Abstract

Risk adjustment models are used to predict health care costs of insurees and represent an important part of mechanisms for redistribution of funds among insurance companies. In the Czech Republic, pharmacy-based cost groups (PCGs) were introduced into the risk adjustment model in 2018, reflecting the costs of chronic diseases in addition to age and gender. The thesis reviews the model for the most expensive chronic disease – renal failure. Using the sample of General Health Insurance fund (GHI) insurees reported with typical health care consumption for kidney disease in years 2015-2018, we tested the current model and subsequently modified the classification criteria for PCG "renal failure". The classification based on the number of dialysis procedures proved to be much better indicator of costs than the currently used consumption of typical drugs. The incorporation of dialysis-based approach into the PCG model improved the explained variation from 26 % to 49 %, and the predictive power increased substantially. The study suggests improvements of the Czech risk adjustment model and proposes a fairer fund redistribution among insurance companies, while no additional data collection is needed.