

## Invited Commentary

## Hip Fracture

## A Trigger for Palliative Care in Vulnerable Older Adults

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**Hip fracture most commonly affects** older adults and causes devastating consequences including pain, immobilization, functional decline, delirium, and death. Among those in the Medicare population who sustain hip fractures, 13% die within 3 months and 24% die within 12 months.<sup>1</sup> Of those who survive to 6 months, only 50% recover prefracture ability to perform activities of daily living.<sup>2</sup> Although long-term nursing home residents are much more likely than community-dwelling older adults to sustain hip fracture and have poorer functional outcomes,<sup>3</sup> relatively little is known about the patterns and predictors of mortality and functional decline in long-term nursing home residents with hip fractures.

In a study reported in this issue, Neuman and colleagues<sup>4</sup> examined the survival and functional outcomes after hip fracture in 60 111 US long-term nursing home residents who were hospitalized with an acute hip fracture. Using a retrospective cohort study design and large national data sets (Medicare claims and Nursing Home Minimum Data Set), this study characterized patterns and risk factors of survival and new total dependence in locomotion after hip fracture in this uniquely vulnerable subset of patients with hip fractures. By 180 days after hip fracture, 36% of patients had died, including 46% of all male patients. Moreover, among patients who had some degree of functional independence in locomotion at baseline, 54% had either died or developed new total dependence in locomotion within 180 days of hip fracture. In these patients, risk factors most highly associated with decreased survival and new total dependence in locomotion after hip fracture were non-operative fracture management, male sex, age over 90 years, advanced comorbidity, and severe cognitive impairment.

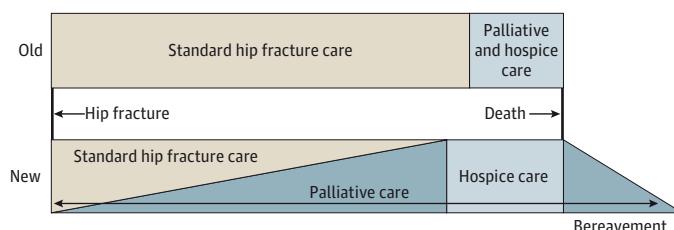
The novel findings from the study by Neuman and colleagues<sup>4</sup> have tremendous implications on the clinical care of vulnerable older adults with hip fractures. The prognostication of survival and functional outcomes after hip fracture in long-term nursing home patients has historically been a challenge for practitioners because of limited evidence in the medi-

cal literature. Results from the current study strongly demonstrate that mortality and functional dependence, particularly among the very old and those with advanced comorbidity and cognitive impairment, are exceedingly common among nursing home residents after hip fracture. These extreme rates of mortality and functional disability place palliative care, front and center, in the clinical management of hip fracture in vulnerable older adults.

Palliative care is a new interdisciplinary specialty that focuses on improving quality of life for patients and families by providing an added layer of support (pain and symptom management, goals of care discussions, care coordination) in the setting of serious illness. Palliative care is provided concurrently with all other disease-directed or curative treatments. Hospice, conversely, is care focused exclusively on comfort for patients with a prognosis of 6 months or less if the disease follows its usual course and who are willing to relinquish curative treatments. Orthopedic surgery and rehabilitation facilitate early mobilization and are the standard and mainstay of hip fracture treatment (Figure). More often than not, palliative and hospice care are only considered in instances when a patient with hip fracture deteriorates beyond the point of achieving meaningful recovery despite receiving this “old” model of care. Given the high rates of mortality and functional dependence after hip fracture in nursing home residents, we conceive a “new” model for hip fracture care in which palliative care is implemented at the onset of hip fracture and complements standard care in postfracture management. Furthermore, hospice care should be considered and administered early if appropriate, in the most vulnerable nursing home residents including the oldest-old and those with advanced comorbidity and cognitive impairment.

Palliative care program for long-term nursing home residents who sustained hip fracture must provide patient-centered comprehensive interdisciplinary care for the residents and their families, with particular focus on effective communication, care planning and coordination, symptom management, psychosocial, spiritual and bereavement sup-

Figure. Models for Hip Fracture Care in Vulnerable Older Adults



Adapted from work of the Canadian Palliative Care Association and Frank Ferris, MD, and from Meier DE. Increased access to palliative care and hospice services: opportunities to improve value in health care. *Milbank Q.* 2011;89(3):343-380.

port, and end-of-life care.<sup>5,6</sup> Goals of care discussion is an essential part of care planning and needs to incorporate tangible prognostic information, specifically the overall poor rates of survival and functional recovery, in guiding care conversation with patients and their families. Discussions of this nature should take place at the onset of hip fracture or earlier should a nursing home resident be at high risk for falls and traumatic fracture. Pain is a common distressing symptom that is frequently undertreated in older adults and in patients with cognitive impairment and must be appropriately assessed and optimally managed. In the most vulnerable nursing home residents including the oldest-old and those with advanced comorbidity and cognitive impairment, operative management should be considered if it is consistent with the patients' care

goals. However, the decision to pursue operative management needs to be carefully considered in the context of benefits and risks of orthopedic surgery, symptom management, and the patients' life expectancy. In patients with life-limiting diseases such as advanced dementia, patient-centered comprehensive interdisciplinary palliative and hospice care without concurrent operative management may be a more suitable model of care.<sup>7</sup>

Hip fracture has a tremendously deleterious impact on the survival and functional outcomes of the residents of long-term nursing homes. A palliative care approach is highly appropriate and should be initiated at the onset of hip fracture in the clinical care of this most vulnerable subset of older adults.

#### ARTICLE INFORMATION

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