Guiding principles to develop organisational model of care for patients with hip fracture

Aged Health Network and Leading Better Value Care Hip Fracture Care

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Contents

Guiding principles for the care of patients with hip fracture – at a glance 1

Introduction 2

Guiding principles 3

Local governance and leadership 3
Access 3
Protocols and procedures 4
Local data collection 4
Workforce education and training 5
Person-centred care 5
Advanced care planning 6
Coordinated care 6
Multidisciplinary care teams 7

Methods 8

References 10
At a glance

These guiding principles must be considered when developing an organisational model of care for patients with hip fracture.

Local governance and leadership
- Governance structures
- Clinical and executive leadership
- Bottom-up changes

Access
- Equitable and fair
- Rapid access for urgent patients
- Timely access for non-urgent patients

Protocols and procedures
- Clear and readily available
- Anchored in executive support
- Enable clinicians to provide best practice care

Local data collection
- Routine collection of high-quality data
- Used for patient safety and quality improvement
- Data audit to drive enhancements and innovation

Workforce education and training
- Staff upskilling to deliver high-quality care
- Training for local specialist teams

Person-centred care
- Focus on individual needs and preferences
- Shared decision-making with patient, family and carers

Advanced care planning
- Incorporate patient’s goals of care in future medical care
- Involve family and carers

Coordinated care
- Coordination across multi-disciplinary teams (MDTs), other care providers and family and carers
- Timely access and smooth transitions
- Pre-determined roles and responsibilities for care team members

Multidisciplinary care teams
- Patient access to a MDT that works collaboratively to provide care
- MDT to provide the most comprehensive care possible
- Executive support to reduce divisions between teams
Introduction

This document outlines guiding principles to be considered when developing an organisational model of care for managing patients with a hip fracture. It is to be used in conjunction with the Orthogeriatric Hip Fracture Care Clinical Practice Guide. Together they show how hip fracture care can be enabled across the inpatient journey using a coordinated service structure to ensure patients receive the right care at the right time.

The application of these principles has been shown to result in better patient care, improved clinician ability to provide best practice care and improved care team ability to work collaboratively to meet the patient’s needs.¹⁻⁷ Patient-centred and coordinated care by a multidisciplinary team results in better treatment planning and adherence to the treatment by the patient.¹² There is strong clinical evidence to show it also significantly improves diagnostic accuracy, patient experience and health outcomes, and healthcare provider satisfaction as well as decreasing health service use and cost.¹³

A shared care approach involving family and carers should be followed when caring for a patient with a hip fracture. Evidence validates that this approach improves patient outcomes, such as:⁸⁻¹⁰

- improved time to surgery
- long-term survival
- return to preinjury independence
- decreased hospital length of stay
- decreased readmission rates.

Service structure should facilitate a coordinated multidisciplinary team approach to caring for patients with hip fracture.
Guiding principles

Local governance and leadership

Patients should receive high-quality care, underpinned by sound governance structures and clinical leadership. The importance of this principle in ensuring high-quality patient care has been emphasised in healthcare systems worldwide. Leadership and governance should be holistic and use work-based learning and team-based approaches to improve service delivery.

Key components

The leadership in healthcare organisations should support bottom-up changes (by clinicians and service managers), rather than just top down through formal reporting lines. Decisions should be made based on data, having clear lines of accountability with integrated teamwork, and creating shared values and objectives. Strong and committed executive and clinical leadership is essential in quality improvement and best practice care.

Examples in practice

- Executive and management facilitate clinicians to deliver best practice hip fracture care by endorsing recommended standards and guidelines, e.g. to achieve recommended surgical timings (less than 48 hours to surgery).
- Leadership endorsement of protected time on ward to educate junior staff on the importance of delirium assessment as well as providing a clear protocol for staff to follow post-operatively.

Access

Patients receive equitable access to specialist services in the most appropriate setting and in a timely manner.

Access allows patients to get the care and services they need when they need them. Efficient access results in improved patient outcomes, quality care, reduced wait times and improved quality of life for patients.

Key components

There is often an imbalance between the capacity of a service and the ability to meet demand of hospital admissions. Clear procedures to support equitable and fair access are imperative with the support of shared governance and oversight. Rapid access to treatment should be provided for urgent patients and timely access for non-urgent patients.

Examples in practice

- Hospitals should facilitate access to operating theatres for patients with hip fracture within 48 hours of admission, ideally through a seven-day availability of planned acute orthopaedic lists with protected time for hip fractures. Some ways to facilitate this include:
  - priority access for hip fracture surgery on weekday acute orthopaedic lists
  - prioritising patients for theatre once they are medically stable within 24 hours of presentation
  - dedicated weekend lists.
- Patients should have access to a geriatrician in the pre- and post-operative periods (refer to the clinical practice guide).
- Patients should receive delirium assessment and management in accordance with best practice recommendations.
Protocols and procedures

Patients receive timely care from clinicians who are supported by standardised protocols and procedures. Protocols and procedures are anchored in executive support to facilitate clinician engagement and empowerment.13 A showcase of hip fracture pathways is available in Appendices 4a, 4b and 4c of the clinical practice guide.

Key components

Health service organisations should ensure systems, policies and procedures are in place to enable clinicians to provide best practice care across the inpatient journey, from admission to discharge planning (refer to the clinical practice guide for inpatient journey points).9,10 Clear and readily available protocols are recommended to provide management strategies and to support clinicians in providing person-centred care.8

Examples in practice

- Health service organisations should ensure systems, policies and procedures are in place to identify risk of delirium, enable clinicians to provide patients at risk of delirium with a multicomponent set of preventive and management strategies and support clinicians in providing person-centred care.14

- Health service organisations should ensure systems, policies and procedures are in place to minimise the risk of falls and future re-fracture.15

Local data collection

High-quality data are routinely collected and used to ensure patient safety and quality improvement.

Key components

Health service organisations should facilitate local data collection and audit to identify if enhancements to existing services are needed and if innovative options (e.g., aged care upskilling, geriatrician-led telehealth) improve outcomes in the absence of an on-site geriatric medicine team. The Australian and New Zealand Hip Fracture Registry (ANZHFR) facilitates collection of comprehensive data at both the patient and the facility level that allows sites to identify compliance with recommended standards and opportunities for improvement.

Examples in practice

- Tools such as the ANZHFR enable facilities to easily monitor ‘surgery within 48 hours’ metric and reasons for delay.

- Hip fracture patient-reported measures can be collected through the Health Outcomes and Patient Experience (HOPE) platform, which can be used for real-time care planning while aligning with the ANZHFR’s yearly reports and monthly data collections.
Workforce education and training

Patients receive high-quality hip fracture care delivered by a local specialist team that is trained in the delivery of orthogeriatrics and hip fracture care.

Key components

Training and education are vital to the upskilling of staff to deliver high-quality care and should be prioritised by health service organisations to ensure equitable care across services. Scaling up and strengthening the quality of health workforce education and training is a priority for healthcare services.

Examples in practice

- Facilities should support and embed into local processes access to fascia iliaca block (FIB) training for staff.
- Facilities should support and embed local processes for delirium risk assessment/identification/management; falls risk assessment/management; and pain assessment/management.

Person-centred care

Health service organisations should consider a patient’s individual needs and preferences, taking into consideration the health, physical functioning, comorbidity, psychological and social needs of the person. Shared decision-making is used when providing information to patients.

Key components

In line with a person-centred approach, care of the patient with a hip fracture should include consumers as partners, including patients in shared decision-making, and ensuring that the care delivered aligns with individual values and goals. Individualised care should include a holistic approach and involve the patient and their family and carers. Carers should be recognised as partners in patient care, and information should be provided to them to support the patient’s care and help them navigate the system. Professional interpreter services must be engaged as needed, and care provided in a culturally sensitive manner.

Shared decision-making involves discussion and collaboration between a patient, their healthcare provider, their family, carer and/or loved ones. It is about bringing together the consumer’s values, goals and preferences with the best available evidence about benefits, risks and uncertainties of treatment, to reach the most appropriate healthcare decisions for that person.

Examples in practice

- Shared decision-making should be used to improve a patient’s knowledge of their options, clarify what matters most to them and allow them to participate in decision making more actively by having accurate expectations of the possible benefits and harms of their options.
Advanced care planning

Advance care planning (ACP) is defined as a process that supports adults in understanding and sharing their personal values, life goals and preferences regarding future medical care.\textsuperscript{20} ACP has been found to positively impact patient experience and quality of end-of-life care.\textsuperscript{5} Family and carers should be involved in this process and provided with information, as appropriate.\textsuperscript{17} ACP can include one or more of the following:

- Conversations between patients and their family, carer and/or health professional
- Patients developing an advance care plan. An advance care plan is the documented outcome of advance care planning. It records preferences of patients about health and treatment goals
- While not appropriate in the acute setting, after hospitalisation patients may also wish to consider appointing an Enduring Guardian (if they have capacity to appoint and/or formalise an advance care directive (should they have capacity to do so)).\textsuperscript{20}

The resuscitation status of all patients with hip fracture is reconfirmed during the World Health Organization (WHO) sign-in undertaken before beginning an operating list, and anaesthetists routinely ascertain and record the patient’s resuscitation status before administering anaesthesia along with any ACP, advance care directives or other relevant documents.\textsuperscript{21}

Key components

A patient’s goals of care should be discussed and incorporated into acute management decisions as well as ACP. This may include providing prognostic information and guidance on functional dependence to the patient.\textsuperscript{20,22} While suitable to any patient, ACP is of greater relevance to older, frailer patients with multiple morbidities, who are at higher risk of serious illness, chronic morbidities and death. As such, patients diagnosed with hip fracture should be offered the opportunity to formulate ACP during their hip fracture journey. The establishment of goals of care and ACP through a multidisciplinary team approach is recommended.

Examples in practice

- Patients should be supported to consider longer term goals following the acute hip fracture period.
- Resuscitation status should be established for patients undergoing hip fracture surgery.

Coordinated care

Individualised care for a patient should be coordinated between the multidisciplinary team, other care providers and family and carers across the inpatient journey.\textsuperscript{23,24} Refer to the clinical practice guide for details of relevant teams that may be involved in care.

Key components

- Patients should have timely access to coordinated care and smooth transitions.
- Care team members should have agreed pre-determined roles and responsibilities.
- Patients and carers should not have to provide the same information to many different staff members.
- The care the patient needs is integrated across all relevant services and tailored to their individual needs.
- Patients and carers are included in the care team by health professionals.\textsuperscript{25}
Examples in practice

- Facilities should support coordinated care for patients to ensure smooth transition from acute care to post-acute care and rehabilitation through to transfer back to the community to prevent service gaps (e.g. public to private services).\textsuperscript{26}
- Coordinated care for discharge planning with multidisciplinary team involvement to ensure all aspects of care are addressed and liaison with community services such as falls prevention, community support services and mental health services.
- Ownership of roles should be established within the facility to prevent discharge issues relating to rehabilitation.

Multidisciplinary care teams

Patients should have access to a multidisciplinary team that works collaboratively to provide care. Access to specialist services should be available as required.\textsuperscript{9} An individual site approach to shared care for patients diagnosed with a hip fracture should be informed by local resources. Refer to the clinical practice guide\textsuperscript{2} for further details about multidisciplinary teams.

Key components

Multidisciplinary teams should:

- address as many aspects of a patient’s care as possible to provide the most comprehensive care possible, at the right place and time for each patient
- provide effective communication and coordination
- have and maintain respect, trust and transparency\textsuperscript{27}
- have executive support to reduce divisions between teams.\textsuperscript{28}

Examples in practice

- Patients should receive multidisciplinary assessment and rehabilitation that aligns with their individual values and goals.\textsuperscript{25}
- Patients with a hip fracture may benefit from input from a wide range of multidisciplinary team members, including, but not limited to:
  - orthopaedic surgical
  - geriatric medicine
  - nursing
  - physiotherapy
  - occupational therapy
  - social work
  - dietetics
  - speech pathology
  - pain management
  - additional medical specialty input, as needed
  - aboriginal liaison officer, where appropriate.
Input will be determined based on individual needs and local resourcing.
- Consider local options that maximise multidisciplinary communication and goal setting, e.g. multidisciplinary rounding, case conferences, journey-board meetings.
Methods

The ACI Orthogeriatric Model of Care Working Group (the working group) developed this document in consultation with clinicians, managers, researchers and ACI team members, and informed by a targeted evidence review and NSW survey of existing orthogeriatric care. These were complemented by Hip Fracture Care Clinical Care Standard and the Australian and New Zealand Guideline for Hip Fracture Care.9,10

The development of this document was informed by the 2021 Evidence Check answering the question ‘What are the key features, effectiveness, opportunities, and challenges in the orthogeriatric model of care?’.

For the Evidence Check, PubMed was searched on the 9 December 2021 using the follow search terms:

((("femoral*"[Title/Abstract] OR "femur*"[Title/Abstract]) AND (head[Title/Abstract] or neck[Title/Abstract] or proximal[Title/Abstract])) AND (fracture*[Title/Abstract])) OR ("hip*[Title/Abstract] OR "femur*"[Title/Abstract] OR "femoral*"[Title/Abstract] OR "trochant*"[Title/Abstract] OR "pertrochant*"[Title/Abstract] OR "intertrochant*"[Title/Abstract] OR "subtrochant*"[Title/Abstract] OR "intracapsular*"[Title/Abstract] OR "extracapsular*"[Title/Abstract]) AND "fracture*[Title/Abstract]) OR ("Femoral Fractures"[MeSH Terms]) AND ("models, organizational"[MeSH Terms] OR "organizational innovation"[MeSH Terms] OR "patient centered care/organization and administration"[MeSH Terms] OR "delivery of health care, integrated"[MeSH Terms] OR "model of care*[Title/Abstract] OR "models of care*[Title/Abstract] OR "care model*[Title/Abstract] OR "care delivery model*[Title/Abstract] OR "organisation of"[Title/Abstract] OR "organisational model*[Title/Abstract] OR "organisational model*[Title/Abstract] OR "organization of"[Title/Abstract] OR "organizational model*[Title/Abstract] OR "organization model*[Title/Abstract] OR "healthcare delivery model*[Title/Abstract] OR "integrated care*[Title/Abstract] OR "integrated model*[Title/Abstract] OR "multidisciplinary*[Title/Abstract] OR "integrated*[Title/Abstract] OR "model*[Title/Abstract] OR "shared care*[Title/Abstract] OR "clinical pathway*[Title/Abstract]) AND ("geriatr*"[Title/Abstract] OR "geriatrics"[MeSH Terms]) AND ("2010/01/01"[Date - Publication] : ":3000"[Date - Publication]) Filters: Humans, English 178 results (orthogeriatr*[Title/Abstract]) AND ("2010/01/01"[Date - Publication] : ":3000"[Date - Publication]) Filters: Humans, English 322 results

Google search terms

Key search terms included “geriatric care”, “orthogeriatric models of care”, “acute geriatric care” and “acute orthogeriatric care”.

The medRxiv database was searched using the following key terms: “care”, “model”, “geriatric medicine” and “orthopaedics”.
Survey of existing orthogeriatric models of care in NSW

A survey was developed by the working group, informed by the Hip Fracture Care Standard and the ANZHFR audit questions,9,10 to explore the existing provision of care to patients with a hip fracture, and barriers and facilitators of best care, across NSW. Through assessment of ANZHFR data and previous stakeholder consultation, potential areas for improvement in hip fracture care were identified and reflected in the survey.29,30 The survey was piloted with the working group before being distributed to all clinical sites which care for patients with acute hip fractures, in electronic and/or paper form as per respondent preference (Appendix 1: Survey; Appendix 2: List of sites).

Findings from this survey can be found in Appendix 3.

Consultation was undertaken with local health districts, specialty health networks, the Hip Fracture Clinical Advisory Group, the Clinical Excellence Commission, relevant ACI networks and professional bodies.
References


7. Support LM. The importance of patient access in healthcare. United States; Call 4 Health: 2022 [cited: 8 Dec 2022]. Available from: https://www.call4health.com/the-importance-of-patient-access-in-healthcare/#:~:text=Quality%20of%20Life,-When%20patients%20have%20good%20access%20to%20healthcare%2C%20they%20are%20more,and%20management%20of%20chronic%20conditions


The Agency for Clinical Innovation (ACI) is the lead agency for innovation in clinical care.

We bring consumers, clinicians and healthcare managers together to support the design, assessment and implementation of clinical innovations across the NSW public health system to change the way that care is delivered.

The ACI’s clinical networks, institutes and taskforces are chaired by senior clinicians and consumers who have a keen interest and track record in innovative clinical care.

We also work closely with the Ministry of Health and the four other pillars of NSW Health to pilot, scale and spread solutions to healthcare system-wide challenges. We seek to improve the care and outcomes for patients by re-designing and transforming the NSW public health system.

Our innovations are:
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