

Toward the triple aim: implementing a hospitalist co-management model for orthopaedic surgical patients in an academic medical centre

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Aims

To examine the impact of consultant general physician co-management of patients requiring major orthopaedic surgery on measurements of quality of care, patient and provider satisfaction, and cost.

Methods

In August 2012, we implemented a co-management programme for all patients requiring hip fracture or elective total hip or knee replacement surgery who presented with significant medical comorbidities (American Society of Anesthesiologists class ≥ 3). Our goal was to use a dedicated hospitalist team to optimise the perioperative medical management of patients, while minimising complications and costs. We used standardised management protocols and regular, open communication between surgical and medical teams. Our hypothesis was that this service would result in improved quality and financial performance; we therefore compared quality and cost data in orthopaedic patients 1 year before and 1 year after implementing this system in a single tertiary hospital, with a common group of surgeons during both periods.

Results

A total of 2,348 patients received operative treatment in this 2-year period and there was no difference in baseline characteristics or proportion of operations in each group before and after implementation of the co-management model.

A confidential staff survey showed agreement or strong agreement with the statement that ‘overall job satisfaction was

improved’ as follows: orthopaedic staff, 98%; hospitalists, 60%; nursing staff, 75%. Standardised patient experience data showed improvements in nurse ($p < 0.05$) but not physician ($p = ns$) communication scores. There was a trend toward reduced total cost per case (\$17,454 vs \$17,129, $p = ns$).

Conclusions

This co-management model of coordinated orthopaedic and general medical care showed favourable trends in quality metrics, cost and provider satisfaction. Such interdisciplinary care provides a programmatic and evaluative template for the future hospital.

Conflict of interest statement

Andrew Marcantonio is a consultant to De Puy Synthes Orthopaedics. The authors report no other conflicts of interest. ■

Table 1. Baseline characteristics.

	Cases	LOS index	% ICU	Cases with 1 or more comps	% Deaths	Mortality index	CMI	% 30-day readmit
Before	1,195	1.07	5.19	43	0.33	0.47	2.27	6.88
After	1,153	1.04	7.20	50	0.52	0.86	2.31	6.02

LOS, length of stay; ICU, intensive care unit; CMI, case mix index; Readmit, all-cause readmissions.

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