

# Outcomes after orthogeriatric review of all elderly trauma admissions



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## Introduction

The importance of orthogeriatric involvement has been well recognised amongst patients with neck of femur (NOF) fractures<sup>1</sup>. Early orthogeriatric review forms part of both NICE guidelines<sup>2</sup> and subsequent Best Practice Tariff for Fragility Hip Fractures<sup>3</sup>.

Current practice locally involves patients with NOF fractures being admitted under joint orthopaedics/orthogeriatric care, with the latter becoming the primary team immediately following surgery.

In contrast, patients with non-NOF fractures remain under the care of the orthopaedic team throughout their admission. Subsequently orthogeriatric input is reactive in nature rather than preventative, as requests commonly follow an acute deterioration. This prompted a Quality Improvement Project to investigate the impact of regular orthogeriatric review of all elderly non-NOF fractures.

## Aim

To assess the impact on patient care when extending orthogeriatric care to all elderly trauma admissions.

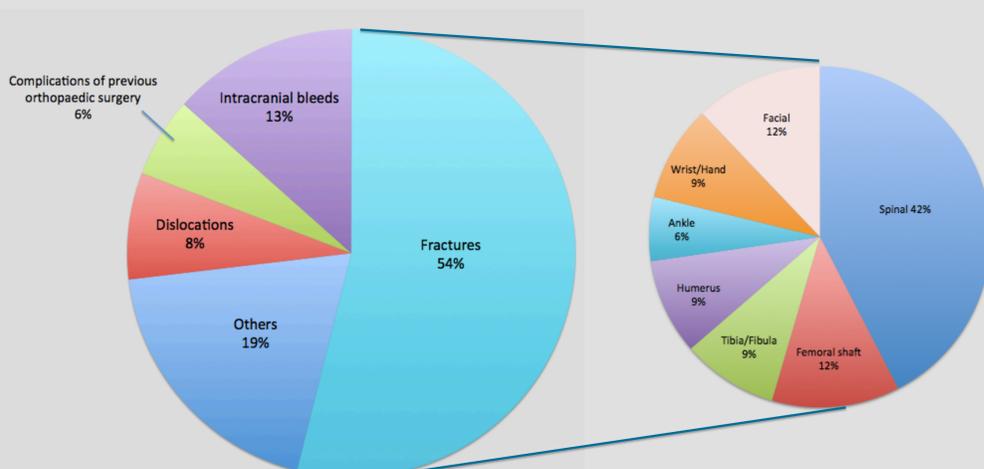
## Methods

An initial scoping exercise looked at the number of trauma admissions aged over 65 years during a 4 week period before the pilot. Over the subsequent 4 weeks, new patients aged over 65 years admitted with trauma (non-NOF fractures) were identified at the daily trauma meeting. These patients were admitted under an orthopaedic consultant and received daily review as per standard care.

Each patient also received a comprehensive geriatric assessment (including falls review) and weekly reviews by the orthogeriatrics team. Unwell patients were seen more frequently. A Multidisciplinary meeting was also held during the pilot.

## Results

Chart 1. Admitting diagnosis and fracture analysis

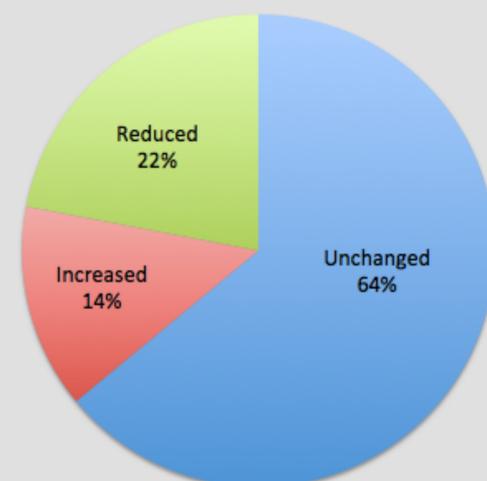


50 patients over >65 years were admitted with conditions other than neck of femur fractures. Mean age was 79 years (65-94yrs) with 62% females vs 38% male. 104 patient reviews were completed with each patient seen twice on average (range 1 – 5).

78% sustained injuries as a result of a fall or collapse. 54% had sustained fractures of which almost half (48%) were fragility fractures. 13% had sustained an intracranial bleed.

50% of patients reviewed had their analgesia increased and 34% had laxatives either added or increased. 22% of patient had a reduction in polypharmacy compared to 14% who had medication commenced (excluding analgesia or laxatives).

Chart 2. Change in overall number of medication following orthogeriatric review (excluding analgesia or laxatives).



20% had vitamin D deficiency treated. 75% of patients with fragility fractures had a bone health assessment. In regards to Advanced Care Planning, 16% of patients had discussions regarding preferences and 10% involved decisions regarding cardiopulmonary resuscitation.

## Conclusions

Elderly patients commonly suffer falls and have complex comorbidities. Early Comprehensive Geriatric Assessment of this patient group allows interventions such as: optimisation of medication, bone plan commencement and early Advanced Care Planning.

Expansion of regular orthogeriatric care throughout all orthopaedic admissions would result in a significant workload which has staffing implications. The cost of this is likely to be offset by the significant improvement to patient care and the reduction in medical complications.

1. Grigoryan KV, Javedan H, Rudolph JL. Orthogeriatric care models and outcomes in hip fracture patients; a systematic review and meta-analysis. *JOrthopTraums* 2014;28:e49-e55
2. National Institute for Health and Care Excellence. Guidelines CG124. Hip fracture:management NICE, 2011, updated May 2017
3. National Hip Fracture Database. <http://www.nhfd.co.uk>