

SECONDARY USE OF ADMINISTRATIVE DATA TO COMPARE HEALTHCARE PROVIDER QUALITY

Introduction

Administrative healthcare data is increasingly being utilized for research and management within the healthcare system. This data can also serve as a tool to compare the quality of different healthcare providers. The Health Insurance Institute of Slovenia (hereinafter: HIIS) has used this healthcare data to develop quality indicators for health services.

Methods

Since 2013, the administrative database at HIIS has been structured at the individual person's level and organized within a data warehouse. It includes demographic information, data on medical treatments, the principal diagnosis, secondary diagnoses of coexisting health conditions, codes for procedures, medications, medical devices, and rehabilitation. These data HIIS collects from healthcare providers for billing purpose.

The primary objective of our analysis is to use this data to prepare quality indicators for various medical treatments and to supply healthcare providers with a comparative analysis. The secondary objective is to present these indicators to insured persons, thereby facilitating their decision-making process when choosing a healthcare provider.

Results

Quality indicators have been prepared for orthopaedic surgery (planned hip and knee endoprosthesis) and gastro-surgery (planned and acute gallbladder surgery and planned operations of inguinal hernias). For all areas, we have presented the average length of stay, complications, unplanned readmission rate, and mortality rate. Quality indicators are shown for Slovenia as a whole and by individual healthcare providers from 2015 onwards.

Discussion

Using administrative data to compare the quality of providers has its pros and cons. Some advantages include comprehensive coverage of the entire population in Slovenia (HIIS is only provider of obligatory health insurance), long-term data availability, and no additional burden on healthcare workers for data collection. However, potential disadvantages include the possibility of errors in coding diagnoses and procedures, and a lack of information about comorbidity and chronic diseases.

Conclusion

The administrative health database is a valuable resource of data for comparing the quality of different providers. It provides useful information for providers to improve their quality of service and assists patients in choosing the most suitable provider.

Future objectives include developing quality indicators for all medical specialties and include them into the payment model.