Falls and bone health: improving the quality of care

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Life expectancy is rising and hospital admissions for falls and fractures are increasing. The human and economic costs of falls and fractures are considerable. Falls are the leading cause of accidental death of older people in the UK; one older person dies as a result of a fall every five hours.[1] Fractures have a significant mortality and cause considerable human misery. Twenty per cent of patients with a hip fracture will die within the first six months while 1 in 2 will lose the ability to live independently.[2] Hip fractures cost the NHS and social services £1.8 billion per year.[3] The hospital cost of a single hip fracture is on average £12,520.[4] If the patient requires subsequent admission to a nursing home the total health and social services costs for the first year may be £30,000.[5] A patient who has sustained a vertebral fracture will have approximately 14 extra consultations with their general practitioner (GP) over the following year.[6]

A national strategy is urgently required to provide clinically effective and cost-effective care. While primary prevention is important, targeting those at highest risk ie those who have a history of fractures or who have recently presented to the emergency department (ED) with a fall, is likely to be the most effective strategy.

Lessons from national audits

The Clinical Effectiveness and Evaluation Unit (CEEU) of the Royal College of Physicians (RCP) is associated with around 25 national audits in a variety of areas from blood transfusions to care of the dying. The audits have had a considerable impact. The stroke audit, for example, demonstrated wide variations in care but has witnessed improvements each year; in 1998 half of all trusts had a stroke unit but by 2006 this had increased to over 90%. Similar improvements have been demonstrated with the Myocardial Infarction National Audit Project (MINAP). Call to needle time has decreased, the percentage of patients receiving secondary prevention with statins has increased and mortality rates have fallen. It is hoped that a similar impact will be realised from the National Clinical Audit of Falls and Bone Health.

National audits of care for falls and bone health

Primary care

The vast majority of patient consultations are in primary care. A number of electronic databases are used and they are becoming increasingly more comprehensive. They are useful for benchmarking, disease surveillance, developing new clinical indicators and for clinical audit. A report on the first national evaluation of standards of care in the primary care setting for older people at risk of falls and osteoporotic fractures was published in 2007.[7] A set of criteria and indicators were derived from national guidance. Electronic patient records on the QRESEARCH general practice database, which covers a total population of approximately 3.4 million patients, were explored for relevant documented diagnosis, risk factors, assessments, referrals and interventions. The report highlights many areas of sub-standard care and the need for improved computer recording of information. Assessment and management of falls, in particular, appears to lag behind the care for bone health. Improvements in recording could have been achieved rapidly by using a set of indicators in the Quality Outcomes Framework (QOF) which is part of the General Medical Services contract in primary care. Direct feedback to primary practices could be provided with comparative data thus completing the audit cycle.

Non-governmental organisations and charities provide strong voices in demanding improved standards of care. The National Osteoporosis Society (NOS) and Help the Aged submitted proposals to include osteoporosis and falls in the QOF. They put forward suggested indicators that are readily measurable and that target those at highest risk. For example, practices should keep a register of patients with a history of an osteoporotic fragility fracture and of those who have had a recent fall, and record the percentage of women aged 65–74 years with a fragility fracture who have confirmation of the diagnosis of osteoporosis on a DXA scan and who are then treated with an appropriate bone-sparing agent.

Older people hold their GP in high esteem and 90% will visit them every year. Many older people are reluctant to participate in falls prevention activities but are more likely to do so if they receive a personal invitation from a trusted health professional. The

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treatment of chronic conditions is the primary responsibility of the GP and osteoporosis is a chronic condition with acute exacerbations. Primary care is therefore the ideal setting to assess patients with falls and fractures. Like the authors of the QRESEARCH evaluation, NOS and Help the Aged argued strongly that if these proposed indicators were included in the QOF, standards of care were likely to improve rapidly. Sadly since the symposium, the decision has been made not to include falls or osteoporosis in the QOF – a missed opportunity.

National Clinical Audit of Falls and Bone Health in Older People

The National Clinical Audit of Falls and Bone Health in Older People, commissioned by the Healthcare Commission and conducted by the RCP, was published in November 2007.[8] Of NHS trusts in England, Northern Ireland and Wales, 91% provided data on 3,184 patients who sustained a hip fracture and 5,642 patients with a non-hip (wrist, humerus, pelvis or vertebral) fragility fracture. Approximately 150 primary care trusts (PCTs) assisted with data collection. Clinical care was audited against the standards set out in the National Service Framework for Older People and the National Institute for Health and Clinical Excellence clinical guidelines on prevention of falls and the secondary treatment of osteoporosis.[9,10] Detailed patient information was collected along the pathway from time in the ED to post-operative management and secondary prevention of falls and osteoporosis. This audit follows on from the national audit of the organisation of care for falls and bone health published in 2006.[11] Despite 74% of PCTs stating they had an integrated falls/bone health service, as recommended by national guidance, this report suggested otherwise – most had no case finding and referral systems in either the ED or fracture services for fallers.

The 2007 audit has shown wide variability in clinical scores between sites and revealed that most local health services are providing an inadequate service in hospital care and in the prevention of future falls and fractures. Pre-operative management for hip fracture patients is generally good for analgesia, fluids and routine observations. Of cases, 69% have surgery within 48 hours (national target is over 90%) but 29% are delayed more than 48 hours because of organisational reasons. Of hip fracture patients, 87% are admitted to an orthopaedic or orthogeriatric ward with a mean length of stay (LoS) of 16 days (25% have a LoS greater than 26 days). Of hip fracture patients, 59% returned to their usual residence while 27% were transferred to an intermediate care bed. The audit highlighted inconsistencies in anticoagulation policies reflecting the need for further research to establish a clear evidence base in this area. There is a lack of acute orthogeriatric input with just 47% receiving a routine medical review.

The number of patients receiving an adequate multidisciplinary falls risk assessment and treatment was low in the hip fracture and non-hip fracture groups. Those with a hip fracture, however, faired considerably better than those with a non-hip fracture as they were generally seen on a ward whereas the majority of the non-hip fractures were discharged directly from the ED. Similarly, secondary bone assessment and treatment was higher in the hip fracture group but still inadequate at less than 50%. Those fortunate enough to be referred to falls clinics received better falls and bone assessments but only 5% received such a referral.

The audit recommends that:

- PCTs should commission a patient care pathway for the secondary prevention of falls and fractures that includes a fracture liaison service
- PCTs should commission clinics which can perform effective assessments
- PCTs should review local therapeutic exercise options and promote evidence based programmes in collaboration with councils
- the Department of Health should consider supporting inclusion of osteoporosis treatment in the QOF

Symposium programme

Falls and bone health: the national agenda
Professor Ian Philp, National Director for Older People, Department of Health

Falls and bone health: the clinical importance
Dr Jonathan Bayly, Associate Lecturer, Faculty of Education Health and Sciences, University of Derby

Improving the quality of care: lessons from national audit
Dr Jonathan Potter, Clinical Director, Clinical Effectiveness and Evaluation Unit (CEEU), Royal College of Physicians

Use of GP databases and clinical audit/primary care audit of falls and osteoporosis – results
Dr Jonathan Bayly

Quality Outcome Framework – implications of primary care audit:

Osteoporosis
Danielle Preedy, Policy and Information Officer, National Osteoporosis Society

Feedback from a non-government organisation and a charity's view
Pamela Holmes, Programme Manager, Help the Aged

National clinical audit of falls and bone health – findings
Dr Finbarr Martin, Associate Director (Falls and Bone Health), CEEU

National hip fracture database – findings
Robert Wakeman, Consultant Orthopaedic Surgeon, Basildon and Thurrock University Hospitals NHS Foundation Trust and Orthopaedic Clinical Lead for the National Hip Fracture Database Implementation Group

Healthcare Commission perspective
Dr Dick Waite, Clinical Audit and Patients' Outcomes Lead, Healthcare Commission

Primary care trust commissioning perspective
Christine Greenough, Planning and Performance Manager, Tameside and Glossop Primary Care Trust

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- acute hospital trusts should review their capacity and operational systems to ensure prompt surgery
- acute trusts and PCTs should review procedures to share clinical information and develop joint clinical governance for the falls/fracture pathways.

National Hip Fracture Database

The National Hip Fracture Database (NHFD), launched in September 2007 and the second edition of the blue book on the care of patients with fragility fractures by the British Orthopaedic Association and British Geriatrics Society are important levers in achieving the required improvements.[12] The NHFD is a web-based registry that builds on the work of established hip fracture audits across the UK, it is supported by the Information Centre for Health and Social Care. The dataset will cover in detail the care of patients with hip fracture and key outcomes. This will focus attention locally and nationally to use continuous comparative data to create a drive for improvements in standards of care and provide a platform for clinical research.

Conclusion

National audits have demonstrated that the quality of care of older people with falls and fractures is frequently inadequate. Many organisations are determined to improve the standards of care and a number of important tools are now in place to help achieve that aim. This is the time for healthcare providers and commissioners to influence strategy, make a difference and raise the standard of care for older people.

Further information

To access the symposium slides, please visit the CEEU website: www.rcplondon.ac.uk/clinical-standards/ceeu/Current-work/Pages/Falls-and-Bone-Health-in-Older-People.aspx

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