NSLHD Hip Fracture eMR Project

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NSW GOVERNMENT Health
Northern Sydney Local Health District

Acknowledgements

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- Lyn Olivetti, Jillian Moxey, Anna Butcher, Service Development Managers, Clinical Networks NSLHD

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The Problem

Standard 7: Local ownership of data systems/ processes to drive improvements in care

- 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

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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 a electronic solution with in 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

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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

	Name of Field	Type (i.e. Drop Down, AutoFill, Free Text)	Options
Basic Demographics	Facility (i.e. RNSH, Ryde, ...)	Auto Fill	N/A
	Surname	Auto Fill	N/A
	First Name	Auto Fill	N/A
	DOB	Auto Fill	N/A
	Sex	Auto Fill	N/A
	Postcode	Auto Fill	N/A
	Contact #	Auto Fill	N/A
	Hospital MRN	Auto Fill	N/A
	Medicare #	Auto Fill	N/A
	Indigenous Status	Auto Fill	N/A
	Patient Type (i.e. Public, Private, Overseas...)	Auto Fill	N/A
Admission Information	Was patient transferred from another hospital?	Drop Down (one option)	• Yes • No
	• **If YES...**Hospital Transferred From	Free Text	N/A
	• **If YES...**Date of Presentation to other hospital	Free Text (in date format)	XX / XX / XXXX
	• **If YES...**Time of presentation to other hospital	Free Text (in time format)	XX : XX
	Date of Presentation to this hospital ED	Auto Fill	N/A
	Time of Presentation to this hospital ED (triage time)	Auto Fill	N/A
	Date of Discharge from this hospital ED	Auto Fill	N/A
	Time of Discharge from this hospital ED (triage time)	Auto Fill	N/A
	Ward admitted to from ED	???? Auto Fill	N/A
	Inpatient Fracture?	Drop Down (one option)	• Yes • No
	• **If YES...**Date of Fracture	Free Text (in date format)	XX / XX / XXXX
	• **If YES...**Time of Fracture	Free Text (in time format)	XX : XX
Pre Admission Information	Usual Place of Residence	Drop Down Menu (one option)	• Private Residence (including retirement village) • High Level Care • Low Level Care • Not known
	Pre-Morbid Mobility	Drop Down Menu (one option)	• Independent, Nil Aids • Independent, with stick/crutch • Independent, with frame • Independent, with wheelchair

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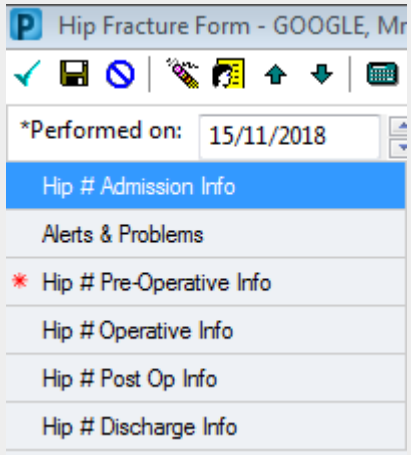
The Enablers/Barriers

- 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



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Hip Fracture Form - GOOGLE, Mr Jack

*Performed on: 15/11/2018 1746

- Hip # Admission Info
- Alerts & Problems
- * Hip # Pre-Operative Info
- Hip # Operative Info
- Hip # Post Op Info
- Hip # Discharge Info

Hip Fracture Admission Information

Google, Jack **MRN:** 186-84-84 **DOB:** 05/05/1955 **AGE:** 63 Years **MC:** 99999999999
52 ARTARMON RD ARTARMON NSW 2064 **SEX:** M **LOC:** 6E ICU RNS ASB; 11; 11I **Adm:** 04/06/18 08:00

i 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 intial presentation with Hip Fracture: **/**/**** **:**

Inpatient Fracture Date / Time : **/**/**** **:** **IIMS Number**

Pre-Fracture Information

Usual Accomodation:
- ○ 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

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Pre-Admission bone protection medication:
- ☐ No bone protection medication
- ☐ Yes - Calcium and/or vitamin D only
- ☐ Yes - Bisphosphonates, strontium, denosumab or teriparitide (with or without calcium and/or vitamin D)
- ☐ Not known

Hip Fracture Form - GOOGLE, Mr Jack

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Hip Fracture Pre-Operative Information

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Pre-Operative Medical Assessment:

(In addition to Orthopaedic and Pre-operative Anaesthetic)

- ☐ No assessment conducted
- ☐ Not Known
- ☐ Geriatrician / Geriatric Team
- ☐ Physician / Physician Team
- ☐ Specialist Nurse
- ☐ GP

Side of Fracture: ○ Left ○ Right

If bilateral fracture please complete separate form for eac

	Left Hip Fracture Details:	Right Hip Fracture Details:
Type of Fracture		
Atypical/Pathological Fracture?		

Pain Assessment

- ☐ Documented assessment of pain within 30 minutes of ED presentation
- ☐ Documented assessment of pain greater than 30 minutes after ED presentation
- ☐ Pain assessment not documented or not done
- ☐ Not known

Pain Management

- ○ Analgesia given within 30 minutes of ED presentation
- ○ Analgesia given more than 30 minutes after ED presentation
- ○ Analgesia provided by paramedics
- ○ Not known

Hip Fracture For

*Performed on: 22/11/2018 1537

- Hip # Admission I
- Alerts & Problems
- Hip # Pre-Operati
- Hip # Operative I
- Hip # Post Op Inf
- Hip # Discharge I

Hip Fracture Operative Information

MRN: 189-09-93 DOB: 29/01/1962 AGE: 56 Years MC: 25464980691
IORTH PARRAMATTA NSW 2151 SEX: M LOC: TRAN LOUNGE RNS ASB; 01; CH15 Adm:
20/08/18 11:38

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

Did the patient have operative treatment of hip fracture?

(•) Yes ( ) No

Surgical Information:

Segoe UI 9

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:

i

Consultant Surgeon present:

( ) Yes ( ) No ( ) Not known

Type of Anaesthesia

( ) General anaesthesic ( ) Not known
( ) Spinal/regional anaesthesia
( ) General and spinal/regional anaesthesia

Analgesia - Nerve Block

( ) Nerve block administered before theatres ( ) Neither
( ) Nerve block administered in theatres ( ) Not known
( ) Both

Operative treatment of hip fracture

Surgery within 48 hours ?

( ) Yes ( ) No

From initial time of presentation to any hospital with this hip fracture, to time of surgery.

(for Operative treatment of hip fracture)

Hip Fracture Form - GOOGLE, Mr Jack

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- Hip # Admission Info
- Alerts & Problems
- Hip # Pre-Operative Info
- Hip # Operative Info
- Hip # Post Op Info
- Hip # Discharge Info

Hip Fracture Post-Operative Information

Google, Jack **MRN:** 186-84-84 **DOB:** 05/05/1955 **AGE:** 63 Years **MC:** 99999999999
52 ARTARMON RD ARTARMON NSW 2064 **SEX:** M **LOC:** 6E ICU RNS ASB; 11; 11I

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

Post-operative immediate weight bearing status

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

Did the patient mobilise within 24hrs of operative fixation of hip fracture ? ○ Yes ○ No *i*

New pressure injuries of the skin ○ Yes ○ No ○ Not known

Delirium Assessment

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

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Patient assessed by Orthogeriatrician during admission ? ○ Yes ○ No

Date of first OG Review: **/**/****

If No - Reason ?

Specialist Falls Assessment

- ○ No
- ○ Performed during admission
- ○ Awaits falls clinic assessment
- ○ Further intervention not appropriate
- ○ Not relevant
- ○ Not known

Hip Fracture Form - GOOGLE, Mr Jack

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- Hip # Admission Info
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- Hip # Pre-Operative Info
- Hip # Operative Info
- Hip # Post Op Info
- Hip # Discharge Info

Hip Fracture Discharge Information

Google, Jack **MRN:** 186-84-84 **DOB:** 05/05/1955 **AGE:** 63 Years **MC:** 99999999999
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08:00

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

To be completed on patient discharge

Hospital Discharge Date: & Care Type Changes:

Not yet discharged

Care Type Changes
04/06/18 08:00 Full Routine Medical/Surgical Admission
04/10/18 11:32 Rehabilitation
06/11/18 08:20 Full Routine Medical/Surgical Admission
06/11/18 08:40 Rehabilitation
06/11/18 08:59 Full Routine Medical/Surgical Admission

Acute Ward Discharge Date/Time **/**/**** **Acute Ward Type**

Destination on discharge from acute / orthopaedic ward:

(Discharge from Acute Hospital)

- ○ 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 teriparitide (with or without calcium and/or vitamin D)
- ☐ Not known

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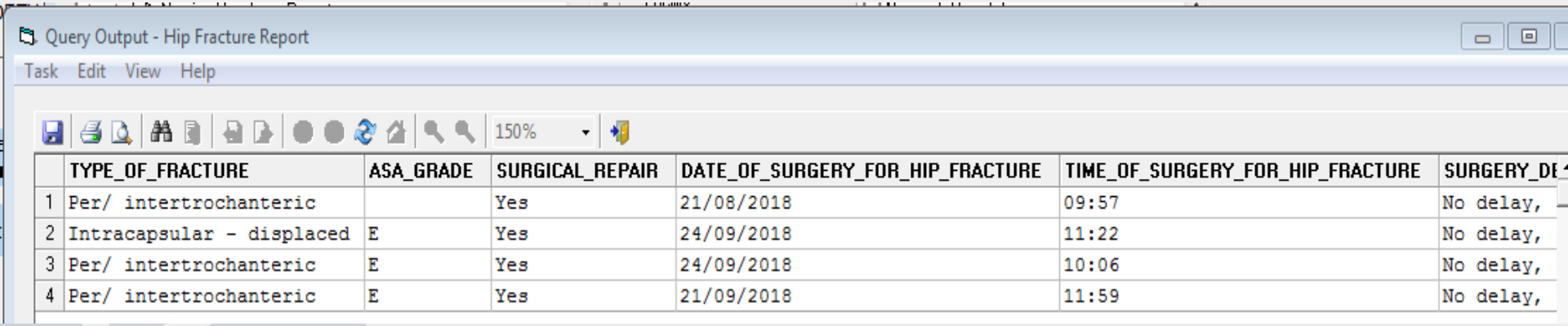
Please note if medication commenced in Hospital / GP Responsibility on Medication Form for Discharge Referral received by GP.

Reporting

- Reporting sample:


Query Output - Hip Fracture Report

Task Edit View Help

150%

	TYPE_OF_FRACTURE	ASA_GRADE	SURGICAL_REPAIR	DATE_OF_SURGERY_FOR_HIP_FRACTURE	TIME_OF_SURGERY_FOR_HIP_FRACTURE	SURGERY_DE
1	Per/ intertrochanteric		Yes	21/08/2018	09:57	No delay,
2	Intracapsular - displaced	E	Yes	24/09/2018	11:22	No delay,
3	Per/ intertrochanteric	E	Yes	24/09/2018	10:06	No delay,
4	Per/ intertrochanteric	E	Yes	21/09/2018	11:59	No delay,

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Questions?

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