

AB200. SOH21AS157. Fracture liaison services interventions compliance with best practice framework at Tallaght University Hospital

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Background: It is proven from previous studies that a fragility fracture is well established risk factor for a re-fracture in the future. Fragility fractures occur as a result of “low energy trauma”, often from a fall from standing height or less, that would not normally result in a fracture. Studies have shown that fracture liaison service (FLS) models are the most cost-effective approach to prevent secondary fractures. It is a systematic approach, with a fracture coordinator at its center and can result in fewer fractures, cost savings for the health system and improvement in the quality of life of patients. The aim of this audit is to assess the Fracture liaison service efficiency in Tallaght University Hospital (TUH) in assessing and providing advice and treatment to patients presenting with fragility fractures.

Methods: Utilizing the Health management information system (Cellma), which is used by the FLS in TUH, we retrieved the records for all captured patients in the month of December 2017 who presented to ED with a fragility fracture, patients referred to orthopedic OPD or admitted to the wards for further management. We examined the service’s capability to apply the standards selected in the management of patients with fragility fracture. We investigated the occurrence of subsequent fracture in the following two years among the patients who were captured by our local FLS in TUH, by examining the National Integrated Medical Imaging System (NIMIS).

Results: Sixty-nine patients presenting with fragility fracture were captured in December/2017. Mean age was 68 years old (range, 52–91 years old) with gender distribution female: 49, male: 20. Among the patients captured, 17

patients didn’t attend their appointment (24%), didn’t receive full assessment by FLS in TUH due to various reasons: patients RIP prior to FLS appointment (n=3), lack of suitability to commence osteoporosis treatment due to significant comorbidities (n=2), the need to repatriate patient to local follow up in a different region of the country (n=1) and transfer issues mandating patient assessment to be carried out by the general practitioner, in the nursing home where the patient is residing long term (n=1). There was only one patient lost to follow up due to unclear reason. Among the 44 patients who have been assessed, all patients received multifaceted risk assessment, screening for secondary causes of osteoporosis. Furthermore, all patients assessed were stratified into high, intermediate and low risk of re-fracture using FRAX risk assessment model. Figure 2 shows the distribution of FRAX risk for the cohort of the patient assessed. The average waiting time for a patient to be assessed by FLS following a fragility fracture incidence is 20 months (range, 9 days to 25 months). Finally, it was noted that over the subsequent two years following the fragility fracture, 14% of patients who didn’t attend their FLS appointment developed subsequent fracture, compared to 10% occurrence of repeated fracture among the patients who attended our local fracture prevention service.

Conclusions: Our local FLS met the gold standards for most of the aspects delineated in the BPF apart from the waiting time for post fracture assessment. We believe the reasonable approach to address this deficit is by raising awareness of FLS procedures among relevant clinicians, namely orthopaedic surgeons and emergency medicine physicians, and subsequently delegating some of the FLS duties to doctors working in these relevant sectors. Additionally, we believe recruitment of additional FLS team members is an essential step towards better outcome for fragility fracture patients. To achieve the aforementioned recommendation, the findings from our audits should be discussed with the head of the trauma and orthopaedics department, emergency medicine and rheumatology departments (which is running supervising the FLS in TUH) in order to reach an agreement about the most suitable and safe approach to improve the current FLS outcome. Hospital management has a pivotal role to implement and promote recommendations distilled from our study results. Re-auditing is recommended to be performed in December 2020 to assess the impact of the recommendations.

Keywords: Fracture liaison services (FLS); Tallaght University Hospital (TUH); international osteoporosis foundation (IOF);

best practice framework (BPF)

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Footnote

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