

A Critical Need to Improve Post-Fracture Care

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Osteoporotic fractures are associated with significant disease burden, health care cost, morbidity, and mortality [1]. In 2016, leading osteoporosis organizations issued a “Call to Action to Address the Crisis in the Treatment of Osteoporosis” [2]. Among experts, there was a strong concern in regards to the decrease rates of testing, and treatment of osteoporosis, and therefore a call to action was made with recommendations to close the gap in osteoporosis care.

One of the major issues of concern is post-fracture care, which has been suboptimal despite strong evidence showing osteoporosis drug therapy reduces the risk of a subsequent fracture [1,3]. For example, in the United States the rate of hip fracture patients age 50 and above who received osteoporosis drug therapy decreased from 40.2% in 2002 to 20.5% in 2011 [4].

Fracture Liaison Services, are the most common intervention model found to be highly effective in improving post-fracture care [5]. Fracture Liaison Services are comprehensive programs that coordinate the patient’s care from fracture onset to osteoporosis therapy initiation. Specifically, a specified individual (usually a clinical nurse specialist) coordinates efforts to identify fragility fractures patients, risk stratifies them, then initiates osteoporosis specific treatments when indicated.

Fracture Liaison Services vary based on the level of intensity of the interventions. Ganda et al. grouped Fracture Liaison Services into four subtypes (Table 1) [6].

Fracture Liaison Service	Identify at-risk patient	Workup initiated	Treatment initiation
Type A	X	X	X
Type B	X	X	
Type C	X		
Type D	X		

**Type B C PCP notified, treatment initiated by PCP*

**Type D PCP not notified, patient provided education only.*

More comprehensive services (Type A and Type B) have been found to be successful in reducing fractures, while the less intense programs have been less successful. One successful program is the Kaiser Permanente Southern California Healthy Bones Program, a type A service which included efforts and initiatives to increase DXA scan use, osteoporosis medication prescription, while at the same time implementing osteoporosis education programs. This intervention reduced hip fracture rates from the expected value by 37.2% [7].

Besides, fracture rate reduction, Fracture Liaison Services have been shown to be effective in increasing the number of patients who receive bone mineral density assessment, as well as initiation of osteoporosis medications [8]. With the successful implementation of

Fracture Liaison Services, few studies have also demonstrated that there is decreased mortality [8]. Recent studies have also supported the notion the implementation of Fracture Liaison Services are cost effective and cost saving [8].

In summary, further efforts are needed to improve the post-fracture care of our patients. Fracture Liaison Services are an effective intervention that increases osteoporosis testing and treatment rates, reduces fractures, and is cost saving. Further efforts are needed to determine the optimal setting in which Fracture Liaison Services can be used to improve post-fracture care.

Bibliography

1. Lim SY and Bolster MB. "Current approaches to osteoporosis treatment". *Current Opinion in Rheumatology* 27.3 (2015): 216-224.
2. ASBMR. ASBMR Issues "Call to Action to Address the Crisis in the Treatment of Osteoporosis" (2016).
3. Kim SC., *et al.* "Use of osteoporosis medications after hospitalization for hip fracture: a cross-national study". *The American Journal of Medicine* 128.5 (2015): 519-526.
4. Abrahamsen B., *et al.* "Excess mortality following hip fracture: a systematic epidemiological review". *Osteoporosis International* 20.10 (2009): 1633-1650.
5. Aizer J and Bolster MB. "Fracture liaison services: promoting enhanced bone health care". *Current Rheumatology Reports* 16.11 (2014): 455.
6. Ganda K., *et al.* "Models of care for the secondary prevention of osteoporotic fractures: a systematic review and meta-analysis". *Osteoporosis International* 24.2 (2013): 393-406.
7. Dell R., *et al.* "Osteoporosis disease management: the role of the orthopaedic surgeon". *The Journal of Bone and Joint Surgery American* 90.4 (2008): 188-194.
8. Walters S., *et al.* "Fracture liaison services: improving outcomes for patients with osteoporosis". *Clinical Interventions in Aging* 12 (2017): 117-127.

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