

EDITORIALS

Hip fracture care: all change

Hip fracture is the most common serious consequence of falls in older people, with a mortality rate of 10% at 1 month, 20% at 4 months and 30% at 1 year [1]. Many of those who recover suffer a loss in mobility and independence: approximately half of those previously independent become partly dependent, while one-third become totally dependant [2]. Hip fracture accounts for more than 20% of orthopaedic bed occupancy in the United Kingdom, and 87% of the total cost of all fragility fractures, and is thus, by far the most expensive fracture associated with osteoporosis [3]. In 2005–06, the acute care of 68,416 hip fracture patients in England cost the NHS an estimated £ 781 million [4]. The average age of patients with fractured neck of the femur is 81 years, and 75% of these are female. Many are frail and have significant co-morbidities, which may lead to delay before surgery and slow functional recovery. The median superspell (total time in NHS care) is 28 days, although this varies considerably from trust to trust, ranging from 17 to 40 days. In the past year, one-third of trusts have seen rises in the superspell bed days of between 1 and 9 days [5].

The journey of care for patients with hip fracture is complex and challenging, involving many professionals and several clinical departments, and often crossing a number of service boundaries. These patients are among the most frail to be admitted to hospital, and their outcomes depend critically on how effectively their care pathway is managed. Avoidable delay, incomplete assessment and lack of attention to important details—such as co-morbidities, fluid balance and nutritional status, as well as the underlying cause(s) of the fall and subsequent management of their osteoporotic risk—will result in poorer outcomes. Pre-operative delays increase mortality and, in those who survive, prolongs post-operative stay. For every additional 8 h delay to surgery after the initial 48 h, an extra day in hospital results [6]. Current models of care fall far short of the ideal to provide optimal care.

The three key strategic elements towards improving hip fracture care are:

- (1) Ensuring high-quality acute and rehabilitation care delivered through coordinated multi-disciplinary teams
- (2) Providing high-quality secondary prevention of fragility fractures—bone protection and multi-disciplinary falls risk assessment
- (3) Collecting high-quality information and using audit standards to provide feedback to units, allowing them to monitor and benchmark what they do, and thus, to improve the hip fracture care and secondary prevention that they provide.

With both the Scottish Hip Fracture Audit (SHFA) [7] which commenced in 1993 and the Scottish Inter-collegiate Guideline (SIGN) on hip fracture care in 2002 [8], hip fracture care in Scotland has seen significant developments over recent years [9]. The SHFA, developed in partnership by orthopaedic surgeons and geriatricians, documents casemix, monitors the hip fracture journey of care and records outcomes at 4 months. Casemix-adjusted outcome reporting allows individual trauma units to identify their strengths and weaknesses and learn from others. Now a new collaboration between the British Orthopaedic Association (BOA) and the British Geriatrics Association (BGS) has led to another major initiative, signalled by the simultaneous launch in September of a new BOA/BGS Blue Book on the care of patients with fragility fracture [10] and the National Hip Fracture Database (NHFD).

The Blue Book provides an authoritative evidence-based clinical guide for the multi-disciplinary team on best practice in the management of hip fracture. Complementing it is the joint BOA-BGS NHFD. Web-based, and using systems derived from those of the highly successful Myocardial Infarction Audit Project (MINAP), NHFD offers an audit of casemix, process and outcome indicators designed to monitor and improve hip fracture care and secondary prevention. Six key care standards are set out in the Blue Book and monitored by NHFD. These relate to: prompt admission to orthopaedic care, early surgery, pressure ulcer prevention, access to acute orthogeriatric medical care, osteoporosis assessment and treatment, and falls assessment. In addition, NHFD will provide a platform for clinical research designed to address, in large studies and time-limited sprint audits, unresolved questions in clinical care and service organisation for hip fracture.

Too often audit collects much information and results in little change, but in synergy, with best-practice guidance on clinical care and service organisation, its potential to drive change and deliver improvement is greatly enhanced. Locally gathered and owned data, continuously updated and readily accessible, is more likely to be trusted by clinicians than the kind of feedback provided sporadically from raw HES data or agencies such as Doctor Foster. When such trusted data can be used to compare performance with national average data and—perhaps more importantly—at regional level, the resulting stimulus to improve and the ready ability to document the impact of changes in clinical or organisational practice can come together with good effect: on pre-operative delay, on rehabilitation/early return home and on mortality.

Clinicians, managers and those who commission services all have much to gain from vastly better information—in the

form of guidance as well as audit data—on hip fracture care in all its cost and complexity. Credible local service information can transform an argument around anecdotes and targets into a useful and numerate discussion of problems, of potential solutions based in agreed best practice and of progress towards improvement as and when problems are addressed.

Optimal delivery of high-quality care for fractured neck of the femur in patients is now an achievable goal. The opportunities for enhanced quality of care are many: process improvement achieved by evidence-based service development, reduced length of hospital stay, reduced institutionalisation and reduced mortality and, through better secondary prevention a reduction in the burden of future fractures. And because good care of hip fracture minimises delay and promotes quicker recovery and an earlier return home, cost and quality are not in conflict. If the relatively modest expense of collecting data for participation in the NHFD is seen as a down payment on better quality of care at reduced cost, all of us—patients, clinicians, fracture services and those responsible for them—will be better-off, because looking after hip fracture patients well is a lot cheaper than looking after them badly.

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Frailty: different tools for different purposes?

In this issue, Ravaglia *et al.* [1], report on ‘a frailty score’, which they have tested as a predictor of a range of adverse health outcomes which they characterise as ‘frailty outcomes’ in people aged 65+ years (mean age at baseline was 74.7) [1]. The outcomes were death (14.6% of the baseline sample), fractures, hospitalisation, and new onset or worsening of capacity to perform activities of daily living (ADL) during the next 4 years. Their model was arrived at through statistical exploration of data from a longitudinal population study of 1,016 individuals in Italy. The nine variables emerging after multivariate analysis were age >80 years, male gender, low physical activity, co-morbidity, sensory deficits, calf circumference <31 cm (taken as an indicator of sarcopenia), dependence in Instrumental ADL, a Tinetti gait and balance performance score ≤ 24 , and pessimism about one’s health compared to others. Together they produce a numerical score which at various cut-points tested was significantly

predictive of the ‘frailty outcomes’. While acknowledging that their prognostic score is not yet adequately developed and requires at least to be tested in a remote cohort of older people, the authors suggest that their findings support further investigation of frailty scores for use in clinical geriatric practice.

Consideration of the frailty concept and its utility for the geriatrician is certainly welcome. Indeed, in this journal, Rockwood challenged the clinical geriatrics community to recognise frailty as the central *raison d’être* of the specialty [2] and went on to discuss the theoretical and empirical work needed to make a definition of frailty valid and useful [3]. Part of the work needed is to consider what frailty means from a range of perspectives. Within the clinical research community, particularly in the United States, considerable effort has been made in recent years to achieve a consensus [4, 5] and during 2005–06, the *Journal of the*