NSLHD Hip Fracture eMR Project

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Acknowledgements

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- Stewart Fleming, Webmaster, ANZHFR
- Lyn Olivetti, Jillian Moxey, Anna Butcher, Service Development Managers, Clinical Networks NSLHD
The Problem

- Release of the ACI Minimum standards for the management of hip fracture in the older person in 2014 were the driver for NSLHD to review compliance and identify needs to support implementation.

- Review of an expert group identified that there was no easy way to review performance against the minimum standards across multiple disciplines and multiple sites, due to:
  - Multidisciplinary care being recorded in various data systems and points (surginet, powerchart, paper record,..) by a variety of clinicians.
  - No transparency or integration of data items across disciplines
  - No data governance
  - No reporting function available for combined data items
The Solution

- Rehabilitation & Aged care together with the Surgery & Anaesthesia clinical network identified the need to work towards the development of a hip fracture database for NSLHD that aligns with the ANZHFR data requirements in order to understand current service provision and clinical variations in care in comparison to outlined standards.

- An expert clinician working group was established (ICT, ED, Orthopaedic surgeons, Geriatricians, Operations Manager) that agreed on the need to develop an electronic solution within EMR

Benefits:

- Data collection integrated into electronic record at patient level
- Consistency of data management across the district - clear governance
- Potential options for automation of data entry and automated reporting
- Ability to review data at the site and LHD level
- Potential ability to use report function for direct submission to the ANZHFR
The Process

- Project management overseen by clinical networks
- Support from NSLHD Executive for this work driven by release of Minimum Standards and directive to implement same.
- Support from ACI for Implementation of standards and auditing of compliance.
- Steering group to map data and IT requirements
- Testing of build with stakeholders
- Provision of Training and Education resources
- Implementation support through targeted education of stakeholder departments/wards/clinicians
- Ongoing review of IT solution, upgrade same in line with changes to registry data requirements in conjunction with registry staff

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<td>Pre-Mortem Information</td>
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The Enablers/Barriers

- Identify most appropriate operational processes for data collection, so this can become part of routine care
- Ensure as much automation in data collection as possible to reduce data collection burden.
- Good project management to ensure buy in from all stakeholders (nursing, orthopaedics, orthogeriatrics, operations)
- Reporting option that allows teams to review performance and ask service specific questions - feedback loop
- Patience and tenacity
- eMR Solution is limited by system configuration
- Dedicated resource needed for data collection
- eMR solution reflects only part of the patient journey (fasting, pain review,..)
eMR Build

- eOrder for Hip Fracture Form – identifying clients
- Powerform – multiple sections – single form for visit
  - Admission information
  - Pre-Operative information
  - Operative information
  - Post Operative information
  - Discharge information
### Hip Fracture Admission Information

**Google, Jack**  
**MRN:** 186-84-84  
**DOB:** 05/05/1965  
**AGE:** 63 Years  
**MC:** 99999999999  
**SEX:** M  
**LOC:** 6E ICU RNS ASB, 11, 11I  
**Adm:** 04/06/18 08:00

*Indicates that reference text exists for this field. To access, right click in the field and select "Reference Text".*

**Was patient admitted from Emergency Department of this hospital?**
- Yes
- No transferred from another hospital
- No in-patient fall

**Hospital Transferred from:**

**Admission Date/Time for initial presentation with Hip Fracture:**

**Inpatient Fracture Date / Time:**

### Pre-Fracture Information

**Usual Accommodation:**
- Private residence (including unit in retirement village)
- Residential aged care facility
- Not Known
- Other

**Pre-Fracture Mobility**
- Usually walks without walking aids
- Usually walks with either a stick or crutch
- Usually walks with two aids or frame
- Usually uses a wheelchair / bed bound
- Not Known

**Pre-operative cognitive assessment:**
- Cognition assessed using validated tool and recorded
- Cognition not assessed
- Not known

**Pre-Fracture Cognitive State:**
- Normal cognition
- Impaired cognition or known dementia
- Not assessed
- Not known

**Pre-Admission bone protection medication:**
- No bone protection medication
- Yes - Calcium and/or vitamin D only
- Yes - Bisphosphonates, strontium, denosumab or teriparatide (with or without calcium and/or vitamin D)
- Not known
Did the patient have operative treatment of hip fracture?  
- Yes  
- No

Surgical Information:

- Date/Time of Surgery: 21/08/18 09:57
- Plan Procedure: Left NOF long gamma nail
- Primary Procedure: Insertion of Gamma Nail
- Procedure Consultant: Ellis, Andrew (Senior MO)
- Discharge time from PACU: 13:55
- Senior Anaesthetist: Santoro, Andrea (Senior MO)
- Operative Anaesthetic: General Endotracheal
- Time to Operation from Adm: 22:32 hrs

Type of Operation Performed:
- [Dropdown]

Consultant Surgeon present:
- Yes
- No
- Not known

Type of Anaesthesia
- General anaesthetic
- Spinal/regional anaesthesia
- General and spinal/regional anaesthesia
- Not known

Analgesia - Nerve Block
- Nerve block administered before theatres
- Nerve block administered in theatres
- Both
- Neither
- Not known

Operative treatment of hip fracture

Surgery within 48 hours?
- Yes
- No
Hip Fracture Post-Operative Information

Google, Jack  
52 ARTARMON RD ARTARMON NSW 2064

MRN: 186-84-84  DOB: 06/06/1955  AGE: 63 Years  MC: 9999999999
SEX: M  LOC: 6E ICU RNS ASB: 11, 11

- Unrestricted weight bearing
- Restricted / non weight bearing
- Not known

Did the patient mobilise within 24hrs of operative fixation of hip fracture?
- Yes
- No

- Yes
- No
- Not known

New pressure injuries of the skin

- No assessed
- Assessed and not identified
- Assessed and identified
- Not known

Delirium Assessment

- Yes
- No

Date of first OG Review:

Patient assessed by Orthogeriatrician during admission?
- Yes
- No

If No - Reason?

Specialist Falls Assessment
- No
- Performed during admission
- Awaits falls clinic assessment
- Further intervention not appropriate
- Not relevant
- Not known
### Hip Fracture Discharge Information

**Google**: Jack  
**MRN**: 186-84-84
**DOB**: 05/05/1955  
**AGE**: 63 Years  
**SEX**: M  
**LOC**: 6E ICU RNS  
**MC**: 99999999999  
**Adm**: 04/06/18

- **Hospital Discharge Date**: Not yet discharged
- **Care Type Changes**:
  - 04/09/18 08:00: Full Routine Medical/Surgical Admission  
  - 04/10/18 11:32: Rehabilitation  
  - 08/11/18 08:20: Full Routine Medical/Surgical Admission  
  - 09/11/16 06:40: Rehabilitation  
  - 08/11/18 08:59: Full Routine Medical/Surgical Admission

#### Acute Ward Discharge Date/Time

**Destination on discharge from acute / orthopaedic ward**:
- Private residence (including unit in retirement village)
- Residential aged care facility
- Rehabilitation unit - public
- Rehabilitation unit - private
- Other hospital/ward/specialty
- Deceased
- Not known

#### Bone protection medication at discharge from hospital:
- No bone protection medication
- Yes - Calcium and/or vitamin D only
- Yes - Bisphosphonates, strontium, denosumab or teriparatide (with or without calcium and/or vitamin D)
- Not known

*Please note if medication commenced in Hospital / GP Responsibility on Medication Form for Discharge Referral received by GP.*
Reporting sample:

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<th>TYPE_OF_FRACTURE</th>
<th>ASA_GRADE</th>
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<th>DATE_OF_Surgery_FOR_HIP_FRACTURE</th>
<th>TIME_OF_Surgery_FOR_HIP_FRACTURE</th>
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Questions?