

Background: In many countries where hospitals are funded by a prospective payment scheme based on Diagnosis Related Groups (DRG), two risks may arise whenever legitimate extra costs are not considered: patient selection and/or lower care quality. We aimed to analyse determinants of an increased length of stay (LOS) used as a proxy for costs, in major head and neck cancer surgery.

Methods: We selected all hospitalisations in France between 2015 and 2021 classified in the DRG « Major head and neck surgery », with a main diagnosis of cancer. We analysed determinants of the LOS using a multivariate linear model.

Results: We analysed 19380 stays. We found several factors associated with increased LOS, that are not taken into account in the hospital funding scheme: complexity of surgical procedures, type of admission, patients' comorbidities.

Conclusions: Some of these factors should be considered in the hospital funding model.