

IMPACT EVALUATION OF A NEW ORGANIZATION IN ORTHOPAEDIC SURGERY ON CARE PATHWAYS

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Coordination of care provided before and after a hospitalization is essential both for assuring the quality of patient care and for improving the efficiency of healthcare provision. Various patient-centred care protocols have been developed in the medical literature for improving patient care pathways. They are increasingly promoted and employed in healthcare facilities. In this study, we evaluate the impact of the implementation of an evidence-based strategy, enhanced recovery after surgery (ERAS) in orthopaedics on patients' care pathways.

The analysis is focused on private sector and used mixed methods for comparing patients treated in hospitals that implemented ERAS versus other comparable hospitals. The data used in quantitative analyses come from the French hospital database (PMSI-MCO) and concern patients who were admitted to hospital for hip or knee replacement surgeries. We analyse patient-level data using a quasi-experimental design, difference-in-difference, and estimate the impact of ERAS on patient care pathways: days spent in hospital (LOS), the probability of discharge to home and the probability of readmission at 30 and 90 days after discharge. DID regressions control for a number of confounding factors at patient level (age, gender, social status, comorbidities and care supply in patients' residence area) as well for hospital level fixed effects.

Patients treated in hospitals that practice ERAS have a shorter length of stay than those treated in a conventional surgery department (-0.4 days) and have a higher probability of returning home after surgery (OR 1.15), without having a greater risk of readmission. The ERAS label has also a positive impact on hospital volumes: all else being equal, hospitals labelled as ERAS has a higher activity growth compared to control clinics (+10%). We further find that the impact of ERAS get stronger with time, and patients treated in hospitals that were certified for two years have smaller risk of readmission. In 2016, if all private hospitals had performed ERAS for knee and hip replacement surgeries, about 41,200 days of hospitalization and 2,800 admissions to rehabilitation facilities could have been avoided.

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