2012-2022,
- Strategic goal 2: Social cohesion and reduction of inter-regional inequalities through investments in human capital and social infrastructure, Regional Development Plan of the South Central Region 2014-2020.
- Priority 1. Improving the quality of services provided to the population, Specific objective 1.2 - Social responsibility and protection, Municipal Development Plan of the Municipality of Kirkovo 2014-2020;
- Priority Area 2: Social Inclusion of Disadvantaged Communities and Vulnerable Groups, District Strategy for Development of Social Services in Kardzhali District 2016-2020;
- Priority axis 4 – "A Socially inclusive cross-border area" investment priority 9a "Investing in health and social infrastructure which contributes to national, regional and local development, reducing inequalities in terms of health status, promoting social inclusion through improved access to social, cultural and recreational", Interreg V-A "Greece-Bulgaria 2014-2020" Cooperation Programme.

Mapping of the target groups

Table 6 contains current data on the adult population at risk in the municipality of Kirkovo. The most numerous is the group of persons who are retired (7752), followed by the registered unemployed (1441), of whom 819 are long-term unemployed and 547 are unemployed persons over 55 years of age. The number of persons living below the poverty line and who are assisted with targeted heating assistance is 1290. There is a large number of elderly people subject to social assistance - 866, as well as the elderly living alone in the municipality - 861.

Table 6: Adult population at risk on the territory of Kirkovo municipality

Category	Number of persons
Number of adults below the poverty line assisted by targeted heating assistance	1290
Registered unemployed persons	1441
• Including young people from 18 to 29 years	169
• Including people above 55 years	547
• Including persons with reduced working capacity	33

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• Including persons without or with less than primary education	200
• Including persons with reduced working capacity	33
• Including long-term unemployed persons (over 1 year)	819
Pensioners (total)	7752
Pensioners with seniority and age pensions	5163
Pensioners with disability pensions	2091
Pensioners with invalidity pensions who have not reached retirement age	1354
Pensioners with social pensions	12
Persons with physical disabilities	715
• Of these, persons with sensory impairments	141
Persons with multiple disabilities	301
People with mental retardation	108
People with mental illness	53
Persons receiving monthly social benefits	143
Single parent raising child / children	14
Large families	9
Old people living alone	861
Older people, subject to social assistance	866
Total number of elderly people using social services	4
Number of adults below the poverty line, with access to monthly social assistance	105

Source: Interim evaluation of the implementation of the District Strategy for Development of Social Services in Kardzhali District for the period 2016-2017.

CONCLUSION ON THE SECTION

The factors that pose a risk to the population of Kirkovo municipality are:

- Low income
- Age - an increase in the number of single people living alone, in need of daily support, especially in isolated small settlements, with extremely limited access to health care and services
- A person with a disability
- Presence of one or more chronic diseases of the face (cardiovascular diseases, malignant neoplasms, chronic respiratory diseases and diabetes)
- Family structure - complete or incomplete family, large families
- Belonging to vulnerable communities that are in social isolation

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- Low education (including illiteracy), lack of professional qualifications, which lead to unequal position on the labor market
- Unemployment among people of working age
- Place of residence - remoteness and isolation of the settlement
- The target group of the project "Improving access to health services through a personal health monitoring system": (1) people with disabilities, (2) elderly people in need of care, (3) people living alone in small, remote settlements places without access to social and health services, (4) persons suffering from chronic diseases.
- Among the target group, the most numerous are the categories of pensioners - 7 752, the registered unemployed - 1 441, the people living below the poverty line and who are assisted with targeted heating assistance - 1 290. The number of elderly people is also large. , object of social assistance - 866, as well as of the elderly people living alone on the territory of the municipality - 861.

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SOURCES

Report on the results of the mid-term evaluation for the implementation of the regional development plan 2014-2020 of the South Central region of level 2

Interim evaluation of the implementation of the District Strategy for Development of Social Services in Kardzhali District, for the period 2016 - 2017

National Center for Public Health and Analysis at the Ministry of Health. Healthcare 2018. 2018. National Statistical Institute.

National Center for Public Health and Analysis at the Ministry of Health. Turbidity for main reasons in the Republic of Bulgaria for 2018.

National Strategy for Regional Development 2012-2022

National Strategy for People with Disabilities 2016-2020

The National Development Program: Bulgaria 2020

Kardzhali District Administration. 2017. District Strategy for Development of Kardzhali District for the period 2014-2020

District strategy for development of social services in Kardzhali district 2016-2020

Municipal Development Plan of the Municipality of Kirkovo 2014-2020

Municipal Development Plan of the Municipality of Kardzhali 2014-2020

Regional Development Plan of the South Central Region 2014-2020

Socio-economic survey on the territory of the Kirkovo-Zlatograd LAG, 2017