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CONFERENCE ABSTRACT

# Effects of introducing a fee for "bed blockers" on adverse events among patients hospitalized for chronic obstructive pulmonary disease, heart failure, hip fracture and stroke

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**Introduction**: The Norwegian healthcare Coordination Reform (Samhandlingsreformen) was implemented from January 1, 2012. In addition to providing municipalities with funding to strengthen their health infrastructure, it required municipalities to pay hospitals a daily fee for patients who, having been declared ready for discharge and in need of municipal health services, were not received by the municipalities on time. This study examines the effects of the reform on adverse events, defined as deaths or readmissions occurring within 60 days of hospitalization.

**Methods**: We use Norwegian register data for patients (age 18+) hospitalized between 2009 and 2014 for COPD/asthma (N=25,936), heart failure (N=27,708), hip fracture (N=44,981) and stroke (N=43,313). Our logit models test for conditional effects of the reform, whereby associations between the reform and adverse events vary by whether or not patients were classified as ready for discharge and in need of follow-up care in the community. The models include fixed effects for districts and a year trend. They also adjust for sociodemographic and health characteristics.

**Results**: We found significant ($p<0.042$) conditional effects of the reform among patients with heart failure but not among patients with COPD/asthma, hip fracture, or stroke. Specifically, during the post-reform period (2012-2014), heart failure patients who needed follow-up had a slightly higher and significant probability of adverse events (Pr=0.36, p=0.029) compared to their counterparts not in need of follow-up (Pr=0.34). We did not find a similar effect among heart failure patients in the pre-reform period (2009-2011; p=0.946).

**Conclusion**: Overall, there is no strong evidence to suggest that the Norwegian healthcare Coordination Reform is functioning in a manner that exacerbates risk for readmissions or death among the patients considered in this study. Even so, patients with heart failure appear somewhat vulnerable.

**Keywords:** payment system; overstays; readmissions; mortality