

17 APRIL 2023

Impact evaluation of the EU funds' investments in health 2014-2020

SUMMARY OF THE EVALUATION



LIETUVOS RESPUBLIKOS
SVEIKATOS APSAUGOS MINISTERIJA



Creating the
future of Lithuania
2014-2020 Operational
Programme for the
European Union Funds
Investments in Lithuania

The service procurement contract is co-funded by the European Social Fund and the State Budget of the Republic of Lithuania under Measure No 12.0.2-CPVA-V-203 "Evaluation of EU Funds' Investments" of Priority Axis 12 "Technical Assistance for Communication and Evaluation of the Operational Programme" of the Operational Programme for the EU Funds' Investments in 2014-2020.

AIMS, OBJECTIVES AND MAIN METHODS

The purpose of the evaluation is to assess the impact of interventions implemented under the objectives (8.1.3, 8.4.2, 13.1.1) of the Operational Programme for the EU Funds' Investments in 2014-2020 by providing evidence of the changes that have resulted from the investments and how they have contributed to the achievement of the objectives set out in the Operational Programme.

Evaluation objectives

1. To assess the sufficiency, relevance, coherence and impact of the results of Objectives 8.1.3 and 8.4.2 of Priority Axis 8 "Promoting Social Inclusion and Combating Poverty" and Objective 13.1.1 of the Priority Axis 13 "Promoting actions to tackle the COVID-19 crisis and preparing for an environmentally friendly, digital and sustainable economic recovery".
2. To assess the coherence, potential impact and contribution of specific measures and interventions implemented under other priorities of the Operational Programme for the EU Funds' Investments in 2014-2020 in addressing health-related issues;
3. Assess whether and how the health investments have contributed to the objectives of the Europe 2020 Strategy.

The object of the evaluation is the 34 measures of the Operational Programme for the EU Funds' Investments in 2014-2020 (hereinafter referred to as the "OP") that directly contribute to the health policy priorities of the 2014-2020 investment period. 26 OP measures were administered by the Ministry of Health of the Republic of Lithuania (hereinafter referred to as the "MoH") and implemented under OP Objectives 8.1.3, 8.4.2 and 13.1.1. Eight OP measures were administered by other intermediate bodies and implemented under other OP Objectives.

For the purposes of the evaluation, all selected measures of the OP have been grouped together under separate health areas, in line with the logic of the main health policy planning documents¹ for the 2014-2020 investment period. The potential of investments to contribute to improving the quality of health services was analysed in the following areas: **Tuberculosis, acute infectious and chronic respiratory diseases** (including COVID-19), **Alcohol and other psychoactive substance addiction, Injuries and accidents, Circulatory system diseases, Cerebrovascular diseases, Oncological diseases, Health care for people with disabilities, Children's health and Healthy ageing.**

The theory-based evaluation approach is based on a theory of change that deconstructs the intervention logic and sets a framework for a problem analysis, cause and effect insights.

The data required for the analysis was obtained from a variety of primary and secondary sources, including the SFMIS (the subsystem of the European Union Structural Funds Information System 2014-2020), project contracts, beneficiaries' survey (N=144), semi-structured interviews with beneficiaries (N=34), and a focus group discussion with representatives of NGOs covering patients and other target groups (N=7). Previously conducted surveys and studies were also invoked for the evidence-based evaluation.

¹ Action Plan for Reducing Health Inequalities in Lithuania 2014-2023, approved by the Order of the Minister of Health of the Republic of Lithuania No. V-815 of 16 July 2014; Action Plan for Ensuring Healthy Ageing in Lithuania 2014-2023, approved by the Order of the Minister of Health of the Republic of Lithuania No. V-825 of 16 July 2014; National Programme for Cancer Prevention and Control 2014-2025, approved by the Order of the Minister of Health of the Republic of Lithuania No. V-814 of 16 July 2014

The timeline of project-level output and result indicator values used in the evaluation was set to 1st September 2022.

ALLOCATION OF FUNDS FOR DIFFERENT TYPES OF INTERVENTIONS

Investments under specific objectives 8.1.3, 8.4.2 and 13.1.1 of the OP, administered by the MoH, amount to **€328 million** (from all funding sources; aggregating project contracts signed by 1st September 2022). By the evaluation date, 57% of the projects were completed.

The largest share – almost €202 million or 62% of the EU funds – was spent on **laboratory and medical equipment** acquisition. Reconstruction and renovation of premises accounted for almost €77 million or 23% of the total amount.

Expenditure on training for health professionals, other professionals, patients and their relatives amounts to €14 million or 4% of the total funds in healthcare sector under the OP specific objectives 8.1.3, 8.4.2 and 13.1.1. A further €15.5 million, or 5% of the total amount, has been allocated to training, information and awareness-raising activities related to health literacy and the promotion of a healthy lifestyle.

€8 million or 2% of the total funding has been granted to implementation of pilot projects that facilitate the development of new mode health care services.

Expenditure on social and related support amounted to €3.5 million, or 1% of the total funds. This includes assistance to patients from vulnerable groups, psychological support for cancer patients, etc.

More than half (by value) of all laboratory and medical equipment purchased under the OP measures is used by largely inpatient care providers at national level in the country's largest cities (€122 million), about a quarter of equipment is allocated to inpatient care providers at municipal or regional level (€48 million)², and just over a tenth of the medical equipment went to primary outpatient care providers (€25 million).

As a response to the COVID-19 pandemic, efforts were made to increase the volume of specialised laboratory and medical equipment at inpatient care facilities at all levels in 2020. Funds spent on equipment dedicated to the diagnosis and treatment of COVID-19 account for around €60 million which equals to roughly one-third of the total expenditure on equipment allocated to inpatient care providers during the financial period analysed.

In addition to the main interventions under OP specific objectives 8.1.3, 8.4.2 and 13.1.1, the health sector also accounted for investments of around **€65 million under other OP objectives administered** by other ministries. EU fund subsidies were granted to provision of integrated home care services (including nursing services), healthcare professionals skills development and methodological support, the development of eHealth and public health monitoring systems.

² Calculated according to the main beneficiary of the investment. The purchased equipment can be used for primary, secondary or tertiary care services.

RELEVANCE AND COHERENCE OF THE INTERVENTIONS

The 2014-2020 investment period was marked by the continuation of the reform of the national healthcare system, which involves changes of spatial distribution and mode of provision of health care services. Moreover, healthcare system has faced the unprecedented challenges posed by the COVID-19 pandemic that started in early 2020.

Overall, the **relevance of the planned and implemented interventions to the needs identified at the beginning of the 2014-2020 period is considered high**. The compatibility was achieved mainly through planning process. Dedicated strategic documents drawn up at the beginning of the investment period detailed existing problems in relevant healthcare areas and identified the main lines of investment needed. Further, terms of reference set out the specifications and requirements for projects had been in consistency with the aforementioned strategic documents. Moreover, a significant part of project level investments were centrally planned, allowing horizontal coordination of project's inner configuration and ensuring relatively smooth implementation of plans on specific medical equipment, infrastructure or human resource development.

The fact that project eligibility criteria were set centrally, did not decrease relevance reported by project beneficiaries. 89% of healthcare providers stated that funded activities were in line with the essential needs of their institutions in specific healthcare areas. This is also the case for 78% of project beneficiaries representing the field of public health.

Investment in infrastructure and acquisition of medical equipment for secondary and/or tertiary care facilities in most cases has been aligned with ongoing or planned changes in healthcare network and service provision modalities under national legislation. Such approach of management strengthens EU funds **contribution to the implementation and continuity of the national reforms**.

Most of the measures implemented under OP specific objectives 8.3.1, 8.4.2 and 13.1.1 were successfully **focused on solving specific, predefined problems**. Investments were mostly concentrated in a limited number of highly specialised healthcare facilities (e.g. cancer research and treatment centres, rare disease diagnosis and treatment centres, etc.) or in a number of spatially dispersed facilities with the particular service profile together forming a network (e.g. stroke treatment, geriatric care, addiction treatment, etc. networks). Some networks (e.g. heart disease treatment, trauma and poisoning treatment), however, were developed investing mainly into infrastructure and equipment of hospitals operating at the national level, while high level telemedicine consultation pilot model was developed to tackle service quality issues at the hospitals operating at the municipal and regional levels (although only 9 municipal or regional-level hospitals are involved so far).

Greater emphasis on the main healthcare centres has allowed to concentrate resources and to acquire high-tech, modern equipment, which, in some areas, opened the way for the application of new treatment methods that have not existed in the country so far. It contributed to the quality of tertiary level specialised services available for the entire population of the country. On the other hand, aforementioned focus on quality of highest level services has led to a certain **lack of attention to the quality of secondary healthcare services provided at the municipal level** (e.g. in the areas of heart disease, cerebrovascular disease, oncology, etc.) playing key role in disease prevention, timely diagnosis, and early treatment.

At the beginning of the investment period, a strong focus was placed on **the primary care (family medicine)**. Among main concerns was insufficient decision-making capacity of the family medicine units. One the one hand lagging disease detection and diagnosis by undue patient referral to the appropriate specialists, or, conversely, overly rapid referral of patients with some diseases or conditions to secondary-

level healthcare specialists. EU funds were used to upgrade certain medical equipment in primary outpatient facilities (more than 300 facilities across the country), which collectively serve more than half of the country's population. Almost three-quarters of these primary outpatient institutions were also equipped with vehicles, which should contribute, among other benefits, to the development of outpatient home care services.

In the medium to long term, the development of the integrated model of child health care services may be of particular importance in strengthening the competences of family physicians in the field of child health care. EU funds were allocated to the methodological case-specific development of the model in order to address the challenges caused by closure of paediatric wards in many small hospitals as main responsibilities for child health care has shifted to general practitioners and emergency department specialists.

The investments in infrastructure and equipment of the healthcare facilities discussed above are mainly related to the quality of treatment and, to some extent, rehabilitation services. However, inadequate disease prevention situation, with particular emphasis on rural or remote areas, is also highlighted in 2014-2020 planning documents. This unsatisfactory situation is commonly attributed to two sets of problems: (a) insufficient coverage of preventive measures at the level of the health system and institutions, and (b) the lack of attention to the health of the population, the lifestyles that increase the risk of various diseases, and the lack of use of the available preventive programmes.

Specific **preventive medical care activities** were implemented only in relation to heart disease and oncological disease. In the area of reducing heart disease, the investments were aimed at strengthening secondary prevention through the establishment of heart failure consultation rooms in 30 healthcare facilities which provide secondary and/or tertiary outpatient cardiology services. In the area of cancer prevention, investments were made to improve the implementation of cancer screening programmes throughout the country. The funds were allocated to the development of uniform screening methodologies, dissemination of information for a target groups, and the upgrading of the qualifications of the healthcare specialists involved in the implementation of the programmes.

In some other areas, improvements in disease prevention are expected through infrastructure-strengthening activities at the primary care level or by expanding the methodological base (e.g. childhood diseases, cerebrovascular diseases, age-related diseases), however no specific preventive medical interventions were planned.

Activities promoting healthy lifestyles are integrated into many relevant healthcare areas targeted in 2014-2020 OP. Promotion of physical activity and healthy nutrition, support for emotional health, and similar activities were implemented under a single key measure (No 08.4.2-ESFA-R-630). There exists a natural overlap between most of healthcare areas discussed, as the same factors closely linked to lifestyle (overweight, high cholesterol, stress, etc.) may affect the occurrence of different illnesses and conditions. Thus, implemented activities related to health literacy contribute simultaneously to the achievement of the objectives of several healthcare areas.

The pilot projects that were planned and implemented in various fields should be also distinguished. In order to maintain and improve the availability and quality of health services, healthcare providers need continuously to adapt to demographic, mobility, communication changes. It requires to develop new forms of healthcare service delivery. During the 2014-2020 investment period, projects that pilot telemedicine services, disease-specific case management, mobile healthcare services in patients' homes, and models that involve patients more actively in monitoring and controlling their own health, were implemented. The pilot projects being implemented in the limited territories are crucial for a successful further development and the full-scale roll-out of the new medical service across the country.

IMPACT OF INTERVENTIONS

In order to evaluate the impact of the interventions for the 2014-2020 investment period, five key indicators were analysed. These indicators are included in the OP as specific result indicators: 1) The decline of the age-standardised (0-64 years) rate of mortality from circulatory system diseases in target territories; 2) The decline of the age-standardised (0-64 years) rate of mortality from cerebrovascular diseases in target territories; 3) The decline of the age-standardised (0-64 years) rate of mortality from malignant tumours in target territories; 4) The decline of the age-standardised (0-64 years) rate of mortality from external causes in target territories; 5) The difference in the number of visits to physicians per person between population of urban and regional municipalities.

In addition, there were also indicators, specific to other health areas to which EU funds were granted, analysed.

It should be noted that **almost all key 2014-2020 OP achievement indicators of the healthcare area, have consistently improved till 2019** (decreasing mortality rates for circulatory system diseases, cerebrovascular diseases, malignant neoplasms, external causes of death). Though the morbidity rates for children and the number of avoidable hospital admissions for children have remained stable or even worsened. Additionally, the difference between the number of visits to doctors between the population of urban and regional municipalities has increased.

Most of the aforementioned indicators has changed significantly between 2020 and 2021. Almost all changes can be attributed to the COVID-19 pandemic effect. The COVID-19 pandemic required major and sudden changes in both the provision of health services for COVID-19 patients and in the organisation of the rest health services. The EU funds' response to COVID-19 for the 2014-2020 period was focused mainly on ensuring the provision of health care to COVID-19 patients and strengthening public epidemiological control.

The impact of planned and implemented EU funds' investments on the evolution of the key indicators identified was direct, but still very limited until 2021, as only a small part of the planned investments had been completed by then. Nevertheless, **a positive impact of the 2014-2020 EU funds' investments on the value of the indicators can be projected in the future.**

The standardised mortality rate of the population aged 0-64 due to circulatory system diseases in the target territories has been declining, from 146.17 cases in 2014 to 127.64 cases per 100,000 inhabitants in 2021. The impact of the EU funds' investments on the dynamics of this indicator is direct, but has had manifested to a very small extent until 2021, as only a small share of the planned investments have been completed by that time. On average, the impact of the investments is projected to have **a moderate positive effect on the reduction of mortality from circulatory system diseases.** The impact on the indicator is projected for the coming years and will be driven by interventions in primary and secondary prevention of circulatory system diseases as well as in treatment of a myocardial infarction. However, the magnitude of this impact will depend to a large extent on whether and when existing problems of patient pathway are tackled (from the first contact with the family medicine specialist, through referral, to the completion of the treatment), including long waiting queues leading to delayed diagnosis and a reduction in the effectiveness of further treatment. In order to address the problem of the overdiagnosis of ischemic heart diseases in the medical death certificates, methodologies were developed and programmes for the qualification of specialists responsible for the completion of medical death certificates were set up.

The standardised mortality rate for cerebrovascular diseases in the population aged 0-64 in the target territories has been decreasing from 29.57 cases in 2014 to 21.56 cases per 100,000 inhabitants in 2021.

The interventions being analysed have already contributed to the positive change in the value of the indicator in recent years, and the impact is expected to be maintained and even increase in the future with the full completion of the interventions, especially counting on the implementation of the national reform of the ambulance services. **A major positive impact on the reduction of mortality from cerebrovascular diseases** is projected, primarily due to network-based investments in the medical equipment of stroke treatment centres and intermediate care hospitals. The overall positive impact of the investments is also reinforced by the increase in the ambulance capacity, the availability of high level consultative support for healthcare professionals in municipal-level hospitals, the upgrading of methodological guidance, and the development of healthcare professionals competences.

The standardised mortality rate for malignant neoplasms in the target territories for the population aged 0-64 has been decreasing from 96.45 cases in 2014 to 86.49 cases per 100,000 inhabitants in 2021. The 2014-2020 EU funds' investments have made a direct impact on the changes in the mortality rate, but due to the timing of the investments, the full impact has not yet manifested. The impact on the improvement of the indicator may have already occurred due to the provision of specialised oncology centres with innovative, state-of-the-art medical equipment for surgery and the new generation of radiotherapy equipment. With the full deployment of the acquired equipment, as well as at least a partial improvement in the implementation of screening programmes (the planned activities of centralised management and dissemination of cancer screening programmes will not yet be implemented due to technical constraints), **a minor positive impact on malignant neoplasm mortality rates** is expected. The estimation of the impact of the investments is limited by the fact that the treatment of malignant neoplasms is a multifaceted intervention, and other factors, such as the availability of innovative medicines, the introduction of new diagnostics and treatments, etc., are necessary to ensure a larger positive impact of current investments. In addition, the indicator covers mortality from different types of cancer, however preventive measures are only applied for breast cancer, cervical cancer and colorectal cancer.

The standardised mortality rate due to external causes of death for the population aged 0-64 in the target territories has been declining from 124.22 cases in 2014 to 73.15 cases per 100,000 inhabitants in 2021. The observed positive change has not yet been affected by the implemented measures under the OP as the main interventions have not yet been implemented. Over the coming years, **a limited positive impact of the interventions on the change in mortality due to external causes of death** is projected. The limited impact is foreseen mainly due to the fact that the list of external causes of death is quite long and includes causes of different nature. Consequently, investments related to a specific cause (e.g. poisoning) may only affect part of the indicator. The main investments that should contribute to reducing mortality from external causes of death are the expansion of poisoning treatment and/or laboratory capacity at the Toxicology Centre of the Vilnius University Hospital and the National Public Health Laboratory, the upgrading of the medical equipment of the Trauma centre at Hospital of Lithuanian University of Health Sciences Kauno Klinikos, the expansion of ambulance capacity and the improvement of the quality of emergency medical care in the regions.

It is important to note that the objectives in OP were set and, consequently, all the indicators discussed were designed to reduce mortality rates in selected target territories (municipalities where the standardised cause-specific mortality rate is above the Lithuanian average by a given amount). According to the statistical data, **the dynamics of mortality from the identified causes in the municipalities of the target territories and in the rest of the country are very similar**, i.e. although mortality from all the causes analysed is decreasing, differences between municipalities remain. A detailed analysis of the 2014-2020 investments shows that even after the complete implementation interventions will have almost no impact on the reduction of this spatial gap.

The lower uptake of health services - the poorer health indicators in some municipalities, especially those remote from the major centres. The difference in the number of visits to doctors per capita between the population of urban and predominantly rural municipalities has increased from 3.9 in 2013 to 5.1 times in 2019 (the difference in visits to doctors between the population of urban and predominantly rural municipalities has been declining only in recent years, when the number of visits to doctors, in general, has been decreasing significantly due to the restrictions imposed by the pandemic of COVID-19, the changes in the population's behaviour, and the general changes in the number of visits). It is likely that **the dynamics of the difference in the number of visits to doctors per capita between the populations of urban and predominantly rural municipalities will, however, depend mainly on the overall changes implemented in the national health system.** EU funds have provided some tools (medical equipment, methodological support, training), but whether and how these assets will be used will depend very much on the organisation of healthcare services, cooperation between institutions operating at different levels, etc. It is important to note that almost all the interventions in the 2014-2020 investment period address problems common to the country as a whole, and even in the target territories identified at the beginning of the period (municipalities with the highest rates of premature mortality from the main non-communicable diseases) there were implemented very few specific interventions.

STRATEGIC PROPOSALS AND RECOMMENDATIONS

Taking into account the information gathered and the analysis carried out during the evaluation, suggestions and recommendations were developed to contribute to better planning and implementation of the interventions under the Programme for the EU Funds' Investments 2021-2027 and other similar programmes. The recommendations are limited to the areas covered by the interventions of the 2014-2020 investment period and to actions that could potentially be implemented under the EU funds' investments.

Closer **cooperation with NGOs, communities and businesses** is recommended to expand the range, supply and quality of healthcare services and to help address constraints caused by resource deficiency. This cooperation should be promoted primarily in the field of public health, including general public first aid capacity building. Cooperation should include but not be limited to the acquisition of relevant health, social or similar services in the market. It is essential to seek cooperation among various players in the planning and development of services for the population and to ensure the continuity of such delivery modes.

Collaboration between general practitioners (family doctors) and public health bodies (public health offices, etc.) should be encouraged with the aim to increase health literacy and promote healthy lifestyles among different population groups and provide more and better health related services to less active population groups. Public health specialists should consult with family doctors and other healthcare professionals when designing wellness programmes relevant to the local population. This should be followed by medical advice and proactive encouragement of the patients to participate in available wellness activities.

Reasonable distribution of functions and cooperation between healthcare system institutions is also important to ensure a rational balance between the nationally operating centres of excellence for public health and the bodies implementing specific activities in local communities. It is recommended that some share of EU-funded or similar projects would be dedicated to the strengthening capacity of methodological guidance and coordinated systemic advisory support of the national-level institutions, whereas the provision of public health services to the community should be entrusted to the municipal-level entities.

Notably, some of the services to patients, including social and emotional support to vulnerable groups, were financed on a project basis for a number of years. It was found that service providers face difficulties in ensuring the continuity and scope of services after termination of the project. Such situation causes problems in finding and retaining qualified and experienced staff. It is, therefore, necessary to address the issue of **irregular funding** of services that have been provided on a project basis for a number of years by moving towards permanent or at least longer-term funding.

The evaluation found that, on the basis of the practical experience of the projects, some activities could be implemented without the support of EU funds. It is therefore recommended that, when planning new investments, consideration should be given to **limiting the funding of small and affordable equipment and activities** and using the allocations to **increase the funding of complex, expensive laboratory and medical equipment, specialised vehicles**.

In order to adapt to the changing demographic situation and the changing network of healthcare facilities, it is necessary to change some of the existing forms of healthcare services and to find innovative ways to maintain and improve the accessibility and quality of services for patients throughout the country. In order to create the preconditions for potential qualitative changes in service provision in the medium to long term, it is recommended to continue to **initiate and finance pilot projects**, testing new forms or models of service provision in a limited territory/group of facilities. Lessons learnt from the implementation of the pilot models and the documentation developed/revised should be used as a basis for good practices to be subsequently expanded nationwide.

The evaluation report also includes a number of rather technical recommendations related to the indicator framework, the monitoring of indicators, assistance to project promoters facing significant funding shortfalls due to external unforeseen factors, and so on.