LVN-led Transitional Care Coordinator Program for Hip Fractures Reduces Mortality

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Purpose: Hip fractures pose an increased risk of morbidity and mortality in geriatric patients as postoperative care often involves multiple providers and transitions of care. This study analyzed the effects that a licensed vocational nurse (LVN)-led transitional care program had on outcomes of geriatric patients with hip fracture in a large urban health system.

Methods: A cross-sectional study with a nonrandomized control group was performed from July 2018 to April 2024. An LVN was trained to be a transitional care coordinator (TCC) for the academic orthopaedic faculty and remained under the day-to-day supervision of an adult, geriatric, acute care nurse practitioner at a single academic urban institution. The TCC was provided with orthopaedic postoperative protocols for pain, mobilization, DVT prophylaxis, and wound care following hip fracture surgery and performed phone calls to patients at 7-, 14-, 30-, and 90-days post-discharge. The TCC answered patient questions when feasible, or otherwise escalated questions directly to the orthopaedic surgeon or primary care provider. The study groups included patients contacted by the TCC, and the control groups included those not contacted by the TCC. Bivariate analyses were conducted for primary outcomes, including 90-day emergency department visits, 90-day readmission rates, 90-day mortality, and 1-year mortality.

Results: A total of 1569 patients underwent hip fracture care during the study period, 620 (39.5%) of which included TCC. The control group and TCC group were similar in age (83.13 ± 8.73 years [60–105] vs 82.58 ± 8.73 years [65–103], p = 0.182) and sex (67.0% vs 71.1% female, p = 0.086). No differences were seen in 90-day emergency department visits between control and TCC groups (6.9% vs 8.7%, p = 0.175) or 90-day readmission rates (23.7% vs 19.7%, p = 0.06). The TCC group had lower 90-day mortality rates (7.8% vs 3.5%, p = 0.001) and 1-year mortality rates (11.6% vs 7.1%, p = 0.003).

Conclusion: The implementation of an LVN-led transitional care program improved outcomes for geriatric patients with hip fracture by reducing 90-day and 1-year mortality rates. These findings highlight the benefits and importance of a TCC program because it reduced mortality and potentially addressed gaps of post-discharge care.