FUN Spot' – multidisciplinary pathway aimed at improving the care of patients with fracture neck

Summary

To reach national targets of time to surgery within 48 hours for neck of femur (NOF) patients, the Sunshine Coast University Hospital (SCUH) implemented a multidisciplinary pathway spanning the patient's hospital journey from the Emergency Department (ED), through to post-surgical care.

The primary focus of the pathway centres on ensuring early and consistent access to surgical theatre time, as well as integrated pre-operative patient assessment and optimisation by the Orthogeriatric, Orthopaedic and Anaesthetic teams. Patients who meet defined criteria are automatically booked into specific time slots on the orthopaedic trauma list, seven days a week.

This dedicated operating time has been termed 'The FUN spot' – an acronym for 'First Up NOF' – which has greatly helped to align expectations of all teams, leading to an improvement in streamlining the care of this patient population.

Aim

To improve time to surgery for patients awaiting surgical management of fractured neck of femur injury.

Background

We were failing to achieve the time to surgery quality statement as outlined in the hip fracture care clinical care standard " a patient presenting to hospital with a hip fracture, or sustaining a hip fracture while in hospital, receives surgery within 48 hours, if no clinical contraindication exists and the patient prefers surgery". Our time to surgery was only 64%.

We also were noting that the patients receiving the surgery were going to theatre later on in the day. This resulted in the frailest patients with the highest comorbidities and surgical risk being operated on later in the day, returning to the ward often after hours when there was reduced staffing and senior expertise available.

Solutions implemented

Multidisciplinary team established – Orthopaedic Nursing Team, Orthogeriatric, Emergency Medicine, Anaesthetics, Orthopaedics, Theatre Nursing Team and Allied Health Professionals.

Theatre time slot agreed – NOF cases to be allocated first each day on the orthopaedic trauma list (including weekends). If unable to meet the criteria for the first slot (FUN), then allocation to the second slot (SUN –Second up NOF) is recommended.

Pre-operative criteria agreed – checkpoints indicating readiness for surgery, including specific physiological parameters, documentation of discussion with the patient and their family about the risks of anaesthetics/surgery and review of advanced care planning.

Early notification paging system – upon diagnosis of fractured neck of femur in the Emergency Department, an alert is sent to representatives from the orthogeriatric team, orthopaedics, senior orthopaedic nurses, and anaesthetics. This page allows each team the greatest window of opportunity to review the patient and help prepare them and their family/carers for upcoming surgery.

Emergency Department NOF management protocol refined – outdated pathway reviewed and improved to ensure patients are receiving femoral nerve blocks, appropriate blood tests and imaging, urinary catheter insertion etc at the earliest opportunity.

Streamlined transport of suspected NOF patients to centralised facility – during COVID, all NOFS from the greater Sunshine Coast region were transported directly to the main campus (SCUH). It was recognised that this allowed patients from more remote areas to receive treatment with greater efficiency. In response to this observation, direct ambulance transport of suspected NOF patients to SCUH has been formally established

Evaluation and results

This initiative has been evaluated through local audit processes as well as benchmarking against national averages using the Australia and New Zealand Hip Fracture Registry, comparing time to surgery and overall length of stay with other centres. During the 12 months since its implementation, the rate of patients receiving surgical management for NOF injuries within 48hrs has improved from 65% to > 89%. Overall length of acute stay has also been reduced from six days to five days.

As of December 2021, our year to date figures are sitting at 86% with our average time to surgery from initial presentation to any emergency department is 35 hours.

Lessons learnt

Through this process, the teams involved have developed a greater sense of the importance of effective and coordinated multidisciplinary care to deliver the best outcomes for our patients. As with any clinical intervention, it has been challenging for all team members to find the time to commit to education and ongoing review and refinement of the pathway. The biggest challenge has been creating and sustaining a shared mental model within the core group of stakeholders. To create a standardised pathway of care requires a high percentage of buy in from all members of the team. Continuing to invigorate and empower team members will be an ongoing process

Partnerships

Queensland Ambulance Services