

Title

Comparative analysis of the efficiency and quality of services in two groups of general hospitals in Serbia

Introduction

Objective of the work: Comparative analysis of two groups of general hospitals (GH) in Serbia – those with below 400 beds capacity and those with above 400 beds capacity, based on certain indicators of efficiency and quality and case-mix tools.

Methods

Data from the electronic invoice system of the National Health Insurance Fund related to 38 public GHs (founded by the Republic of Serbia) were collected and analyzed for 2022 and the first six months of 2023. The analysis of the work of the GHs has been based on the following indicators:

- Case-mix index, which measures the average relative DRG weight
- Average length of stay (ALOS)
- Admission criteria, which measure the rate of unjustified admissions to hospital
- Inpatient mortality rate within 48h from admission
- Acute myocardial infarction (AMI) mortality rate
- The same-day hospital rate, which measures surgical and invasive-diagnostic procedures in same-day cases rather than through ordinary hospitalizations
- The rate of patients treated with reserve antibiotics
- The average cost per episode of care (per patient), which measures the hospital acute inpatient care expenses.

Results

The overall analysis showed heterogeneous results when comparing the two groups of hospitals. In general, it is not possible to directly associate bigger GHs with better results. The average relative DRG weight of the big and small GHs is basically the same, as is their efficiency, quality and outcomes.

Discussion

However, this preliminary evidence may inform the discussion on the future role of these two groups of GHs and encourage further considerations with regard to the strategy of optimization of the health care system. More specifically, the evidence will help define priorities and allocate resources in the health care system, as well as provide basis for achieving substantial savings and economic efficiency while preserving the quality of health services.