



## Efficiency indicators for the care of patients with headaches in the emergency department

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### Introduction

Headache is among the routine complaints in emergency services. It is estimated that 1 to 4% of visits are due to this cause, which directly impacts hospital resources and logistics. Indicator management allows for a detailed analysis of patient flow, presenting itself as an important tool for healthcare service management.

### Objective

To evaluate efficiency indicators for the care of patients with headaches in the emergency department of a private hospital in Recife.

### Method

A cross-sectional study was conducted in a private hospital in Recife. Data from the Electronic Patient Record from January to June 2024 were used, extracted using a Business Intelligence-based tool. Visits with International Classification of Diseases codes R51, G44.2, G43.0, G43.1, and G43.8 were included, and patient age and sex, as well as emergency visit outcomes, were evaluated. Indicators analyzed included time of care, performance of exams, evasion, and variation of visits between shifts and days of the week.

### Results

The sample included 2,304 patients, representing 4.7% of emergency visits. Most patients with headaches were female (1,726/2,304; 74.9%), with an average age of 39 years (minimum: 18; maximum: 95). Neuroimaging exams were performed on 831 (36%) patients, with cranial tomography being the most common (723/928; 77.9%). The evasion rate was 4.6%, and the hospitalization rate was 4.2%. The average care time was 2 hours and 58 minutes, increasing to 7 hours for patients who were hospitalized. Among those who underwent neuroimaging, the time was 3 hours and 41 minutes. The highest number of visits (40%) occurred in the afternoon, from 1 PM to 7 PM, and the shortest care time (2 hours and 46 minutes) was recorded at night.

### Conclusion

The prevalence of headache visits occurred among women in the afternoon. The high utilization of imaging exams points to the need for developing clinical protocols to optimize resources, reduce care time and evasion rates, and improve service efficiency and patient satisfaction.