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## INTEGRATE HEALTH CARE SYSTEM PERFORMANCE ASSESSMENT FOR VALUE-BASED HEALTH CARE IMPLEMENTATION IN LATVIA

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### Introduction

Every year, efforts are applied worldwide, particularly in the European Union, to improve health care systems by increasing the added value of resources already available for health care financing by increasing the performance of health care systems. According to experts of the World Health Organisation (WHO) and the Organisation for Economic Cooperation and Development (OECD), 20-40% of the resources are used for complications that could be avoided, for unnecessary treatment or administrative inefficiency. Therefore a new initiative to improve health performance – the value-based health care (VBHC) concept is becoming increasingly popular in the world, and particularly in Europe.

### Research Aim

This research aims to explore the possibilities of applying VBHC in Latvia and the interaction between various management tools in the field of health care.

The main idea of the research is to arise discussions on VBHC valuables among scientists, policy makers, non-governmental organisations, doctors' associations and health services providers in Latvia regarding who should step with an initiative and how the VBHC interpretation in Latvia should look like conceptually.

### Materials and Methods

Meta-analysis of the research is based on the use of qualitative data sources – the existing data sources from policies implemented by the Ministry of Health in Latvia and examples of the introduction of VBHC initiatives worldwide summarised by the VBHC Center Europe. The deductive research is based on the Value-Based Healthcare concept introduced by Porter and Teisberg.

### Results

Assessment of the performance of health care systems is a valuable factual material that helps in policy-making. It can also be seen by healthcare providers as a strategic framework for monitoring progress and evaluating best practices by linking health indicators to the health system strategy and functions. Health Systems Performance Assessment (HSPA) has established a set of indicators that describe the following health care dimensions:

- ✓ resources (input) (finances, human resources and other provision)
- ✓ process (process) (e.g., accessibility, quality, safety);
- ✓ short-term result (outcome/output) (e.g., received care, mortality);
- ✓ long-term result (outcome/output) (e.g., survival).

HSPA provides for benchmarking of indicators in Latvia. Depending on the indicator, the assessment is performed at the international, regional, local and health service providers' level. The indicators (performance) generally focus on four priority areas: circulatory system diseases, oncology, mental health, maternal and child health. The framework foresees the benchmarking of indicators (performance), which have an informative nature at the level of health service providers.

Holistic approach of the concept should be discussed, focusing on shifting the focus of attention from the volume of services (output) to the value or results achieved (outcome) within all levels of health service providers, emphasizing that the value is not measured according to the health care process used (process). Still, measuring and improving is an important tactic, but it cannot replace the determining of results and costs.

The volume of services is mostly assessed at state companies in Latvia, and only in certain cases the service value. When evaluating activities of hospitals, Table 1 reflects a number of performance aspects, but these indicators do not reflect personal value, technical value, allocative value and public value in the VBHC context.

On the national level

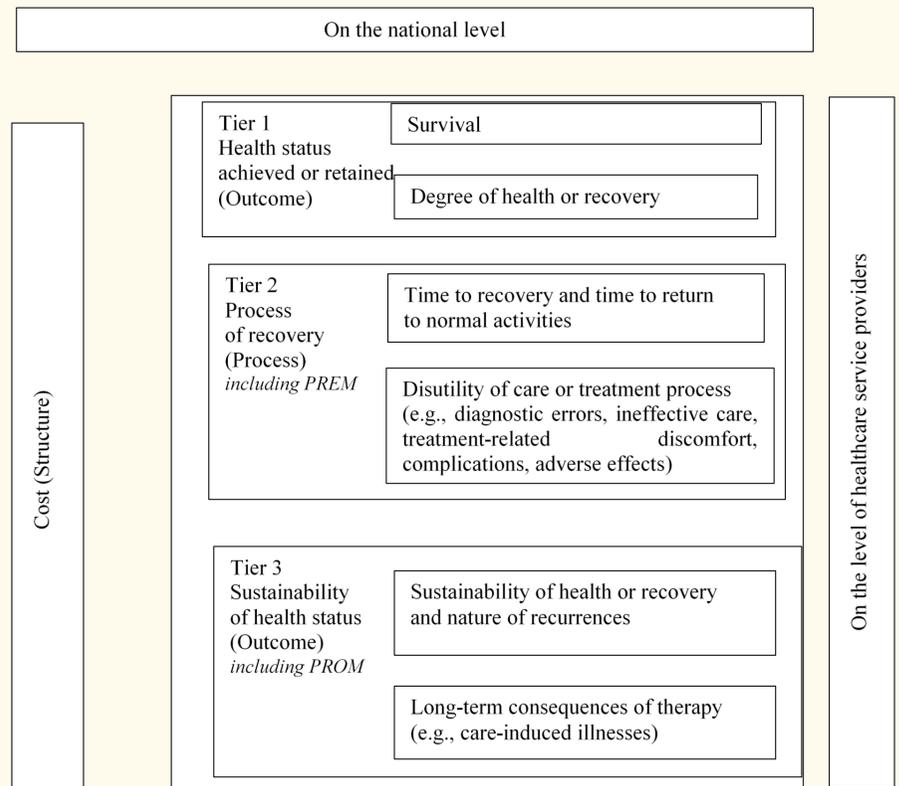


Figure 1. The Outcome Measures Hierarchy (developed by the authors based on Porter 2010)

VBHC Outcome Measures Hierarchy can be recommended for Latvian circumstances, which provides three assessment levels for the system. Tier 1 is the health status that is achieved or retained (Survival and Degree of health or recovery). Tier 2 outcomes are related to the recovery process (Time to recovery and time to return to normal activities and Disutility of care or treatment process (e.g., diagnostic errors, ineffective care, treatment-related discomfort, complications, adverse effects)). Next Tier 3 is the sustainability of health status, which can be divided into two sub-levels: Sustainability of health or recovery and nature of recurrences and Long-term consequences of therapy (e.g., care-induced illnesses).

Table 1  
Non-financial targets, according to which state companies of the Latvian health care sector assess their operation

Sub-target	Performance indicators	Dimensions
Service availability	Ratio of number of practitioners and nurses	input
	Total number of patients in hospital/outpatient	output
	Number of beds in a medical institution	input
	Average waiting time to receive a consultation from an outpatient specialist	process
Efficiency of services	Average duration of treatment in a hospital	process
	Average loading of beds in a 24 h in-patient clinic	output
	Average load of CT and magnetic resonance equipment	output
	Share of functional specialists from all employees	input
	Proportion of working medical practitioners in the age group 25-40 from the total number of medical practitioners	input
Quality of services	Patient mortality rate, number and proportion	outcome
	Number of complications	outcome
	Proportion of medical practitioners working overtime during the period considered	input
	Volume of patients released home who were re-hospitalised on the same or next day	outcome
Knowledge transfer	Independent research activities	output
	Students education and professional development process of practitioners and medical support persons	output

### Conclusions

1. Only setting of the indicators benchmarks in Latvia does not create a mechanism to improve the functioning of the health system, particularly at the level of Clinical University hospitals. A management mechanism is missing where each independent health service provider is responsible for its service and, at the same time, would be interested in achieving the overall outcome.
2. The cascading of indicators is essential for the inclusion of health indicators identified in the national planning documents into the strategic planning documents of health service providers, as individual indicators can be traceable at the regional and municipal level.
3. Large health service providers who want to introduce VBHC to justify a cost per patient are recommended to use the Time-Driven Activity-Based Costing (TDABC).

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