

Frailty in the elective orthopaedic population: assessing the population and designing a service to manage frail patients

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Introduction

Frailty is a syndrome of reduced physiological reserve based on composite functional and physiological limitations, affecting outcomes within many surgical disciplines. Managing frailty in patients of all ages in the peri-operative period is predicted to consume vast amounts of time, resources and personnel in the future [1]. The service improvement project therefore undertaken at Nottingham University Hospitals (NUH) attempted to identify the scope of moderate to severe frailty amongst the elective orthopaedic population and to introduce an appropriate service to manage and optimise this cohort of patients pre-operatively.

Methods

Over a period of 5 weeks patients presenting to the pre-operative elective orthopaedic clinic undertook a nurse-conducted frailty assessment using the validated Edmonton Frailty Score. This exercise allowed the team to obtain data on the prevalence of various degrees of frailty within that population. A search of literature failed to find single conclusive system to preoperatively manage this cohort, so the team conducting this project at NUH decided that severely frail patients would be seen in a face-to-face meeting and moderately frail patients would have an anaesthetic notes review.

Results and Follow-Up

Over 5 week, 262 patients underwent a frailty assessment in the elective orthopaedic pre-op clinic. Of these, three patients were identified as having severe frailty and six patients were scored as moderately frail. As far as increasing the burden on a service, the sample size suggested a minor burden to the system that was well within the ability of the current anaesthetic service. Whilst a SCOPES (systemic care of patients in elective surgery) service run by the orthogeriatric team exists at NUH it currently has little anaesthetic input. This exercise prompted anaesthetic into the SCOPES clinic to review those specific patients flagged up as severely frail, in order to optimise fitness for surgery in all aspects. The sample sizes of moderate to severely frail patients suggest that the true success of this program will be seen over a large number of months and maybe years.

References

- 1) Patel KV, Brennan KL, Brennan ML, Jupiter DC, Shar A, Davis ML. Association of a modified frailty index with mortality after femoral neck fracture in patients aged 60 years and older. *Clin Orthop Relat Res.* 2014;472(3):1010–1017. doi:10.1007/s11999-013-3334-7