

The Costs of Confronting Osteoporosis: Cost Study of an Australian Fracture Liaison Service

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Background

Fracture liaison services (FLS) are an accepted approach to lowering rates of osteoporotic re-fractures. However, resource allocations to FLSs are open to challenge, as most relevant cost analyses are based on anticipated, rather than observed, benefits.

Objectives

To support informed decision making our objective was to estimate the cost of operating an FLS, from the perspective of the Australian health system, with observed costs.

Method

Using hospital records, we compared total costs of two cohorts of patients presenting with minimal trauma fractures (MTFs) at two hospital emergency departments (EDs) across a 6 month period (July to December 2010). The treatment cohort (FLS Cohort, n=515) attended an ED at a hospital offering FLS post-fracture care; the Usual Care Cohort (n=416) attended an ED at a hospital without an FLS. Hospital records were reviewed for further attendance of both groups at their respective hospitals EDs with re-fractures, over three subsequent years.

Results

Total costs for both cohorts included any FLS and re-fracture costs. Compared to the Usual Care Cohort, the FLS Cohort had 62 fewer fractures per 1,000 patients and \$617,415 lower costs over three years. As both hospitals consistently process around 2,000 patients per year, the estimated annual saving is \$1.2 million to \$1.8 million AUD. From the perspective of the Australian public health system, investment in FLS can be a financially effective way of reducing the cost of osteoporotic fracture management.