Evaluation of the relevance and efficiency of the monitoring indicators for measures of the Operational Programme for the Promotion of Cohesion administered by the Ministry of Health

Summary

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Drawn up by Public Company Europos socialiniai, teisiniai ir ekonominiai projektai under Contract No S-23 of 14 March 2011 concluded with the Ministry of Health of the Republic of Lithuania.

The Ministry of Health (hereinafter – the "MoH") administers twelve measures of the Operational Programme for the Promotion of Cohesion 2007–2013 (hereinafter – the "OPPC"), focused on direct investments into the health sector. Funds planned for direct investments into the health sector in Lithuania amount to around 3.5% of the whole EU support in 2007–2013.

OPPC measures administered by the MoH implement certain national programmes and should contribute to the fulfilment of the OPPC task "to provide high-quality and accessible health care services". The implementation of the measures is monitored on the basis of two output indicators (the number of projects and the number of health care institutions which have received support) and one result indicator (the number of patients to whom the quality and availability of health care services improved).

Objective and tasks of the evaluation

The purpose of the evaluation is to improve the implementation of the OPPC measures administered by the MoH through the evaluation of the relevance and efficiency of the methodology for measurement of indicators used to monitor the implementation of measures.

The tasks of the evaluation are as follows:

- To evaluate the relevance of the methodology for measurement of the result indicator of the OPPC measures administered by the MoH (by measure and the whole task) and to deliver recommendations on how to improve the existing methodology for collection of data to monitor the indicator.
- To evaluate the efficiency of the methodology for measurement of the result indicator of the OPPC measures administered by the MoH (by measure) and to deliver recommendations on/methodology for the development of a monitoring system for secondary indicators necessary for the measurement of monitoring indicators.

The evaluation was carried out by Public Company Europos socialiniai, teisiniai ir ekonominiai projektai under Contract No S-23 of 14 March 2011 concluded with the MoH. The evaluation was carried out in March–August 2011.

Evaluation methodology

The evaluation was carried out at the level of individual indicators and the system of indicators. Individual indicators were evaluated according to their relevance and compatibility with evaluation criteria of national programmes. The relevance of the indicators was measured according to 5 quality criteria: specificity, relevance, utility, reliability and measurability. The system of indicators was assessed against the relevance and efficiency criteria: the sufficiency and balance of indicators, causal relationship among output, result and strategic context indicators, the clarity of the methodology for measurement of indicators, data sources to measure indicators.

In the course of the evaluation, different qualitative and quantitative data collection and analysis methods were used: desk research, analysis of monitoring information, analysis of health information systems and statistical information, analysis of the intervention logic of the OPPC measures administered by the MoH (logical models), interview, survey of beneficiaries, analysis of monitoring indicators according to quality criteria of indicators, etc.

Definition and monitoring of the quality and accessibility of health care services

To define the concept of high-quality and accessible services, the evaluation examined documents of various foreign countries and international organisations on the quality and accessibility of health care services. High-quality health care services are usually defined as effective, safe and acceptable/ patient-cantered. Such concept of the quality of care is also backed up by beneficiaries of the OPPC measures administered by the MoH, who define high-quality health care services primarily as services that meet the

needs of patients and are positively viewed by patients, also safe services that do no harm to the patient's health. The quality of services is defined by structural, process and result indicators. *Structural indicators* reflect the preparedness of health care institutions (hereinafter – "HCI") to provide certain health care services, the provision of health care institutions with the necessary equipment, qualified personnel, etc. *Process indicators* describe the healthcare process (frequency, duration of certain diagnostic and treatment procedures, etc.). *Result indicators* show the changes in the patient's health and in his/her satisfaction with health care services, determined by the services provided to the patient. Structural indicators in the monitoring system of the OPPC measures administered by the MoH correspond to output indicators, process indicators to result indicators, and result indicators to strategic context indicators as the result of healthcare depends not only on the OPPC measures administered by the MoH and the projects financed under them, but also on many exogenous factors.

The availability of services is usually associated with certain time, physical (the supply of services, the distance to the place where services are provided) and financial (costs of travelling to the place where services are provided, costs for the services) factors that may determine the capability of individual access to healthcare.

Results of the evaluation of the relevance and compatibility of indicators

The **relevance** of individual indicators has been evaluated by analysing the extent to which the indicator meets the key quality criteria such as specificity, relevance, utility, reliability and measurability.

Specificity. It has been established that *monitoring indicators are not specific enough*: they neither reflect the objectives of individual investment areas and measures, nor show any changes in the quality and accessibility of health care services at the HCI and national level. The result indicator is calculated taking into account all patients served rather than calculating patients based on the qualities of the service provided to the patient (quality, accessibility). To ensure a greater specificity of the result indicator, in case of each measure it should be clearly defined what a high-quality services is (e.g. physician's consultation, during which a certain diagnostic procedure is carried out) and what is considered the improvement of the accessibility of the service (e.g. a larger number of the patients served, a larger number and variety of the services provided, emergence of new services, the scope of their provisions, etc).

Relevance and utility. The output indicators applied are useful as core indicators: they are relevant to the European Commission and may be used for comparison of different measures or programmes. However, overall the relevance and utility of the indicators used to monitor the implementation of the OPPC measures administered by the MoH are not sufficient as they do not provide relevant information on the implementation progress of the measures and the results and impact of the intervention. The monitoring indicators are not sensitive enough (the intervention has no significant impact on the changes in these indicators, especially the result indicator). To make the indicators relevant and useful to the decision-making on the management of the OPPC measures and projects, they have to provide information on the implementation progress, results and impact of projects and measures: the improvement of the healthcare process (e.g. earlier diagnostics of diseases, faster provision of emergency medical services (hereinafter – "EMS"), changes in the structure of health care services (e.g. a larger scope of more efficient services such as outpatient surgery, day hospital care, or a larger scope of new services, the provision of which requires infrastructure created using the support from the EU Structural Funds, etc.),

Reliability and measurability. Output indicators are relevant in terms of reliability and measurability, but it is necessary to specify how to calculate HCIs that have been supported at the priority level. The result indicator raises certain doubts in terms of reliability and measurability as there is not a single reliable data source to measure the result indicator. The measurement of the indicator is usually based on the data of the information system SVEIDRA, but this information system collects data on the health care services paid from the budget of the Compulsory Health Insurance Fund (hereinafter – the "CHIF") rather than on the patients served. If the service is paid not from the CHIF budget, the information on the service provided is not recorded in the information system SVEIDRA. Hence SVEIDRA does not provide comprehensive information on the actual scope of health care services. Moreover, due to a different

method of payment for EMS, SVEIDRA does not provide information on the patients served by EMS providers.

The evaluation of the **compatibility** of the indicators has established that the monitoring indicators of the OPPC measures administered by the MoH correspond to the evaluation criteria of national programmes but national programmes provide for a larger number and more varied indicators. To ensure better compatibility of indicators, it is recommended to establish additional indicators to monitor the implementation of the OPPC measures administered by the MoH. The information required to measure some indicators should be collected from beneficiaries, and other indicators or changes in the some specific indicators at the national level could be analysed by special thematic studies and evaluations. Such studies and evaluations could prove to be useful in supplementing the monitoring information of the OPPC measures administered by the MoH.

Results of the evaluation of the relevance and efficiency of the system of indicators

The evaluation of the **relevance** of the system of indicators has established that there is a lack of indicators that reflect the objectives of the measures and the results of their implementation. Furthermore, the system of indicators is not balanced: it has a shortage of indicators that reflect the important aspect of quality of health care services – patient satisfaction.

The evaluation of the **efficiency** of the system of indicators has revealed that effective monitoring at the measure level requires more specific indicators (the monitoring indicators applied do not provide information on the results of individual measures). Moreover, there is a shortfall of causal relationship among output, result and strategic context indicators, while the intervention logic of the measures is too simplified. This problem could be tackled by establishing additional indicators or specifying the result indicator applied by secondary indicators, i.e. to indicate what the improvement of the quality and accessibility of services is and to calculate only the patients who have received a service that is of higher quality and more easily accessible. The assessment of the quality of services should take patients who have received a high-quality service (e.g. physician's consultation, during which a certain diagnostic procedure is carried out) into account, while when assessing the accessibility of services it is important to analyse such indicators as the number of the services provided and changes in the number and variety of services at HCI, regional and national levels. The main aim of the interventions administered by the MoH is to change the structure of services (at the national level) and to increase the quality and accessibility of certain services (by renewing old medical equipment, implementing new services such as positron emission tomography in oncology; by expanding the number of places where services are provided, e.g. by establishing mental health day-centres, etc.) rather than to increase the number of the services provided.

To identify secondary and additional indicators which might be relevant for the monitoring of the OPPC measures administered by the MoH, examples of healthcare quality indicators have been thoroughly analysed in foreign countries and international organisations by key investment area (cardiology, emergency services, oncology, mental healthcare, palliative aid, outpatient surgery, etc.). The results of the analysis are presented in the Annex to the Report.

Summary of the key problems and evaluation recommendations

The evaluation has identified the following key **shortcomings of the relevance and efficiency of the system of monitoring indicators** of the OPPC measures administered by the MoH:

1) *Monitoring of the OPPC measures administered by the MoH does not allow analysing the progress in the implementation of national programmes* implemented using the EU Structural Funds as most of the evaluation criteria of national programmes are not provided for in the system of monitoring indicators of the OPPC measures administered by the MoH.
2) *The intervention logic of the OPPC measures administered by the MoH is too simplified; causal relationship among output, result and strategic context indicators is not ensured.* On the one hand, the quality and accessibility of health care services provided by HCIs depend not only on the

infrastructure of HCIs (premises, equipment) and the provision of HCIs with the latest diagnostic and treatment equipment, but also on many other factors (qualification of physicians, their sufficiency, etc.). On the other hand, morbidity, mortality rates, average life expectancy and the quality of life (strategic context indicators set by the OPPC) depend on the quality and accessibility of health care services as well as on various non-health care determinants of health (human biology, lifestyle, living environment, etc).

3) Output and result *indicators are not sufficiently specific and related to the objectives of the measures*. Also, the indicators do not reflect how the OPPC task "to provide high-quality and accessible health care services" is implemented.
4) *The methodology for measurement of the result indicator* (the number of patients to whom the quality and availability of health care services improve) *does not reflect the essence of the indicator* as the qualities (quality, accessibility) of the services provided to the patient are not taken into account. The quality and accessibility of services are different dimensions of health care and require different indicators.
5) *The methodology for measurement of the output indicator "The number of health care institutions which have received support" does not indicate how to measure this indicator at the priority level* (how to calculate HCIs that have received support for several projects).
6) The system of indicators *does not have indicators that reflect the main aspects of high-quality health care services*: effectiveness, safety and patient-centeredness (patient satisfaction). Patient satisfaction is an important result of the healthcare process. In the context of the OPPC measures administered by the MoH, patient satisfaction is relevant as a strategic context indicator, the changes of which could be evaluated through regular patient surveys.
7) Effective *monitoring* of the OPPC measures administered by the MoH *is limited by a lack of certain decisions at the national level:*
    a) National health care quality indicators are not determined and the quality of health care is not monitored;
    b) There is a lack of information on the actual scope of health care services as there is no single system for recording health care services paid not from the CHIF budget;
    c) The scope and accessibility of personal health care services paid from the CHIF budget is often determined not by physical capabilities of health care institutions to provide a certain service (e.g. a lack of diagnostic or treatment equipment), but by the financing of services from the CHIF budget and the quota of the provision of services determined by limited financing.

In the light of the shortcomings of the system of monitoring indicators, the following **recommendations** are delivered:

1) **Compatibility of the evaluation criteria of national programmes and the monitoring indicators:** additional indicators should be established for certain OPPC measures with regard to evaluation criteria of national programmes (in the Supplement to the OPPC). The analysis of national indicators which are relevant at the national rather than at the HCI level should be provided in annual implementation reports of the OPPC, and done by carrying out thematic studies and evaluations. These indicators are important for the assessment of the improvement in the quality and accessibility of health care services, the optimisation of the infrastructure of health care services.
2) **More specific monitoring indicators and the improvement of the monitoring system of the OPPC measures administered by the MoH:** in order to reveal causal relationship between the intervention and the expected results (output, result and strategic context indicators), it is recommended to establish more specific indicators at the measure level which could better reflect the objectives of individual measures and their likely impact on morbidity and fatality rates. Monitoring of the OPPC measures administered by the MoH and reporting for the results could be improved by the following solutions:
    a) Specifying the result indicator applied using secondary indicators (revising the methodology for measurement of the result indicator);

b) Establishing additional indicators for certain OPPC measures administered by the MoH (amending the Supplement to the OPPC);
c) When establishing additional and secondary indicators, following the methodology for measurement of indicators provided in the Report is recommended. The methodology outlines the recommended secondary and additional indicators by all OPPC measures administered by the MoH, proposes approaches to data collection (monitoring or evaluation), possible data sources, and defines the type of indicator in the system of monitoring indicators;
d) Carrying out thematic studies and evaluations in order to supplement monitoring data and to measure indicators that cannot be reliably measured by collecting data from beneficiaries;
e) Applying HCI-level organisational and clinical quality indicators at the project level. In order to ensure the comparability of these indicators at the measure level, it is recommended to make a reference list of HCI-level quality indicators and define a unified methodology for their measurement.

3) **Indicators for the assessment of the quality of services:** it is recommended to establish and analyse indicators that reflect the main aspects of high-quality health care services: effectiveness, safety and patient-centeredness (patient satisfaction). These indicators may be defined and measured by carrying out special thematic studies and evaluations. Considering the specific objectives of the different measures, different indicators for effectiveness and safety may be applied to different measures. Indicators for patient satisfaction may be the same for all measures:
   a) *Effectiveness of services* (impact on the patient's health) may be measured by analysing result indicators (e.g. decrease in the cardiovascular disease mortality). These indicators are relevant as strategic context indicators.
   b) *Safety of services* may be evaluated by establishing both process (e.g. demand for another intervention after a certain procedure when the number of cases or their share (%) is calculated) and result indicators (e.g. the number of hospital infections; the share of operated patients with hospital infection). These indicators may be relevant as result as well as strategic context indicators.
   c) *Responsiveness or patient-centeredness (patient satisfaction)* may also be measured in two ways: by establishing process (e.g. the number of complaints and its dynamics, the nature of complaints) or result indicators (patient satisfaction indicators which may be established with a help of patient surveys).
4) **Assessment of patient satisfaction:** in order to objectively measure patient satisfaction within HCIs that have received support from the EU Structural Funds, a unified methodology should be developed and independent patient surveys should be organised.
5) **Indicators to assess the accessibility of services:** indicators which reflect the supply and variety of services, the scope of the provision of certain services and their changes (by calculating the number of cases and/or the number of patients) should be established. Considering the difficulties to measure the result indicator and the shortage of sources of information (e.g. information system SVEIDRA collects data on the number of services paid from the CHIF budget rather than on patients), additional indicators related to monitoring of the number services, not the number of patients, would be more reliable and easier to measure.
6) **Problems to be addressed at the national level:** the following actions could help create conditions for effective monitoring of the implementation of the OPPC task "to provide high-quality and accessible health care services":
   a) Defining national healthcare quality indicators;
   b) Defining the concept of the accessibility of services and drawing up the methodology for assessment of the accessibility of services;
   c) Regulating the record of health care services paid not from the CHIF budget;
   d) When deciding on the financing of HCI projects by the EU Structural Funds, making beneficiaries indicate the HCI-level and national quality and accessibility indicators that they are trying to improve and to prioritise the projects with the possible greatest impact on the quality and accessibility of health care services.