ANZHFR
Australian & New Zealand Hip Fracture Registry

Professor Jacqueline Close
Co-Chair ANZ Hip Fracture Registry
Argument for a Registry

- Approx 20,000 new hip fractures each year
- Costs and number set to escalate  \[\text{HIGH VOLUME}\]
- Cost to economy - $1 billion  \[\text{HIGH COST}\]
- Enormous cost to the human
- Guidelines  \[\text{EVIDENCE}\]
- Sentinel event.  \[\text{MEASUREABLE}\]
Clinically owned and driven
Demonstrating Unwarranted Clinical Variation

Funnel plot for 30-day mortality rate following hip-fracture procedure. NSW by facility, Jul 09 - Jun 11. Adjusted for patient comorbidity, age and sex.

NSW average: 7.35%

6.2% v 8.4%

Zeltzer et al MJA 2014
It Takes Time

- Nov 2011 – Interested clinicians came together
- 2012 ANZHFR Steering Group formed
- 2012 Bupa Health Care Grant
- 2014 Published ANZ Guideline for Hip Fracture Care
- 2016 ACSQHC launched Hip Fracture Clinical Care Standard
- 2016 ANZHFR launched first patient level report
Essential Ingredients
Publication Approval

Australian Government
National Health and Medical Research Council

This guideline was approved by the Chief Executive Officer of the National Health and Medical Research Council (NHMRC) on 24 June 2014, under Section 14A of the National Health and Medical Research Council Act 1992. In approving this guideline the NHMRC considers that it meets the NHMRC standard for clinical practice guidelines. This approval is valid for a period of 5 years.

NHMRC is satisfied that it is based on the systematic identification and synthesis of the best available scientific evidence and makes clear recommendations for health professionals practising in an Australian healthcare setting.

This publication reflects the views of the authors and not necessarily the views of the Australian Government.

Endorsements

The following professional bodies and organisations have formally endorsed the Australian and New Zealand Guideline for Hip Fracture Care:

Australasian College for Emergency Medicine
Australasian Faculty of Rehabilitation Medicine
Australian and New Zealand Orthopaedic Nurses Association
Australian and New Zealand Society for Geriatric Medicine
Australian Orthopaedic Association
Carers NSW
New Zealand Orthopaedic Association
Osteoporosis Australia
Osteoporosis New Zealand
Royal Australasian College of Surgeons
Clinical Care Standards

Hip Fracture Care Clinical Care Standard

1. 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.

2. 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.

3. A patient with a hip fracture is offered treatment based on an orthogeriatric model of care as defined in the Australian and New Zealand Guidelines for Hip Fracture Care.

4. 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.

5. 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.

6. 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.

7. 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.

ACSQHC

Time in ED

Use of nerve blocks

Orthogeriatric model of care

Time to surgery

Weight bearing / early mobilisation

Secondary fracture prevention

Transitions in care

Glossy Reports

Australian and New Zealand Hip Fracture Registry, August 2019.
Perform surgery on the day of, or the day after presentation to hospital with a hip fracture.

A patient presenting to hospital with a hip fracture, or sustaining a hip fracture while in hospital, receives surgery within 48hrs, if no clinical contraindication and the patient prefers surgery.

Proportion of patients with a hip fracture receiving surgery within 48hours of presentation with the hip fracture

Patient level data in Registry
25 hospitals  
3519 patients

34 hospitals  
5178 patients

57 hospitals  
9408 patients

67 hospitals  
11995 patients
The Population - Australia

- Mean age 82 years
- 68% female
- 28% from residential aged care facilities
- 37% have pre-existing cognitive decline
- 56% required an assistive device to mobilise
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.
Use of Nerve Blocks

Australian and New Zealand Hip Fracture Registry, August 2019.
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.
Time to Surgery
Welcome to the Australian Hip Fracture Registry for Prince of Wales hospital

<table>
<thead>
<tr>
<th>Hospital Snapshot</th>
<th>Patient Type:</th>
<th>Period:</th>
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</thead>
<tbody>
<tr>
<td>Active Patients</td>
<td>Admitted Via ED</td>
<td>From: 01/01/2019</td>
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<tr>
<td>73</td>
<td>Inpatient Fall</td>
<td>To: 20/11/2019</td>
</tr>
<tr>
<td>2019 Records</td>
<td>Transferred In</td>
<td>This Year</td>
</tr>
<tr>
<td>153</td>
<td>Other/Unknown</td>
<td></td>
</tr>
<tr>
<td></td>
<td>All Records</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Patient Type:</th>
<th>152 records</th>
<th>Time in ED (hrs) [147]</th>
<th>Time to Surgery (hrs) [149]</th>
<th>Acute Length of Stay (days) [148]</th>
<th>Hospital Length of Stay (days) [110]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td></td>
<td>8.61</td>
<td>34.02</td>
<td>9.85</td>
<td>19.87</td>
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<tr>
<td>Median</td>
<td></td>
<td>6.68</td>
<td>29.12</td>
<td>7.30</td>
<td>16.82</td>
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<tr>
<td>Shortest</td>
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<td>0.00</td>
<td>4.47</td>
<td>0.56</td>
<td>0.56</td>
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<tr>
<td>Longest</td>
<td></td>
<td>29.13</td>
<td>149.58</td>
<td>50.12</td>
<td>70.50</td>
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</table>

<table>
<thead>
<tr>
<th>QS1</th>
<th>QS2</th>
<th>QS3</th>
<th>QS4</th>
<th>QS5</th>
<th>QS6</th>
<th>QS7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care at Presentation</td>
<td>Pain Management</td>
<td>Orthogeriatric Model of Care</td>
<td>Timing of Surgery</td>
<td>Mobilisation &amp; Weight Bearing</td>
<td>Minimising Risk of Another Fracture</td>
<td>Transition from Hospital Care</td>
</tr>
<tr>
<td>Cognitive Assessment prior to surgery (152)</td>
<td>Pain Assessment within 30 minutes (152)</td>
<td>Assessed by geriatric medicine (150)</td>
<td>Surgery Within 48 hours (149)</td>
<td>Day 1 Mobilisation Opportunity (148)</td>
<td>Bone Medication on Discharge (151)</td>
<td>Patients returning to Private Residence @ 120 Days (65)</td>
</tr>
<tr>
<td>84%</td>
<td>65%</td>
<td>95%</td>
<td>86%</td>
<td>86%</td>
<td>81%</td>
<td>80%</td>
</tr>
</tbody>
</table>

| Nerve Block before or at surgery (152) | Unrestricted Weight Bearing (149) 94% | New Pressure Injuries (152) 1% | Specialist Falls Assessment (151) 19% | 80% |
Hip Festivals
Funding

- Solid business case
- Engagement of the States
Support to Date

- AOA
- ANZSGM
- OA
- Bupa
- Amgen
- NSW Health
- Queensland Health
- WA Health
- SA Health
- Commonwealth Department of Health
- NeuRA
Conclusions

- Australia and New Zealand have worked in partnership
- Significant progress to date
- Strategy has been crucial
- Important to be opportunistic
- Naming of hospitals is a game-changer
- Marathon not a sprint
Acknowledgements

And everyone who has supported the ANZHFR