

# **Cesarean delivery: After a pro-competitive reform\***

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## **Abstract**

Health economics literature states that utilization of cesarean deliveries is responsive to hospital's source of payment. However, many high-income countries introduced the hospital's prospective reimbursement. In this study, we examine the practice of cesarean deliveries over time within the new French hospital's DRG-based financing, distinguishing hospital's ownership. We mobilize exhaustive delivery data from a French administrative region over a 7-year period, starting the first year of the full implementation of the pro-competitive hospital's payment reform. We use multilevel logit models to take into account the hierarchical structure of the data and consider many factors that may influence obstetric practice. Our empirical results show that the use of cesarean deliveries remains constant in public hospitals while private for-profit hospitals increase significantly their use of the procedure. However, private for-profit hospitals faced an exogenous income pressure due to a decrease in their hospital's delivery production which fully explains the cesarean delivery increase. Therefore, DRG-based reimbursement, in a stable financial environment, does not seem to incite French hospitals, both public and private, to perform more cesarean deliveries.

Keywords: Cesarean delivery; Prospective payment system; Financial incentives; Development over time

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## **Figures and Tables**

### **Figure 1**

Rates of cesarean deliveries over time by hospital's ownership status.

Data source: PCS, SAE, Yvelines region (France), 2008-2014.

### **Figure 3**

Numbers of deliveries per bed over time by hospital's ownership status.

Data source: SAE, Yvelines region (France), 2008-2014.

**Figure 4**

Rates of bed occupancy over time by hospital's ownership status.

Data source: SAE, Yvelines region (France), 2008-2014.

**Figure 5**

Numbers of deliveries per obstetrician over time by hospital's ownership status.

Data source: SAE, Yvelines region (France), 2008-2014.