



## Impact of the implementation of a headache protocol on cost reduction in a private hospital network: a cost-effectiveness assessment

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### Introduction

The impact of headaches is a problem of enormous proportions, both for the individual and for society. Medical literature has evaluated its individual effects with the prevalence, distribution, frequency and duration of crises and their effects on society, analyzing the socioeconomic burden. (1) And because they are highly prevalent, headaches have a significant impact on the healthcare system, whether public or private. (2)

### Objective

The present study aims to evaluate the cost reduction (avoidable cost) involved in emergency care for patients with headache in a private network, after establishing a care protocol and training the teams involved.

### Method

Data from 13 private hospitals in the southeastern region of Brazil were retrospectively compared, from January to December 2023, with the same period in 2022 (year of implementation of the institutional protocol and training of the units' teams). The tomography rate, hospitalization conversion rate and rate of use of opioid medications were evaluated, in addition to the analysis of avoidable costs between periods.

### Results

There were 45,453 patients treated in 2022 and 58,936 in 2023, with a reduction in the evaluated rates, being 20.6% in the rate of request for imaging exams, 20.3% in the hospitalization conversion rate and 56.3% in the rate of use of opioids in the periods compared. The avoidable cost related to requesting imaging tests was R\$288,692.35 and the total avoidable cost was R\$362,941.87.

### Conclusion

Given the social relevance of headaches, it is important to establish clear care protocols with training and qualification of teams, this results in better financial and care results.