

Early Readmission and Length of Hospitalization Practices in the Dialysis Outcomes and Practice Patterns Study (DOPPS).

Bommer J, Canaud B, Saito A; Fukuhara S, Held P, Port F, Young E, Lopes A, Leavey S, McCullough K, Gillespie B.

Background: Rising hospital care costs have created pressure to shorten hospital stays and emphasize outpatient care. This study tests the hypothesis that shorter median length of stay (LOS) as a dialysis facility practice is associated with higher rates of early readmission.

Methods: Readmission within 30 days of each hospitalization was evaluated for participants in the Dialysis Outcomes and Practice Patterns Study, an observational study of randomly selected hemodialysis patients in the United States (142 facilities, 5095 patients with hospitalizations), five European countries (101 facilities, 2281 patients with hospitalizations), and Japan (58 facilities, 883 patients with hospitalizations). Associations between median facility LOS (estimated from all hospitalizations at the facility and interpreted as a dialysis facility practice pattern) and odds of readmission were assessed using logistic regression, adjusted for patient characteristics and the LOS of each index hospitalization.

Results: Risk of readmission was directly and significantly associated with LOS of the index hospitalization (adjusted odds ratio [AOR] 1.005 per day in median facility LOS, $p=0.007$) and inversely associated with median facility LOS (AOR=0.974 per day, $p=0.016$). This latter association was strongest for US hemodialysis centers (AOR=0.954 per day, $p=0.015$).

Conclusions: Dialysis facilities with shorter median hospital LOS for their patients have higher odds of readmission, particularly in the United States, where there is greater pressure to shorten LOS. The determinants and consequences of practices related to hospital LOS for hemodialysis patients should be further studied.