

## Improving Care for Older Patients with Hip Fracture

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**Background/Purpose:** Hip fracture is a common and increasing socioeconomic problem throughout the world. These patients present a challenge to the health-care system as they are elderly with multiple comorbidities, have high rehabilitation demands, and often require enhanced social care. Single variables within the patient pathway, such as a new implant, may make a difference to outcome but most research suggests that improvements in the entire pathway from admission through to surgery and rehabilitation are required to make the biggest impact on outcome. This pathway should include measures to reduce the risk of future falls and fragility fractures. In England, a best-practice pathway together with financial incentive and audit has been introduced to cover the entire population of the country.

**Methods:** The National Hip Fracture Database (NHFD) prospectively collects data for hip fracture admissions at all 186 hip fracture units in England. 6000 new patients are added to the database each month. It started in 2008 and currently holds records on 309,839 patients. The median age is 80 years and 71% are female. The best-practice pathway has evolved from 7 to 10 key standards: admissions protocol, joint orthopaedic and geriatric care, surgery within 36 hours, geriatric review within 72 hours, multidisciplinary rehabilitation, falls and osteoporosis assessments; pre- and postoperative cognitive assessment, and data submission to NHFD. Mortality data are linked to the National Office of Statistics allowing 100% follow-up for mortality. To qualify for the financial incentive, a patient must receive all 10 parts of the pathway.

**Results:** The best-practice pathway started in 2010 and in the first year 14,615 out of 53,443 patients (27%) received the complete pathway. The number of patients receiving the entire pathway has increased quarter by quarter so that during the year April 2012-2013, 30,627 of 56,226 patients (54.5%) received all 10 standards. A further 14,506 patients (25.8%) received 9 of 10 pathway measures, indicating that the hospitals have systems in place to deliver a good care pathway. The national 30-day mortality following hip fracture has fallen 15% from 9.2% in 2008 to 8.2% in 2013.

**Conclusion:** We have undertaken a project to improve hip fracture care for the entire population of a country. Using a combination of well-defined, evidenced-based practice standards that address the entire patient pathway, financial incentive and good clinical audit, there has been a significant improvement in the care pathway with an additional 30,000 patients receiving the 9 or 10 parts of the pathway within 3 years of starting the project. This has been reflected in a 15% reduction in the national 30-day mortality.

- The FDA has not cleared this drug and/or medical device for the use described in this presentation (i.e., the drug or medical device is being discussed for an "off label" use). For full information, refer to page 600.