Fall-related hip fracture in NSW
Epidemiology, evidence, practice and the future

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Hip fractures due to falls
Males and females, Australia 1999-2007

Injury research and statistics series no. 56. Cat. no. INJCAT 132.
Australian Institute of Health and Welfare, Canberra.
Rate of Hip Fracture by Place of Residence

Figure 7.9: Age-standardised rates of hip fractures (S72.0–S72.2) due to falls in the home and in aged care facilities, calculated using the estimated population of people resident in the general community and residential care; males and females aged 65+, Australia 2002–2009

Note: Lines represent the modelled rates for the ten-year period, while symbols represent the age-standardised rate value for each year.
Rate of Hip Fracture by State/Territory – 2008-09

Figure 2.7: Age-standardised rates of hip fracture cases (± 95% CI) by state or territory of usual residence, persons aged 65+ 2008-09
Change in Rate of Hip Fracture by State/Territory – 1999-2009

Figure 7.11: Age-standardised rates for hip fractures (S72.0–S72.2) due to falls by state or territory of usual residence; persons aged 65+, 1999-2009

Notes
1. Lines and symbols represent the modelled rates over the ten-year period.
2. Y-axis scale starts at 400, not 0.
Fragility hip fracture rates by year, WA, 1999-2009

Average yearly change:
Indigenous, +6.9% (95%CI 2-12%) vs non-Indigenous, -3.6% (95%CI 3-4%)
Distribution of hospitals in Australia and New Zealand performing hip # surgery

Australian States/Territories:
- 13 Qld
- 37 NSW
- 1 ACT
- 24 VIC
- 3 TAS
- 8 SA
- 6 WA
- 2 NT

New Zealand:
- 15 Nth Island
- 7 Sth Island

North Island
South Island
Recommendations

Recommendation
Offer magnetic resonance imaging (MRI) if hip fracture is suspected despite negative anteroposterior pelvis and lateral hip X-rays. If MRI is not available within 24 hours or is contraindicated, consider computed tomography (CT).

Recommendation
Perform surgery on the day of, or the day after presentation to hospital with a hip fracture.

Recommendation
Schedule hip fracture surgery on a planned operating list where an appropriately skilled team are available to undertake the procedure.
Recommendations

Recommendation
Identify and optimise correctable co-morbidities immediately so that surgery is not delayed by:

- anaemia
- anticoagulation
- volume depletion
- electrolyte imbalance
- uncontrolled diabetes
- uncontrolled heart failure
- correctable cardiac arrhythmia or ischaemia
- acute chest infection
- exacerbation of chronic chest conditions
Recommendations

Recommendation
Assess the patient’s pain:
  immediately upon presentation at hospital and
  within 30 minutes of administering initial analgesia and
  hourly until settled on the ward and
  regularly as part of routine nursing observations throughout admission.

Recommendation
Consider adding nerve blocks if paracetamol and opioids do not provide
sufficient preoperative pain relief, or to limit opioid dosage. Nerve blocks
should be administered by trained personnel. Do not use nerve blocks as a
substitute for early surgery.
Recommendations

Recommendation
Operate on patients with the aim to allow them to fully weight bear (without restriction) in the immediate postoperative period.

Recommendation
Unless medically or surgically contraindicated, mobilisation should start the day after surgery. Offer patients a physiotherapy assessment.

Recommendation
Offer patients mobilisation at least once a day and ensure regular physiotherapy review.
Recommendations

Recommendation
From admission, offer patients a formal, acute orthogeriatric service that includes all of the following:
regular orthogeriatrician assessment
rapid optimisation of fitness for surgery
early identification of individual goals for multidisciplinary rehabilitation to recover mobility and independence, and to facilitate return to prefracture residence and long-term wellbeing.
early identification of most appropriate service to deliver rehabilitation
continued, coordinated, orthogeriatric and multidisciplinary review and discharge planning
liaison or integration with related services, including falls prevention, secondary fracture prevention, mental health, cultural services, primary care and community support services.
NSW Data
PATIENT SAFETY REPORT
FROM REVIEW OF CLINICAL INCIDENT REPORTS

Fractured Hip Surgery in the Elderly

July 2011
Review of RCA Reports

Figure 1: Clinical management sub-classifications assigned by the RCA Review Committee

- Death following a fall
- Diagnosis missed
- Monitoring/observations
- Treatment delayed/inadequate

The diagram shows the frequency of each sub-classification.
Unwarranted Clinical Variation

Clinical Variation - Is everywhere, occurs across all disciplines and practices & arises for a range of valid reasons.

UNWRITTEN CLINICAL VARIATION (UCV):

• most definitions include something like: variation that cannot be explained by the condition or the preference of the patient; it is variation that can only be explained by differences in health system performance (ACQSHC)
• not a new concept
• can reduce safety, quality, performance effectiveness and efficiency outcomes
• is not related to a patient’s clinical status but is embodied in health system performance and clinical practices
Unwarranted Clinical Variation

ACI Reducing UCV Taskforce (formed in OCT 2012):

- Comprises clinicians from many disciplines, data experts (including the BHI and the Sax Institute), the Ministry (including the Chief Nursing and Midwifery Officer), CEC, Cancer Institute & two Chief Executives of LHDs.
- The *purpose* of the Taskforce is to work with clinicians, managers and other stakeholders oversee the development of a system-wide *Strategy to Reduce Unwarranted Clinical Variation*.

4 Key Areas Identified and being progressed:

- Stroke & AMI- BHI: Clinical variation and 30 day mortality rates
- Fractured Neck of Femur
- Low volume, complex cancer surgeries: Pancreas & Oesophagus
The Importance of Credible Data
Unwarranted Clinical Variation

OESOPHAGUS CANCER SURGERIES
Mean procedure volume in NSW, 2005-2008

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<th>Average annual volume</th>
<th>Procedures (n)</th>
<th>Facilities (n)</th>
<th>30-day mortality (%)</th>
<th>90-day mortality (%)</th>
<th>1 year conditional survival</th>
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<td>5</td>
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Unwarranted Clinical Variation

Source: BHI Healthcare in Focus 2012
Hospital (anonymised)

Percentage of hip fracture procedures commenced within first two days†, by NSW hospital, July 2000 to June 2011. Adjusted for age, sex and comorbidity of patient‡.
Standards of Care for Hip Fracture

Minimum Standards of Care for Patients with a Fractured Neck of Femur

1) Orthogeriatric Clinical Management
2) Pain management
3) Patient’s planned surgery was not cancelled
4) Surgery within 48 hours and surgery performed in-hours
5) Rehabilitation within 24 hours post-op
6) Secondary Fracture Prevention
7) Local ownership of data systems/processes to drive performance and improve patient care
Welcome to the first edition of the ANZHFR, launched for 2013 and the first with our new logo and newsletter design.

We are anticipating that 2013 will be a busy year for the group as we continue to promote high quality care for people who sustain a hip fracture and to ensure that the population is seen as a priority area in Australia and New Zealand. Much of our work will focus on the development of Australian and New Zealand Guidelines as well as progressing the pilot work we have been doing around National Hip Fracture Registry. From this, we hope to develop national standards of care for hip fracture management.

Clearly, ANZHFR cannot achieve its goals in isolation, but must work with the rest of the health care system and work with other stakeholders. With the help from NHMRC, we have been able to engage key stakeholders to support the guideline development process and we hope that all stakeholders in this area will continue to be involved.

www.anzhfr.org

The first highlight for the year is the launch of our new website. The content of the website will evolve over time and we are keen to ensure that the resources are actually useful to you. We welcome your comments on how to make improvement and feedback is welcome. One of the most valuable resources on the website is the "Literature mapping" which contains the latest scientific papers in the field of hip fracture care and hip fracture prevention.

An important area in the future will be the creation of a directory of services and resources that might be useful to others. We also hope that others will contribute to the website. Lastly, we would also welcome feedback on other relevant topics.

Australian and New Zealand Guidelines for Hip Fracture Care

November 2012 saw the first meeting of the ANZ Hip Fracture Guidelines Ad-hoc and Working Group. During 2013, this group will be working on high quality guidelines and taking them through a process (ANZPT) that allows us to produce guidelines and recommendations for hip fracture care that are relevant and specific to our Australian and New Zealand context. Committee membership has come largely from the existing ANZHFR Steering Group with the formation of the ANZHFR Working Group. The new group will be tasked with reviewing and updating the guidelines and recommendations in a timely manner. The group will work collaboratively and will be supported by a project assistant.

Facility Level Audit

March 2013

The Australian and New Zealand National Hip Fracture Registry

Our thanks to all of you who have contributed to the Facility Level Audit module. Many hospitals have been involved in this process and we appreciate it. The results have been overwhelming and we hope to publish them in the next issue. We are working to improve the process for the next round and we will be contacting you directly.

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Welcome

Hip fracture asserts a substantial burden on our older people and healthcare budgets.

The quality of hip fracture care provided to sufferers has been shown to be dependent upon orthopaedic and geriatrics service configuration.

In the absence of effective systems of orthopaedic-geriatric co-care, key markers of quality of care - including time to surgery, complication rates, readmission rates and length of stay - have been shown to vary considerably.

The Australian and New Zealand Hip Fracture Registry initiative will improve outcomes through:

- Development of national guidelines and quality standards for care of hip fracture sufferers.
- Establishment of National Hip Fracture Registries that will benchmark quality of care delivered by hospitals against professionally-defined standards.
- Sharing best practice through this website and at events in both countries.

Last Updated on Tuesday, 10 July 2012 09:58

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Patient level pilot sites in NSW
The Future

- Facility level audit report in preparation
- Mortality and time to surgery reports in progress
- Guidelines late 2013
- NSW Standards developed in parallel
- Electronic database development continues
Acknowledgements

- Ministry of Health
- ACI
- ANZHFR

- Sandra O’Rourke
- Justin Zeltzer
- Barbara Toson
- Rebecca Mitchell