

PATTERNS OF AVOIDABLE HOSPITALISATIONS AND ITS DIFFERENCES IN LITHUANIA IN 2012

Project implementation period: 2013–2014

Aim. The completed study aimed to evaluate patterns of avoidable hospitalisations (AH) and its differences among in Lithuania in 2012.

Tasks.

1. To evaluate patterns of avoidable hospitalisations in Lithuania in 2012.
2. To evaluate differences of the most common avoidable hospitalisations according to the main demographic factors, also the most frequent manner of transportation used for reaching the inpatient department, and the duration of inpatient treatment in 2012.
3. To evaluate the influence of the main demographic factors on the duration of hospitalisation.
4. To create an algorithm for measuring avoidable hospitalisations.

Methods. The study was carried out by adopting the methodology approved and used in Australia for an long period of time. 21 ambulatory care sensitive conditions (ACSC) were included in the calculations. The data on the number of AH in the country in 2012 was gathered from the National Health Insurance Fund Information System “SVEIDRA” (statistical card of inpatient care, form No. 066/a-LK). The number of AH per 1000 persons and 1000 hospitalisations was calculated, as well as AH and bed-day structure (%) according to different ASCS. The main AH differences stratified by demographic groups (gender, place of residence, administrative territory) were determined, as well as the manner of reaching the inpatient department and the duration of hospitalisation. The χ^2 test, Mann-Whitney U, or Wilcoxon and Kruskal-Wallis H tests, Gini, variations and Moran’s I spatial autocorrelation coefficients were used to determine the AH differences.

Results. Over 110 thousands hospitalisations could have been avoided by improving the outpatient healthcare quality and accessibility in 2012 in Lithuania. This accounted for 16.2% of all the hospitalisations (excluding long-term treatment, rehabilitation and day care cases).

The largest part of AH was due to diabetes and its complications (17.9%), angina pectoris (16.1%), congestive heart failure (13.8%), and influenza and pneumonia (11.9%).

Males had higher AH rate (42.2 cases per 1000 persons) than females (33.7 cases per 1000 persons), while rural residents (39.5 cases per 1000 persons) had higher AH rate than urban residents (36.4 cases per 1000 persons). The most of hospitalised patients were of preschool age or retirement age. Hospitalised females were older than males, while rural residents were older than urban residents. Mostly people came to the inpatient department with a committal (62.0%), less often – with an ambulance (22.7%). Half of all the hospitalisations in 2012 lasted from 4 to 10 days. Females, rural residents and patients with committals were hospitalised longer than males, urban residents and patients without committals. The main demographic factors (gender, place of residence, and age group) had small influence on the duration of inpatient treatment. AH rates in municipalities ranged from 21 to 93 cases per 1000 residents and were distributed irrespective of one another, which shows systemic issues localised in separate municipalities that do not depend on AH situation in surrounding territories. The interdependence of regional AH rates was weakly expressed. In carrying out the study an algorithm for calculating AH rates was created. It can be used for calculating routine AH rates each year periodically.

Conclusion. The results of the completed study confirm that the AH is relevant issue not only in some foreign countries but in Lithuania as well. Improving the outpatient healthcare accessibility and quality could reduce the number of AHs and save funds of the Compulsory Health Insurance Fund, which will always be limited. Great AH’s differences among municipalities show deficiencies in outpatient healthcare and systemic issues in some municipalities. Better outpatient care and prevention for those suffering from diabetes mellitus and circulatory system diseases, and larger influenza shot volumes could contribute to reducing the number of AHs.

Contacts: R. Gurevičius, e-mail: romualdas.gurevicius@hi.lt