

Impact of an orthogeriatric collaborative care model for older adults with hip fracture in a community hospital setting

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Janice C. Lee, MD; Kevin Koo, MD; Eric K.C. Wong, MD; Raza Naqvi, MD, MHSc; Camilla L. Wong, MD, MHSc

Abstract

Background: Studies have shown that the incidence of postoperative delirium, the hospital length of stay and time to surgery are reduced when older adults with a hip fracture are cared for by a multidisciplinary team providing comprehensive geriatric assessments. Most of these studies have been conducted in academic centres. We sought to determine if implementation of an orthogeriatric collaborative care model would improve key quality of care metrics in a community hospital setting.

Methods: This retrospective pre- and postintervention single-site study was conducted in a community hospital in Ontario, Canada. We included consecutive patients aged 65 years or older who were admitted for a hip fracture between June 2015 and June 2017. In the intervention period, a new postoperative order set included a referral to a geriatrician for comprehensive geriatric assessment, with direct implementation of recommendations. Primary outcomes were the incidence of postoperative delirium and length of stay. Secondary outcomes included Health Quality Ontario's quality standards for hip fracture.

Results: A total of 212 consecutive patients (95 in the preintervention group and 117 in the postintervention group) were included in the study. The incidence of postoperative delirium (26.3% v. 26.5%, $p = 0.98$) and length of stay (interquartile range 4–10 v. 5–10 d, $p = 0.32$) were similar in the preintervention and postintervention groups. There were improvements ($p < 0.001$) in the rates of assessment of mental status, falls and bone health; identification of delirium prevention strategies; prescription of vitamin D or calcium or both; and recommendations for antiresorptive therapy. Despite systemic implementation of the orthogeriatric model, only 74.4% of patients in the postintervention group were seen by a geriatric medicine consultant.

Conclusion: Although the implementation of an orthogeriatric collaborative care model for older adults with a hip fracture did not reduce the incidence of postoperative delirium or length of stay, there were improvements in the rates at which several other key quality standards for hip fracture care were met. Earlier proactive, comprehensive geriatric assessment in a community hospital setting will be the target for further quality improvement initiatives.

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Affiliations: From the University of Toronto, Toronto, Ont. (Lee, E.K.C. Wong, C.L. Wong); the Markham Stouffville Hospital, Markham, Ont. (Koo, Naqvi); Unity Health, Toronto, Ont. (E.K.C. Wong, C.L. Wong); and the Li Ka Shing Knowledge Institute, Toronto, Ont. (E.K.C. Wong, C.L. Wong).

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