

REPORT

“POLICY IMPLEMENTATION GUIDELINES FOR ACHIEVING LONG-TERM OBJECTIVES”

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: D3.5.3 Policy Implementation Guidelines for achieving long-term objectives

Beneficiary: Municipality of Kirkovo

Subcontractor: “Advanced Business Consulting” Ltd

This material has been produced with the financial assistance of the European Union. The contents are sole responsibility of Municipality of Kirkovo and can in no way be taken to reflect the views of the European Union, the participating countries the Managing Authority and the Joint Secretariat.

<http://www.ehealthmonitoring.eu/>

D3.5.3 Policy Implementation Guidelines for achieving long-term objectives

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

D3.5.3 Policy Implementation Guidelines for achieving long-term objectives

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

II. CONTENT AND AIMS OF THE REPORT

This report summarizes the work under Art. 1, (3) 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", deliverable D3.5.3 Policy Implementation Guidelines for achieving long-term objectives.

III. METHODOLOGY

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

- Existing strategic documents, analyzes and studies in the field of e-health in Bulgaria and the European Union (EU)
- Public statistical information from official sources - National Statistical Institute (NSI), registers of the Ministry of Education and Science (MES), Ministry of Health (MH). The methods for analyzing the information included:
 - Descriptive analysis;
 - Content analysis;
 - Comparative analysis;
 - Expert analysis.

IV. INTRODUCTION

Over the last decade, the world economy has become significantly more digital. The information and communication technology (ICT) sector is entering all areas of social and economic life. The expectations of citizens and businesses to public institutions are growing and are directly related to ensuring more public control over their activities, improving the quality of services provided and ensuring a higher standard of living.

At the same time, health systems in Europe are facing new challenges such as an aging population and growing budgetary pressures. In this context, eHealth could become one of the tools to address these challenges, contributing to more patient-oriented healthcare, supporting the transition to prevention and at the same time improving the efficiency of the system (European Commission, 2014).

D3.5.3 Policy Implementation Guidelines for achieving long-term objectives

E-health has great market potential. The global telemedicine market is valued at \$ 40.11 billion in 2018 and is likely to reach \$ 148.21 billion in 2025. The market for digital-based products and services for good physical condition (mobile applications and devices) is also growing fast. The convergence between wireless communication technologies and medical equipment, as well as between health care and social care, creates new opportunities for economic activity. The transformation of health and social care systems, as well as the "economy of the elderly", are very promising markets.

E-health can benefit not only citizens, patients and healthcare professionals, but also healthcare organizations and public authorities. When eHealth is implemented effectively, it offers more individual and citizen-oriented healthcare that is more targeted, more efficient and effective, and helps reduce errors and shorten hospital stays. It facilitates socio-economic integration and equality, quality of life and gives more rights to patients through greater transparency, improved access to services and information and the use of social media for health purposes (European Commission, 2012).

The application of information and communication technologies in healthcare and healthcare systems can increase their efficiency, improve the quality of life and unleash the innovative potential of healthcare markets (European Commission, 2012).

Basic concepts and definitions

Telemedicine and telecommunications services are often confused with other terms included in the broad concept of e-health, and are even sometimes considered synonymous and are most often used interchangeably (Fatehi, Wootton, 2012). Despite their similarities, each refers to a different way of using ICT to provide health services. Figure 1 describes a generally agreed framework that illustrates the relationships between these terms, although there are no precise, unique or definitive definitions for them.

E-health is considered to be the most comprehensive concept, covering many aspects. However, there is no consensus on a clearly defined definition. The World Health Organization and the European Commission define eHealth as the combined use of electronic communications and information technology in the health sector to share, store and retrieve electronic health data for prevention, diagnosis, treatment, monitoring, educational and administrative purposes, both on-site, both at a distance.

D3.5.3 Policy Implementation Guidelines for achieving long-term objectives

Annex 4 of the eHealth Development Program defines eHealth as “a rapidly evolving field in which medical informatics, public health, healthcare business and information provided via the Internet and related technologies interact. In a broader sense, the term characterizes not only technological development, but also the approach to global thinking to improve health services at local, regional and global levels, through the use of information and communication technologies.

Telehealth is part of eHealth and refers to the provision of health care and services at a distance, including interaction with automated systems or information resources.

Telemedicine is part of telehealth. Telemedicine differs from telehealth in that it focuses on the provision of health services by health professionals, with the exception of health prevention and promotion, such as distance learning, administrative and educational services.

In the Green Paper on Mobile Health, the European Commission defines mobile health as an area covering “medical and public health practices carried out using mobile devices, such as mobile phones, patient health monitors, digital personal devices, assistants (PDAs) and other wireless devices. ' It also includes various applications, for example to improve lifestyle and well-being, which can be connected to medical devices or sensors (eg bracelets or watches), as well as personal guidance systems, health information systems, reminder systems, receiving medication via SMS, and remote medicine systems using a wireless connection.

V. CURRENT SITUATION IN BULGARIA

E-health has been a constant key priority in all government programs and national health strategies in Bulgaria over the last decade.

The state health policy is managed and implemented by the Council of Ministers, which on the proposal of the Minister of Health approves the National Health Strategy, which is adopted by the National Assembly.

Health Strategy 2020 was adopted by a decision of the National Assembly on 17.12.2015, which is based on the National Health Strategy 2014-2020 and an action plan to it.

The first sectoral **Strategy for the implementation of e-health** was adopted by the Council of Ministers at the end of 2006.

D3.5.3 Policy Implementation Guidelines for achieving long-term objectives

At the end of 2014, an **e-health development program** was adopted, which defines key actions for the establishment of the National Health Information System. The roadmap to the program covers a period of six years (2014 - 2020).

The strategic goal of the introduction of e-health is to improve public health and quality of life in accordance with changing needs and use of existing and new technological opportunities, while increasing efficiency and reducing the cost of health services (Strategy for the implementation of e-health , 2006).

The measures for realization of the operational goals, defined in the Strategy for implementation of the e-healthcare are in the following main areas:

1. Establishment of an integrated information system for exchange of information between the employees in the field of healthcare (between medical, educational, scientific, financial and administrative units)

- Implementation of electronic health cards;
- Implementation of software applications for complex processing of information in real time, including: electronic directions, electronic prescriptions, laboratory data and other research
- Construction of complex and integrated with each other, as well as with external applications hospital information systems;
- Creation of a complete electronic-medical patient file - a set of horizontal collection of electronic health information concerning the health or health care of the citizen; instant electronic access to information about a person or population, by authorized users; providing information and support for making decisions with a view to improving the quality, safety and efficiency of patient care;
- Construction of the necessary infrastructure for normal functioning of the healthcare system - networks, connecting devices, etc.;
- Building an appropriate base for developing telemedicine projects.

2. Standardization and information security

- The construction of an information system in any field is preceded by structuring and unification of the processed information through:
- Introduction of national health information standards;
- Development of a model of the national health information network;
- Development of requirements for compatibility of information systems in healthcare;
- Implementation of security policies for health information systems;

D3.5.3 Policy Implementation Guidelines for achieving long-term objectives

- Access to the personal electronic health record through electronic smart cards, encrypted forms for data exchange;

3. Awareness and training

- Providing web-based services in real time;
- Providing electronically easily accessible information for the population through the implementation of portals for:
 - o providing information on different treatments;
 - o rights and obligations of health insured and providers
 - o health care; ways and level of reimbursement;
 - o health education;
 - o health prevention;
- Implementation of electronic systems for maintaining the qualification and continuing education for health professionals;
- Development of systems to support the decisions of health professionals and exchange of clinical information;
- Providing public registers for medical institutions, for persons providing medical services, health insurance funds, pharmacies, etc.

In report **3.5.2 "Joint Strategy towards sustainable e-health management"** (D.3.5.2), part of the work under Contract № 272 / 01.07.2019, concluded between the Municipality of Kirkovo and "Advanced Business Consulting" Ltd., the team of the company examines in detail the **degree of achievement of the goals for construction and development of e-health and comes to the following conclusions:**

E-health has been a constant key priority in all government programs and national health strategies in Bulgaria over the last decade. However, its implementation is hampered by weaknesses and gaps in the operational planning of strategic goals, measures and activities at the level of the Ministry of Health, the National Center for Public Health and Analysis and the National Health Insurance Fund. The implementation is complicated by the lack of legislation on the nature and organization for the implementation of e-health, the national health information system and their components.

The introduction of national health information standards is a key measure of the Strategy for implementation of e-health from 2006. The Ordinance for approval

D3.5.3 Policy Implementation Guidelines for achieving long-term objectives

of health information standards applied by medical institutions (SG, issue 94 of 25.11.2016) does not necessarily provide application of the specified standards in the health establishments under the Health Act and the Medicinal Products in Human Medicine Act, in the state, municipal and public bodies and institutions for organization, management and control of the activities for protection and strengthening of health.

Against the background of the rapid development of e-health in other European countries, Bulgaria still does not have an integrated health information system to provide the necessary information for the needs of the management and users of health services, incl. to fulfill the country's commitments in connection with the cross-border exchange of health data. The available information systems and databases are not systematically integrated and do not give a real idea of the general state of the healthcare system, which complicates the planning process.

Since 2006, there has been a gradual postponement of implementation and change in the structures responsible for creating an electronic direction, electronic prescription and laboratory data at the level of strategic documents, which creates risks for their effective implementation. Almost 10 years after the realized and strategically declared need for these applications, they have not been developed and implemented, which deprives patients of opportunities for faster and better service. In January and February 2017, the Ministry of Health developed a prototype of a system for electronic prescription, electronic referral and electronic outpatient list. The expectations of the Ministry are that these measures will be implemented in the future within the project № BG05SFOP001-1.002-0007-C01 "Completion of the National Health Information System / NHIS / - stage 1 and stage 2", funded by the operational program "Good Governance" 2014 –2020, with a deadline until the end of December 2020.

One of the main operational goals of the Strategy for implementation of e-health in Bulgaria since 2006 is to improve access to health information. The key measure for providing electronically accessible information to the population through the implementation of portals has been a permanent priority measure since 2006 and continues to be so in the next strategic and program documents. With the Program for development of e-health from 2014, the last National Health Strategy 2020 and the project of the National Strategy "E-Health" the construction of a national health portal is envisaged. The attempts of the Ministry of Health to build an electronic health portal are not coordinated with the National Health Insurance Fund, which hinders the implementation of a unified and shared by key participants vision and creates a risk of inefficient spending of public funds.

D3.5.3 Policy Implementation Guidelines for achieving long-term objectives

The creation of an electronic health record has been a priority measure since 2006 and aims to provide the necessary information in decision-making in order to improve the quality, safety and efficiency of patient care. Since 2006, there has been a postponement of the deadlines for its construction and a lack of a clearly defined scope of responsibilities of the Ministry of Health, the National Health Insurance Fund and the National Center for Public Health and Analysis. There is no approved and coherent concept of an electronic health file, which contains an unambiguous and comprehensive description of the architecture, information flows and interconnections, the institutions responsible for its construction and maintenance and the mechanisms for coordination and control of data accuracy. As of March 2020 The National Health Insurance Fund maintains a partial electronic file, and a complete electronic health file has not been created.

VI. TECHNOLOGICAL REQUIREMENTS

Technology plays a major role in the development of all sectors of our civilization. ICT and web services have a major impact on the quality of services and people's lifestyles. The introduction of ICT in the health sector is emerging as one of the fastest growing areas in healthcare. It has paved the way for a new field of research among doctors, scientists and researchers who are trying to develop effective and accurate technologies to deal with health problems. Technological innovations are leading to new applications for disseminating healthcare information to a diverse audience using innovative interoperable designs. These applications are simple, easy to use, engaging and able to provide relevant primary healthcare information to a variety of users.

A major reason for the growing popularity of e-health is the advances in computer and communication technologies that have made health information and services globally available at a very low cost.

The main technologies that are relevant to the provision of e-health services and influence the development of e-health are:

Satellite communication

Satellite communication uses artificial satellites to provide communication links between different points on Earth. With the help of an integrated receiver and transmitter of radio signals, the satellite receives and retransmits signals back.

Satellites are playing an increasingly important role in supporting the health and well-being of the Earth. Satellite medical care is considered a cost-effective and

D3.5.3 Policy Implementation Guidelines for achieving long-term objectives

affordable solution, especially in developing countries, where the population lacks even basic levels of health care due to remoteness, poverty and lack of health professionals.

Internet communication

Interconnected networks of computers that use a set of Internet Protocols (TCP / IP) to connect devices located around the world. The network can be private, public, academic, business and government and can be connected to a wide range of electronic, wireless and optical network technologies. Internet users can not only seek health information, but can also contact a specialist doctor for an appropriate consultation.

Mobile communication

Mobile communication is a wireless form of communication in which voice and data can be transmitted and received through microwaves. Data exchange can take place while moving from place to place, for example, cellular, wireless, pagers, etc.

In recent years, mobile devices can be used effectively to provide medical care to patients in remote locations. Mobile phone services may include collecting data on patients' health, providing collected health information to healthcare professionals, and real-time monitoring of the patient's vital signs.

Cloud communication

Cloud computing relies on sharing computing resources to work with applications. This is a type of Internet-based computing that shares various services such as servers, storage and applications, leading to efficient and optimized use of software and hardware resources.

VI. AREAS OF INTEREST. BENEFITS AND NEEDS FROM THE IMPLEMENTATION OF E-HEALTH

Health systems in Europe are facing new challenges such as an aging population and growing budgetary pressures. In this context, eHealth could become one of the tools to address these challenges, contributing to more patient-oriented healthcare, supporting the transition to prevention and at the same time improving the efficiency of the system.

In the Green Paper on e-Health, the European Commission defines the following benefits of implementing eHealth:

D3.5.3 Policy Implementation Guidelines for achieving long-term objectives

(1) Increasing prevention / quality of life

Mobile health solutions can help detect chronic diseases at an early stage through self-assessment and remote diagnosis tools, as well as. In time, the exchange of data with healthcare providers will facilitate timely intervention. In this context, mobile healthcare can help to avoid situations in which patients refrain from seeking help because they are afraid of being embarrassed or ashamed, as is the case with mental illness, in which only one in two suffers from a mental disorder. undergoes treatment. Focusing on prevention has the potential to improve people's quality of life and even increase its life expectancy, and can be accelerated by finding new ways to promote 'healthy behavior'. In this respect, consumer motivation and engagement remain key and continue to be an area for fruitful research on behavioral economics. Among other things, the higher involvement of the population, as well as the extension of the period during which they remain in better health, are expected to contribute to reducing the financial pressure on health systems in the EU.

(2) More efficient and sustainable healthcare

Mobile healthcare could contribute to more efficient care delivery through better planning, a reduction in the number of unnecessary consultations, and better training of professionals who will be able to receive guidance on treatment and medication. Estimates show that the use of tablets and other mobile devices could help healthcare professionals and paramedics save up to 30% of the time needed to access and analyze information. The work of staff in the health sector could be more efficient if supported by real-time communication with the patient, e.g. by exchanging user data collected by applications. Mobile healthcare can help health systems cope with declining healthcare resources. An increasing number of medical and healthcare interventions could be carried out remotely or by patients themselves under the guidance of health monitoring and reporting systems, which will reduce hospital stays. For example, mobile healthcare can offer an effective method of dealing with chronic diseases through remote monitoring and guidance, which will even allow patients to stay in their homes will improve patient comfort and significantly reduce healthcare costs. Finally, the analysis of large data sets emerging within mobile healthcare can contribute to improving healthcare effectiveness and disease prevention by providing healthcare authorities with a more accurate and comprehensive picture of disease and patient behavior.

(3) More opportunities and responsibilities for patients

Mobile healthcare solutions support the shift in the role of patients from more passive to more active, while extending their responsibility for their own health by

D3.5.3 Policy Implementation Guidelines for achieving long-term objectives

providing them with information from sensors that detect and report their vital signs, and mobile applications that encourage them to follow a diet and medication regimens. They can also raise citizens' awareness of health issues by providing easy-to-understand information about their health and recommendations for a better quality of life in this state, thus helping them to make more informed decisions about their own health. Many mobile healthcare solutions use tools to improve patients' motivation or adherence to prescribed treatment, for example by motivating consumers to achieve specific fitness goals or reminding them to take their medication. The transition to a model of healthcare in which the patient has a central role may require a reorganization of the existing infrastructure and organization of healthcare, in which the central role is currently assigned to healthcare professionals. Healthcare systems will need to be open to the ability to receive data from patients (eg data collected from mobile applications) and to provide universal access to healthcare, for example through online health platforms that are accessible to patients and doctors. This implies a change in the role of specialists, who may need to perform remote monitoring of patients and more often interact with them via electronic messages.

In addition, in their work "Telemedicine and e-health - features and application" Rusev P. and Georgieva M. reveal the following four categories of benefits of e-health:

(1) Prospects for improving the quality of life:

- Advances in the provision of medical services - telemedicine technologies allow consultation with specialists in real time, directly in patients' homes and thus eliminates a significant part of the travel of health professionals to remote areas;
- Saving money in the local economy - telemedicine helps to provide health services at the local level so that people do not have to travel outside the places they live. Health care costs account for a significant share of any local economy, especially in remote areas, so the more money is retained in the community, the better the local economy will grow.

(2) Patient perspectives:

- Access to health care - use of telemedicine services provides access to quality health care, especially for the benefit of residents of remote areas. They deserve to have the same access to health services as people living in urban areas.
- Saving time, travel and other expenses - often people from isolated areas have to travel to cities for medical advice. The introduction of telemedicine facilities in remote

D3.5.3 Policy Implementation Guidelines for achieving long-term objectives

areas saves transport costs, travel costs, as well as environmental protection, eliminating much of the necessary travel.

- Home health care (Telehome) - the home health care in question applies to patients who are discharged from hospital but need additional medical care until they recover. Studies show that through Telehome, nurses "visit" more patients in one day and this is 30-35% cheaper than traditional home visits. (Example: The nurse talks to the patient via video link and receives up-to-date information about his vital signs. This approach allows monitoring of patients with renal failure, diabetes, cancer and other chronic diseases.

(3) Medical perspectives:

- Reduction of medical errors / accuracy of the diagnosis - it is much easier for a doctor to get a second opinion from a colleague about a patient's diagnosis through telecommunication. This reduces the incidence of improper treatment.
- Continuing medical education / lifelong learning - telemedicine can improve the educational opportunities of healthcare providers and patients without having to travel long distances and waste valuable time.

(4) Economic prospects:

- Reduction of staff costs in medical institutions;
- Savings for patient transport;
- Savings for patients;
- Increasing the use of local additional medical services (laboratories, pharmacies, etc.), as patients do not travel to other municipalities for their initial care (Maneva 2014).

VII. DIFFICULTIES IN THE IMPLEMENTATION OF E-HEALTH

This section presents the main challenges facing eHealth.

Lack of qualified stakeholders

One of the challenges to the implementation of e-health is the lack of qualified users. Users who do not have the skills to use the system can be either healthcare professionals or patients, developers and supporters of related ICT professionals, this may be due to poor literacy and poor technological skills - internet and computer literacy. Low-level stakeholders are technical staff, but are the main users of health

D3.5.3 Policy Implementation Guidelines for achieving long-term objectives

information systems in developing countries. The main challenge is to educate consumers in patient privacy.

Technical and operational implementation of e-health requires strong links between ICT and information systems in different organizations, which has its complexity. Some of the problems and challenges in the implementation of e-health, from a technical and operational point of view, are addressed as follows:

- Lack of an appropriate framework for information quality characteristics
- Need for appropriate medical equipment
- Lack of electronic health records
- Support, support and updating of the project

Legal aspects

Definitely one of the most important factors related to the development of e-health is overcoming specific legal aspects. Some of the legal challenges of the e-health system are the following:

- Lack of unified standards
- Lack or limited legal framework regarding the personal rights and preservation of patients' personal data
- The need to develop a legal framework for its management in healthcare.

The limitations of financial management reveal the following challenges:

- Need for investments and budget allocation in the electronic field of healthcare and the use of relevant technologies in the healthcare sector;
- Unregulated increase in healthcare costs;
- Lack of a framework for economic analysis of the benefits and results of remote health control;
- Lack of consideration of the financial and operational situations of each of the host countries, separately.

VIII. GOOD PRACTICES IN THE FIELD OF E-HEALTH

ELECTOR (2015 - 2018) - this ongoing project aims to "develop, test, implement and evaluate an e-health platform for home monitoring of patients with arthritis. The offered platform includes modern technology - web-based software for

D3.5.3 Policy Implementation Guidelines for achieving long-term objectives

communication and data transfer in combination with miniature devices for biochemistry. The end result is an e-health platform that will provide integrated and direct data collection in an e-health record. The adaptive and flexible nature of this solution has changed the provision of healthcare and can be extended to the surveillance of various diseases. ”¹

Thalea (2013 - 2019) - through this ongoing project, five hospitals from Germany, the Netherlands, Spain, Belgium and Finland will launch joint pre-procurement focused on obtaining a joint platform for telemedicine and telemonitoring to improve care for critically ill patients and patients in intensive care units².

United4Health (2013 - 2016) - the main ambition of this project is to use and scale telemedicine solutions implemented and tested under the health renewal project. Through fourteen large-scale pilot trials of telemedicine in Europe, involving approximately 12,000 patients, this project seeks to provide services to many people suffering from chronic lung disease, diabetes and cardiovascular disease³.

Chain of Trust (2011-2013) - the project focuses on telehealth, aiming to assess the views, needs, benefits and barriers related to telehealth from the perspective of key EU end-users - patients, doctors, nurses and pharmacists). Ultimately, the project aims to significantly increase the levels of awareness and trust for all key stakeholders.⁴

RENEWING HeALTH | REgioNs of Europea WorkINg together for HEALTH (2010-2013) - this project aims to implement, validate and evaluate innovative telemedicine solutions for the management of chronic diseases - diabetes, chronic lung and cardiovascular diseases in nine European regions. The scope of the project includes about 7,000 patients. The activities are aimed at encouraging the participation and empowerment of patients in the management of their own diseases, while helping to optimize the use of resources in the provision of health care.

¹ <http://www.elector.eu/how-it-works.html>

² <http://www.thalea-pcp.eu/>

³ <http://united4health.eu/>

⁴ <http://www.eu-patient.eu/whatwedo/Projects/Chain-of-Trust/>

D3.5.3 Policy Implementation Guidelines for achieving long-term objectives

IX. PROPOSALS FOR INFORMATION CAMPAIGN

In order to promote the benefits and opportunities of e-health practices, it is necessary to conduct information campaigns and activities aimed at raising awareness on topics related to e-health.

The target groups for these activities are:

- the general public,
- scientists and researchers,
- doctors and healthcare professionals,
- representatives of public authorities,
- health insurance funds, insurers,
- the social partners,
- the business community.

In order to increase the sensitivity of the topic, the information campaign should focus on the benefits and needs of the implementation of different forms of e-health (Section VII). Possible practical demonstrations that could be organized are:

- Measurement of indications for blood pressure, pulse, blood sugar, etc.), organized and conducted with the cooperation of health facilities, regional health inspections, Bulgarian Red Cross non-governmental organizations with interests and activities in the field of providing health and social services and community work, public and local authorities, institutions for providing medical and social care;
- Visits to sites where pilot initiatives are being implemented to introduce, test and adapt the E-Health approach;
- Trainings for end users and medical staff;

D3.5.3 Policy Implementation Guidelines for achieving long-term objectives

X. CONCLUSION

Based on the analysis, the team of Advanced Business Consulting Ltd. defines the following guidelines for implementing the policy to achieve long-term goals.

№	Policy Implementation Guidelines for achieving long-term objectives
1	Development a comprehensive eHealth development strategy, in close collaboration with representatives of all stakeholders, including nurses, other health professionals, the private sector, regulators, professional associations and carers (or have been)
2	Establishment an effective governance structure that provides strong, coordinated leadership to work with regulators and professional associations to share health information across the country
3	Creation of incentives for the development of innovative e-health solutions of a new generation, compliant with legislation, standards and policies, formulated in consultation with professional and regulatory bodies and professional associations
4	Provision of financial incentives to mitigate barriers to eHealth decision-making
5	Development and implementation of education and training policies in order to build e-health capacity in the workforce. These policies will be approved by regulators and professional associations to ensure compliance with curricula in academic institutions
6	Review and plan for better connectivity in remote areas to support the implementation of eHealth solutions and to enable national interoperability

SOURCES

Bulgarian sources

Updated strategy for the development of e-government in the Republic of Bulgaria 2019 - 2023

Vinarova J., Mihova P., E-health

Galeva S., Danova N., Grigorov E., Electrification of Healthcare in Bulgaria, Ministry of Health, Republic of Bulgaria 2 National Center for Public Health and Analysis (NCPHA) 3 Faculty of Pharmacy, MU-Varna. 2018

Dikova K., Information systems in healthcare - problems, solutions, benefits, Social Medicine magazine, issue 3, 2013.

Dimitrov G., Economic and organizational problems of the health system; analysis of the situation in the last ten years (2008-2017) Health Policy and Management magazine, 2019

European Commission, Green Paper on Mobile Health, 2014

European Commission, eHealth Action Plan 2012-2020 - Innovative Healthcare in the 21st Century, 2012.

Committee on the Environment, Public Health and Food Safety, Report on the eHealth Action Plan 2012-2020 - Innovative healthcare in the 21st century

Foreign sources

Abolade T. O, Durosinmi A.E, The Benefits and Challenges of E-Health Applications in Developing Nations: A Review, 2018

Adopting eHealth Solutions: Implementation Strategies

Fatehi, F.; Wootton, R. 2012. Telemedicine, telehealth or e-health? A bibliometric analysis of the trends in the use of these terms. Journal of Telemedicine and Telecare. 2012

Report on EU state of play on telemedicine services and uptake recommendations, Joint action to support the eHealth Network, 2017

Shilpa Srivastava, Millie Pant, Ajith Abraham, Namrata Agrawal, The Technological Growth in eHealth Services, 2015