Hip Fracture Care Clinical Care Standard

An introduction for clinicians and health services
Outline

• What is the Australian Commission on Safety and Quality in Health Care?
• What is a Clinical Care Standard?
• Why do we need one for hip fracture care?
• About the Hip Fracture Care Clinical Care Standard
• Implementing the Clinical Care Standard.
The Australian Commission on Safety and Quality in Health Care

- Established in 2006 to lead and coordinate national improvements in safety and quality
- Legislative remit of the Commission (under the *National Health Reform Act 2011*):
  - formulate standards and indicators relating to clinical conditions
  - advise Health Ministers about clinical standards to adopt nationally
  - promote, support and encourage the implementation of standards
  - monitor the implementation and impact of the clinical standards
What is a Clinical Care Standard?

Clinical Care Standards identify and define the care that people should expect to be offered or receive, regardless of where they are treated in Australia.
What is a Clinical Care Standard?

Clinical Care Standards include:

- A small number (six to nine) of concise recommendations – the quality statements
- A set of suggested indicators to facilitate monitoring.
Why do we need a Hip Fracture Care Clinical Care Standard?

• 52 hip fracture admissions in Australia per day
• The human cost is high:
  – 30-day mortality 6-10%
  – loss of mobility and independence is common.
• Substantial variation in time to surgery and in 30-day mortality.
• Lives can be saved by systematisation of care, applying best practice evidence, and having structures and processes to support consistent delivery of care.
About the Hip Fracture Care Clinical Care Standard

Aim
• To ensure that a patient with a hip fracture receives optimal treatment from presentation to hospital to the completion of treatment in hospital.

Scope
• Covers presentation to discharge for people over 50. The care described is also appropriate for people under 50 with a hip fracture due to osteoporosis or osteopenia.

Goal
• To improve the assessment and management of patients with a hip fracture to optimise outcomes and reduce their risk of another fracture.
Improving outcomes in hip fracture care

- Care at presentation
- Pain management
- Orthogeriatric model of care
- Timing of surgery
- Mobilisation and weight-bearing
- Minimising risk of another fracture
- Transition from hospital care

Mortality

Morbidity & disability

Risk of another fracture
Quality Statement 1
Care at presentation

What should we do?

A patient presenting to hospital with a suspected hip fracture receives care guided by timely assessment and management of medical conditions, including diagnostic imaging, pain assessment and cognitive assessment.
Quality Statement 1
Care at presentation

Why does it matter?

- Evidence that timeliness of pain assessment and management could be improved.
- Up to 30% of patients with hip fracture have an underlying cognitive impairment, so need to consider:
  - risk of delirium and poor outcomes
  - issues around consent.
Quality Statement 1
Care at presentation

What could be achieved?
Implementing hip fracture protocols could:
• Improve patient experience
• Reduce the length of time in ED
• Reduce the length of time to surgery.

It might also move your hospital towards the national emergency access target (NEAT) of ensuring patients are either admitted, discharged or referred within four hours of presenting to the ED.
Quality Statement 1
Care at presentation

What the quality statement means for

• **Clinicians**: Undertake timely diagnostic imaging on all patients with a suspected hip fracture. Provide pain relief, assess medical reasons for the fall and exclude other injuries. Screen for cognitive impairment and risk factors for delirium and put in place interventions to prevent delirium based on this assessment.

• **Health managers**: Ensure systems are in place to support clinicians to provide timely and effective management for pain, diagnostic imaging and cognitive assessment for patients with a suspected hip fracture.
Quality Statement 2
Pain management

What should we do?
A patient with a hip fracture is assessed for pain at the time of presentation and regularly throughout their hospital stay, and receives pain management including the use of multimodal analgesia, if clinically appropriate.
Quality Statement 2
Pain management

Why does it matter?

- Most patients have significant pain
- The patient experience can be improved through regular assessment, as recommended in the ANZ Guideline for Hip Fracture Care
- Multimodal pain management strategies can reduce the need for strong systemic analgesics
- This should reduce the risk of side effects such as nausea, vomiting, constipation and delirium.
Quality Statement 2
Pain management

What could be achieved?

• Better pain management could lead to greater mobility and lower risk of pressure ulcers, pneumonia and venous thromboembolism
• Greater mobility may free up staff time
• A better patient experience.
Quality Statement 2
Pain management

What the quality statement means for Clinicians:

• Assess patients’ pain:
  − immediately upon presentation to hospital
  − within 30 minutes of administering initial analgesia
  − hourly until the patient is settled on the ward, and
  − regularly as part of routine nursing and other clinicians’ observations throughout the admission

• Consider multimodal analgesia.
Quality Statement 2
Pain management

What the quality statement means for

• **Health managers**: Ensure pain management protocols, aligned with current guidelines, are in place and that clinicians use them to provide pain assessment and management for patients with a hip fracture.
Quality Statement 3
Orthogeriatric model of care

What should we do?
A patient with a hip fracture is offered treatment based on an orthogeriatric model of care as defined in the Australian and New Zealand Guideline for Hip Fracture Care.
Quality Statement 3
Orthogeriatric model of care

Core components of the orthogeriatric model of care

• Medical optimisation before surgery (e.g. nutrition, hydration, pressure care, bowel and bladder management and monitoring of cognition)
• Effective pain management
• Multidisciplinary input with clear goals and limits for care
• Care coordination
• Proactive secondary fracture prevention plans (falls risk and bone health).
Quality Statement 3
Orthogeriatric model of care

What could be achieved?

• Better quality of care and clinical outcomes can be achieved with close collaboration between orthopaedics and geriatric medicine.
• Hospitals with a formal orthogeriatric service have significantly lower 30-day mortality than those that do not.
Quality Statement 3
Orthogeriatric model of care

What could be achieved?

Source: Zeltzer et al. MJA 2014
Quality Statement 3
Orthogeriatric model of care

What the quality statement means for

• Clinicians (part 1): From the time of admission, offer patients with a hip fracture a formal orthogeriatric model of care that includes:
  − regular orthogeriatrician assessment and medication review
  − managing patient comorbidities
  − optimisation for surgery
  − early identification of the patient’s goals and care coordination. If appropriate, provide multidisciplinary rehabilitation aimed at increasing mobility and independence, facilitating return to pre-fracture residence and supporting long-term wellbeing.
Quality Statement 3
Orthogeriatric model of care

What the quality statement means for

• Clinicians (continued): From the time of admission, offer patients with a hip fracture a formal orthogeriatric model of care that includes:
  - early identification of most appropriate service to deliver rehabilitation, if indicated
  - ongoing orthogeriatric and multidisciplinary review including reassessment of cognition after surgery, and discharge planning liaison with primary care, including falls prevention and secondary fracture prevention.
Quality Statement 3
Orthogeriatric model of care

What the quality statement means for

- **Health managers**: Ensure systems are in place to offer patients with a hip fracture care that is based on an orthogeriatric model of care as recommended in the *Australian and New Zealand Guideline for hip fracture care*. For hospitals that do not have a geriatric medicine service available, care should be undertaken by an orthopaedic surgeon, an anaesthetist and a physician or, if unavailable in rural and remote settings, another medical practitioner, using the orthogeriatric model of care.
Quality Statement 4
Timing of surgery

What should we do?
A patient presenting to hospital with a hip fracture, or sustaining a hip fracture while in hospital, receives surgery within 48 hours, if no contraindication exists and the patient prefers surgery.
Quality Statement 4
Timing of surgery

Why does it matter?

• Compassion – leaving an older person, immobilised, bed bound, fasting and often in pain is poor practice.

• Consequences of delayed surgery include:
  – increased length of stay
  – increased post-operative complications such as pneumonia, thromboembolic events and pressure injury.
Quality Statement 4
Timing of surgery

What could be achieved?

In the UK, a national approach has seen the proportion of hip fracture patients have surgery on the day of, or on the day after admission rise from 65% to 72% over three years.

Quality Statement 4
Timing of surgery

What the quality statement means for

- **Clinicians**: Discuss treatment options with all patients. If clinically indicated and the patient agrees, perform surgery within 48 hours of the patient presenting to hospital. If a patient sustains a fracture in hospital, perform surgery within 48 hours of the fracture occurring. Prescribe surgical antibiotic prophylaxis and thromboprophylaxis according to current guidelines.
Quality Statement 4
Timing of surgery

What the quality statement means for

• Health managers: Ensure systems are in place for clinicians to perform hip fracture surgery within 48 hours of presentation. Surgery within 48 hours of presentation may not be feasible for health services covering some remote areas, however, networks and systems should be in place to ensure coordinated transfer and timely surgery of patients who sustain a hip fracture in these areas.
Quality Statement 5
Mobilisation and weight-bearing

What should we do?

A patient with a hip fracture is offered mobilisation without restrictions on weight-bearing the day after surgery and at least once a day thereafter, depending on the patient’s clinical condition and agreed goals of care.
Why does it matter?

Early mobilisation has been shown to result in earlier functional recovery and independence.
Quality Statement 5
Mobilisation and weight-bearing

What could be achieved?

Better early walking

More likely to be discharged directly home

Less assistance to transfer

Less need for high-level care

Early mobilisation leads to ...
Quality Statement 5
Mobilisation and weight-bearing

What the quality statement means for

- Clinicians: Mobilise patients the day after hip fracture surgery and at least once a day thereafter unless contraindicated. Allow patients to bear weight as tolerated, but avoid weight-bearing if there is a clinical concern about the fracture, the fixation or the likelihood of healing. Mobilisation can include re-establishing:
  - movement between postures (e.g. moving from lying to sitting and sitting to standing)
  - the ability to maintain the upright posture
  - ambulation with increasing levels of complexity (e.g. speed, direction change and multi-tasking).
Quality Statement 5
Mobilisation and weight-bearing

What the quality statement means for

• Health managers: Ensure systems are in place for patients to be mobilised the day after hip fracture surgery and at least once a day thereafter, unless contraindicated.
Quality Statement 6
Minimising risk of another fracture

What should we do?
Before a patient with a hip fracture leaves hospital, they are offered a falls and bone health assessment, and a management plan based on this assessment to reduce the risk of another fracture.
Quality Statement 6
Minimising risk of another fracture

Why does it matter?
One in three hip fracture patients will re-fracture at one year. There is a large body of evidence to support:

• Secondary fracture prevention through treatment of bone health
• Falls prevention strategies to reduce falls risk.
Quality Statement 6
Minimising risk of another fracture

What could be achieved?
Models of care can significantly reduce the risk of further fractures, pain, suffering and hospitalisation if they include:

- Systematic identification of at-risk patients
- Investigation of risk factors for future falls and fractures
- Individualised treatment plans for falls prevention and treatment of osteoporosis.

This approach is also cost effective.
Quality Statement 6
Minimising risk of another fracture

What the quality statement means for

• **Clinicians**: Assess patients with a hip fracture for their risk of another fracture. Educate them by discussing risk factors for falls and providing written information on specific exercises to improve muscle strength and balance. Provide treatment, such as prescribing medicines for osteoporosis, if clinically indicated.

• **Health managers**: Ensure systems are in place so that clinicians can assess patients’ risk of another fracture and then educate and treat them, as indicated.
Quality Statement 7
Transition from hospital care

What should we do?

Before a patient leaves hospital, the patient and their carer are involved in the development of an individualised care plan that describes the patient’s ongoing care and goals of care after they leave hospital. The plan is developed collaboratively with the patient’s general practitioner. The plan identifies any changes in medicines, any new medicines, and equipment and contact details for rehabilitation services they may require. It also describes mobilisation activities, wound care and function post-injury. This plan is provided to the patient before discharge and to their general practitioner and other ongoing clinical providers within 48 hours of discharge.
Quality Statement 7
Transition from hospital care

Why does it matter?

• The acute stay in hospital is a short part of the hip fracture journey. Often health status changes. Often medications are altered, perhaps with limited consultation with the patient and/or their family/carer.

• At the point of discharge, it is important that patients feel empowered to resume control of their own health. Discharge summaries used well support clinicians and services, but are of limited benefit to the patient.

• Patients need an individualised care plan that is informative, accessible and that includes falls and fracture prevention.
Quality Statement 7
Transition from hospital care

What could be achieved?

• Informed and empowered patients are more likely to adhere to health recommendations, including those likely to enhance functional recovery and minimise chances of future fractures.
Quality Statement 7
Transition from hospital care

What the quality statement means for

- **Clinicians**: Develop an individualised care plan with each patient and provide it to them in writing before they leave hospital. Provide a copy to their GP or ongoing clinical provider within 48 hours of the patient leaving hospital.

The individualised care plan includes information about the patient’s rehabilitation goals, their risk factors, lifestyle modification and medicines, any equipment they need, follow-up appointments, and contact details for ongoing support services available in the community.
Quality Statement 7
Transition from hospital care

What the quality statement means for

- **Health managers**: Ensure processes and resources are in place so that clinicians can develop an individualised care plan with patients with hip fracture before they leave hospital, and can provide it to them and their general practitioner or ongoing clinical provider within 48 hours of discharge.
What should we consider?

1. What proportion of patients attending ED with a suspected hip fracture have imaging other than plain X-rays?
2. What proportion of hip fracture patients admitted have a cognitive assessment, and have their pain routinely assessed within 30 minutes of presentation to the ED?
3. Do you use an orthogeriatric model of care? If not, what are the barriers to this?
4. Do your patients routinely have surgery within 48 hours? Is there routinely scheduled time for hip fracture surgery?
5. Are they mobilised without restrictions next day?
6. Before discharge, is their risk of re-fracture assessed and managed?
7. Are they discharged with an individualised care plan?
More information

www.safetyandquality.gov.au/ccs
How can the quality statements be achieved in your health service?

• Add local context here
• What measures do we have?
• How well are we achieving the quality statements?
• What could be changed?
• Who needs to be involved to help things change (internal and external)?
• Is there a successful service model we could adapt locally?