The Use of Mobility Technicians to Deliver Mobility Therapy as an Effective Means of Decreasing Cost in Hip Fracture Patients

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Purpose: Early ambulation has well-documented benefits in patients with surgically treated acute hip fractures. Ambulation in the inpatient setting is typically performed by a physical therapist; however, given their time, cost, and resource constraints, many patients are sparingly seen. A possible solution is the implementation of a mobility technician program (MTP), in which a mobility technician (MT) mobilizes patients after they have been evaluated by a physical therapist. MTs demand less training and compensation, and are more widely available throughout the hospital. As the health-care system moves toward bundled payments, minimizing inpatient costs becomes vitally important. The purpose of this study was to assess the impact and cost- effectiveness of postoperative mobilization delivered via MT in hip fracture patients.

Methods: All patients admitted between June and November of 2018 with acute hip fractures were screened for potential inclusion in the study group. The control group consisted of acute hip fracture patients, time matched to the previous year. A retrospective chart review was performed to determine patient demographics, length of stay (LOS), and discharge disposition. Total costs of therapy services were based on cost of 2 sessions per day, extrapolated from LOS. Minitab software was used to perform bivariate statistical analysis of the data.

Results: The study group contained 32 patients treated with intramedullary nail (n = 12), hemiarthroplasty (n = 8), total hip arthroplasty (n = 7), and screw fixation (n = 3). The control group consisted of 88 patients. The therapy cost of the study group was \$14 per patient per day, compared to \$98 in the control group. Both groups exhibited an identical median LOS of 4 days (P = 0.8002). 77 / 88 patients (87.5%) in the control group were discharged to a skilled nursing / rehabilitation facility while 12/32 patients (37.5%) in the study group were discharged to a skilled nursing / rehabilitation facility (P = 0.627).

Conclusion: Employing mobility technicians is a cost-effective strategy for providing postoperative ambulation in patients with acute hip fractures without sacrificing quality of care. Enrollment of the control group patients to the mobility technician program in this setting would have resulted in an average total savings of \$29,568. With the transition to bundled payments looming, mobility technicians may play an important financial role in the care of hip fracture patients.