# CHALLENGES OF SERBIAN DRG COSTING

## INTRODUCTION

The purpose of this paper is to present the challenges related to piloting the development of the methodology for calculating the costs of hospital services in Serbia. Given that the reform of the health system implies the improvement of the entire system of financing the public healthcare providers, designing the costing methodology is particularly complex. The challenges are related to the context of the current retrospective planning and historical budgeting, with the application of the DRG financing model (since 2019), which implies that 5% of a hospital's annual budget depends on its performace.

## METHOD

The data on costs collected from 13 hospitals, one of which is a university clinical center, have been used to determine DRG base rate and DRG cost weights. A total of 453,640 cases have been analyzed, along with data on costs, case-level invoices, and additional data from hospitals' reports on cost centers.

## RESULTS

Afted calculating the DRG base rate and new cost weights, a simulation of the costs calculation has been conducted for 13 hospitals, along with an analysis of the differences in each category of hospitals compared to the current DRG financing model. As a result, the methodology for the calculation of the DRG cost weights in Serbia has been developed. It has been developed in accordance with all available data related to costs. Due to the unavailability of all the necessary data, three key challenges have been singled out which are related to: 1) the lack of data related to the duration, in minutes, of operative procedures, 2) the lack of data related to the duration, in minutes/days, of the use of intensive care and 3) differences in all types of costs at the patient level. The results showed that the average cost per a DRG is not necessarily in accordance with that DRG's consumption-related features.

## DISCUSSION

The quality of the data and thus the result was significantly affected by the fact that one of the observed hospitals, which participates in the cost matrix of all hospitals with 28.3%, did not allocate costs to the operating room and intensive care. In addition, there are differences in all types of costs at the patient level, for example the tariff for inpatient doctors' salaries in different hospitals. One of the conclusions is that it is necessary to adhere to the rules of coding according to DRG and to conduct cost analyzes at the patient level.