

## The Impact of Hospital Strikes on Patient Care: Evidence from 135 Strikes in the Portuguese National Health System

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**Abstract :** Hospital strikes in the Portuguese National Health Service (NHS) are becoming increasingly frequent, raising concerns in what respects patient safety. In fact, data shows that mortality rates for patients admitted during strikes are up to 30% higher than for patients admitted in other days. This paper analyses the effects of hospital strikes on patients' outcomes. Specifically, it analyzes the impact of different strikes (physicians, nurses and other health professionals), on in-hospital mortality rates, readmission rates and length of stay. The paper uses patient-level data containing all NHS hospital admissions in mainland Portugal from 2012 to 2017, together with a comprehensive strike dataset comprising over 250 strike days (19 physicians-strike days, 150 nurses-strike days and 50 other health professionals-strike days) from 135 different strikes. The paper uses a linear probability model and controls for hospital and regional characteristics, time trends, and changes in patients' composition and diagnoses. Preliminary results suggest a 6-7% increase in in-hospital mortality rates for patients exposed to physicians' strikes. The effect is smaller for patients exposed to nurses' strikes (2-5%). Patients exposed to nurses strikes during their stay have, on average, higher 30-days urgent readmission rates (4%). Length of stay also seems to increase for patients exposed to any strike. Results - conditional on further testing, namely on non-linear models - suggest that hospital operations and service levels are partially disrupted during strikes.

**Keywords :** health sector strikes, in-hospital mortality rate, length of stay, readmission rate

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