



# ANZHF

Australian & New Zealand Hip Fracture Registry

**Data Dictionary**

**Version 9.1**

**September 2016**

## **Australian and New Zealand Hip Fracture Registry**

**Background:** A minimum data set (MDS) was created for the Australian and New Zealand (ANZ) Hip Fracture Registry Steering Group. The purpose of the minimum dataset and registry is to support consistent, local collection of data across Australia and New Zealand to enable facilities to compare practice and outcomes for hip fracture care against national clinical guidelines and standards of care. The MDS has been developed to capture information relevant to ANZ Hip Fracture Guidelines and national Hip Fracture Care Clinical Care Standards and is comparable to the United Kingdom (UK) national hip fracture registry and other registries emerging across the world.

**Purpose:** The ultimate goal of the ANZ Hip Fracture Registry is to use data to improve performance and maximise outcomes for older people who fracture their hip by reducing mortality and morbidity, reducing rates of institutionalisation, maximising functional independence and preventing future fractures by monitoring secondary prevention interventions.

**MDS development:** The MDS has been reviewed by the ANZ Hip Fracture Registry Steering Group, which consists of representatives of key professional and consumer bodies from Australia and New Zealand: Australian and New Zealand Society for Geriatric Medicine (ANZSGM); Australian Orthopaedic Association (AOA); Australian and New Zealand College of Anaesthetists (ANZCA); Australasian College of Emergency Medicine (ACEM); New Zealand Orthopaedic Association (NZOA); Royal Australasian College of Surgeons (RACS); Royal Australasian College of Physicians (RACP); Australian and New Zealand Orthopaedic Nurses Association (ANZONA); Australasian Faculty of Rehabilitation Medicine (AFRM); Osteoporosis Australia (OA); and Osteoporosis New Zealand (ONZ). This version of the ANZHFR Data Dictionary includes data variables for both the Patient Level Audit (the Registry) and the Facility Level Audit (annual snapshot of hospital level processes and protocols).

The data variables collected in the MDS (Patient Level) are from seven (7) key components of care and include: (1) Patient information; (2) Admission; (3) Assessment; (4) Treatment; (5) Discharge; (6) 30 day follow-up; and (7) 120 day follow-up. The data variables collected in the MDS (Facility Level) cover: (1) Hospital Information; (2) Model of Care; (3) Protocols and processes; (4) Beyond the acute hospital stay; (5) Other aspects of care.

### **Core and non-core data items**

Core variables are those variables collected by all using the minimum dataset e.g. date and time of admission, or type of hip fracture, and will be uploaded to the ANZ Hip Fracture Registry (ANZHFR). A number of these items will be considered mandatory for the purposes of forming a meaningful registry. Non-core items are collected at a local level and are held either locally or on the central server, or are generated automatically at a central level using data uploaded.

**Review:** The MDS will be reviewed annually by the ANZHFR Steering Group. It is anticipated that any new item to be added must be presented with a clear case for the benefits of adding it. Equally the Committee will be charged with removing redundant items which are not felt to add value either at a facility or central level.

**Version history:**

<b>Version</b>	<b>Description of Change</b>	<b>Author</b>	<b>Date Changed</b>	<b>Status</b>
1.0	Draft	Rebecca Mitchell	July 2012	Rough draft
2.0	Draft	Rebecca Mitchell	6 Dec 2012	Draft
3.0	Draft	Rebecca Mitchell	8 Jan 2013	Draft
4.0	Draft	Rebecca Mitchell	3 May 2013	Draft
5.0	Draft	Rebecca Mitchell	31 May 2013	Draft
6.0	Penultimate	Rebecca Mitchell	21 June 2013	Draft
7.0	Final	Rebecca Mitchell	5 July 2013	Final
8.0	Revised to ensure data capture consistent with Guideline recommendations	Jacqui Close	4 Dec 2013	Final
8.1	Revised to ensure data capture consistent with Guideline recommendations and the requirement to capture identifying data for follow up and data linkage	Jacqui Close	11 Dec 2013	Final
9.0	Review by the Steering Group against the 2014 ANZ Guidelines for Hip Fracture Care and the 2016 ACSQHC Hip Fracture Care Clinical Care Standard and Indicators; incorporation of definitions for the Facility Level Audit variables	Elizabeth Armstrong	August 2016	Draft
9.1	Revision with Steering Group and Data Committee feedback	Elizabeth Armstrong	September 2016	Final Draft

## List of Data Variables

<b>ANZHFR Patient Level Audit</b> .....	<b>7</b>
<b>Section 1 Patient information</b> .....	<b>7</b>
Unique identifier .....	7
Australian and New Zealand jurisdiction .....	7
First name of patient.....	8
Surname of patient .....	8
Hospital MRN / URN / event number .....	9
Contact telephone number for patient .....	9
Date of birth .....	9
Age derived .....	10
Sex of person .....	10
Australian Indigenous status.....	11
NZ ethnic status .....	11
Patient's postcode .....	12
Medicare number (Australia) / National Health Index (New Zealand).....	12
Patient type .....	13
Usual place of residence .....	14
Statistical linkage key 581 .....	15
<b>Section 2 Admission</b> .....	<b>16</b>
Establishment identifier of operating hospital .....	16
Admission via ED of operating hospital .....	16
Transfer hospital .....	17
ED / hospital arrival date (transfer hospital) .....	17
ED arrival time (transfer hospital).....	18
ED / other ward arrival date (operating hospital) .....	18
ED / other ward arrival time (operating hospital) .....	19
ED departure date (operating hospital).....	19
ED departure time (operating hospital).....	20
In-patient fracture date .....	20
In-patient fracture time .....	20
Pain assessment .....	21
Pain management (operating hospital) .....	21
Ward type .....	22
<b>Section 3 Assessment</b> .....	<b>23</b>
Pre-admission walking ability .....	23
Pre-operative cognitive assessment .....	23
Pre-operative cognitive status .....	24
Bone protection medication at admission.....	25
Pre-operative medical assessment .....	26
Side of hip fracture .....	27
Atypical fracture .....	27
Type of fracture .....	28
Surgical repair .....	28
ASA grade .....	28
<b>Section 4 Treatment</b> .....	<b>29</b>
Date of surgery for hip fracture .....	29

Time of surgery for hip fracture.....	29
Surgery delay .....	30
Surgery delay other text .....	30
Type of anaesthesia .....	31
Analgesia - nerve block .....	31
Consultant surgeon present.....	32
Type of operation performed .....	32
Intraoperative fracture .....	33
Full weight bear .....	33
First day mobilisation.....	34
New pressure injuries of the skin .....	35
Assessed by geriatric medicine .....	36
Geriatric medicine assessment date.....	36
Specialist falls assessment .....	37
Bone protection medication at discharge from acute hospital.....	37
<b>Section 5 Discharge.....</b>	<b>38</b>
Discharge date from acute ward .....	38
Discharge destination from acute orthopaedic episode .....	39
Discharge from hospital date.....	40
Length of stay (operating hospital).....	40
Length of stay (health system).....	41
Discharge place of residence .....	42
<b>Section 6 30 day follow-up.....</b>	<b>43</b>
30 day follow-up date .....	43
Survival at 30 days post-surgery .....	43
Date health system discharge at 30 day follow-up.....	43
Place of residence at 30 day follow-up.....	44
Full weight bear at 30 day follow-up .....	45
Post-admission walking ability at 30 day follow-up.....	45
Bone protection medication at 30 day follow-up.....	46
Re-operation within 30 day follow-up .....	46
<b>Section 7 120 day follow-up .....</b>	<b>47</b>
120 day follow-up date .....	47
Survival at 120 days post-surgery .....	47
Date health system discharge at 120 day follow-up.....	47
Place of residence at 120 day follow-up.....	48
Full weight bear at 120 day follow-up .....	49
Post-admission walking ability at 120 day follow-up.....	49
Bone protection medication at 120 day follow-up.....	50
Re-operation within 120 day follow-up .....	50
<b>ANZHFR Facility Level Audit.....</b>	<b>51</b>
<b>Section 8 Hospital information .....</b>	<b>51</b>
Major trauma centre.....	51
Hip fractures .....	51
<b>Section 9 Model of care .....</b>	<b>52</b>
Orthogeriatric service .....	52
Model of care .....	53
<b>Section 10 Protocols and processes .....</b>	<b>54</b>
Imaging protocol .....	54
Hip fracture pathway .....	54

Venous thromboembolism protocol.....	55
Pain protocol .....	55
Planned theatre list.....	56
Anaesthesia .....	56
Nerve block for pain pre-surgery .....	57
Nerve block for pain post-surgery .....	57
Therapy access .....	58
<b>Section 11 Beyond the Acute Hospital Stay.....</b>	<b>59</b>
Information on treatment and care.....	59
Inpatient rehabilitation.....	59
Home-based rehabilitation .....	60
Injury prevention .....	61
Falls clinic .....	61
Osteoporosis clinic.....	62
Falls and bone health clinic.....	62
Orthopaedic clinic .....	63
Fracture liaison service .....	63
<b>Section 12 Other aspects of care .....</b>	<b>64</b>
Hip fracture data .....	64
Service provision plans.....	64
Service provision plan details .....	64
Service provision barriers .....	65
Service provision barrier details .....	65

## ANZHFR Patient Level Audit

<b>Section 1</b>	<b>Patient information</b>
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<b>Variable Number</b>	1.01
<b>Variable</b>	<b>Unique identifier</b>
<b>Variable Name</b>	ID
<b>Definition</b>	A consecutive number allocated to each record of a hip fracture
<b>Justification</b>	To allow for the identification of records
<b>Format</b>	10 digit numeric
<b>Status</b>	Non-core (created centrally)
<b>Coding Source</b>	
<b>Coding Frame</b>	
<b>DD Comments</b>	This is the unique record number used to identify each record

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<b>Variable Number</b>	1.02
<b>Variable</b>	<b>Australian and New Zealand jurisdiction</b>
<b>Variable Name</b>	Area
<b>Definition</b>	The Australian or New Zealand jurisdiction of the hospital
<b>Justification</b>	To enable the identification of hospitals in Australian and New Zealand jurisdictions
<b>Format</b>	2 digit numeric
<b>Status</b>	Non-core (created centrally)
<b>Coding Source</b>	Adapted from the National Health Data Dictionary, Version 15 (METeOR identifier 269941)
<b>Coding Frame</b>	1 New South Wales 2 Victoria 3 Queensland 4 South Australia 5 Western Australia 6 Tasmania 7 Northern Territory 8 Australian Capital Territory 9 Other Territories (Cocos Keeling Islands, Christmas Island and Jervis Bay Territory) 10 New Zealand
<b>DD Comments</b>	The order used here is the standard for the Australian Bureau of Statistics (ABS).

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<b>Variable Number</b>	1.03
<b>Variable</b>	<b>First name of patient</b>
<b>Variable Name</b>	Name
<b>Definition</b>	First name of the patient
<b>Justification</b>	To allow for checking of duplicate entries for the one person and to contact the patient for the 30 and 120 day follow-up
<b>Format</b>	Character
<b>Status</b>	Core
<b>Coding Source</b>	To allow for checking of duplicate entries for the one person as well as the ability to follow up patient including future data linkage
<b>Coding Frame</b>	Character string
<b>DD Comments</b>	The format should be the same as that indicated by the person (for example written on a form) or in the same format as that printed on an identification card, such as Medicare card, to ensure consistent collection of name data

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<b>Variable Number</b>	1.04
<b>Variable</b>	<b>Surname of patient</b>
<b>Variable Name</b>	Surname
<b>Definition</b>	Surname of the patient
<b>Justification</b>	To allow for checking of duplicate entries for the one person as well as the ability to follow up patient including future data linkage
<b>Format</b>	Character
<b>Status</b>	Core
<b>Coding Source</b>	
<b>Coding Frame</b>	
<b>DD Comments</b>	The format should be the same as that indicated by the person (for example written on a form) or in the same format as that printed on an identification card, such as Medicare card, to ensure consistent collection of name data

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<b>Variable Number</b>	1.05
<b>Variable</b>	<b>Hospital MRN / URN / event number</b>
<b>Variable Name</b>	MRN
<b>Definition</b>	Hospital Medical Record Number
<b>Justification</b>	Unique person-identifier for each patient in each hospital and contributes to collection of information on follow up e.g. re-operation
<b>Format</b>	String XXXXXX[X(14)]
<b>Status</b>	Non-core
<b>Coding Source</b>	
<b>Coding Frame</b>	
<b>DD Comments</b>	Key field: must be entered to create a patient record.  Individual hospitals use their own alphabetic, numeric, or alphanumeric coding systems. With the eventual move to E-Health in Australia, each patient will have a unique id nation-wide. Note: Western Australia uses URN. New Zealand to record the hospital event number.

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<b>Variable Number</b>	1.06
<b>Variable</b>	<b>Contact telephone number for patient</b>
<b>Variable Name</b>	phone
<b>Definition</b>	Contact telephone number of the patient
<b>Justification</b>	To contact the patient for the 30 and 120 day follow-up
<b>Format</b>	10 digit numeric
<b>Status</b>	Non-core
<b>Coding Source</b>	
<b>Coding Frame</b>	
<b>DD Comments</b>	Only record one telephone number. This should be the best land line telephone or mobile phone number to contact the patient for the 30 and 120 day follow-up. Record the prefix plus telephone number without punctuation, for example, 08 8226 6000 or 0417 123456.

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<b>Variable Number</b>	1.07
<b>Variable</b>	<b>Date of birth</b>
<b>Variable Name</b>	DOB
<b>Definition</b>	Date of birth of the patient
<b>Justification</b>	Basic demographic details. Required for probabilistic data linkage
<b>Format</b>	8 digit, date in DDMMYYYY
<b>Status</b>	Core
<b>Coding Source</b>	National Health Data Dictionary, Version 15 (METeOR identifier 287007)
<b>Coding Frame</b>	DD/MM/YYYY
<b>DD Comments</b>	Key field Australia: must be entered to create a patient record. Date not known is recorded as: 99999999

<b>Variable Number</b>	1.08
<b>Variable</b>	<b>Age derived</b>
<b>Variable Name</b>	Age
<b>Definition</b>	Age of the patient in (completed) years at admission
<b>Justification</b>	Basic demographic details
<b>Format</b>	3 digit, N[NN]
<b>Status</b>	Non-core
<b>Coding Source</b>	National Health Data Dictionary, Version 15 (METeOR identifier 303794)
<b>Coding Frame</b>	999 Unknown/Not stated
<b>DD Comments</b>	If age (or date of birth) is unknown or not stated, and cannot be estimated, use Code 999. Age to be calculated automatically from Date of Birth and ED/hospital arrival date (operating hospital) or ED/hospital arrival date (transfer hospital) for patients transferred to an operating hospital

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<b>Variable Number</b>	1.09
<b>Variable</b>	<b>Sex of person</b>
<b>Variable Name</b>	Sex
<b>Definition</b>	Sex of the patient
<b>Justification</b>	Basic demographic details
<b>Format</b>	1 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	National Health Data Dictionary, Version 15
<b>Coding Frame</b>	1 Male 2 Female 3 Intersex or indeterminate 9 Not stated / inadequately described
<b>DD Comments</b>	Key field: must be entered to create a patient record.

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<b>Variable Number</b>	1.10
<b>Variable</b>	<b>Australian Indigenous status</b>
<b>Variable Name</b>	Indig
<b>Definition</b>	Was the patient of Aboriginal or Torres Strait Islander origin?
<b>Justification</b>	Basic demographic details
<b>Format</b>	1 digit numeric, N
<b>Status</b>	Core
<b>Coding Source</b>	National Health Data Dictionary, Version 15 (METeOR identifier 291036)
<b>Coding Frame</b>	1 Aboriginal but not Torres Strait Islander origin 2 Torres Strait Islander but not Aboriginal origin 3 Both Aboriginal and Torres Strait Islander origin 4 Neither Aboriginal or Torres Strait Islander origin 9 Not stated / inadequately described
<b>DD Comments</b>	An Aboriginal or Torres Strait Islander is a person of Aboriginal or Torres Strait Islander descent who identifies as an Aboriginal or Torres Strait Islander and is accepted as such by the community in which he or she lives. Collected Australia only

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<b>Variable Number</b>	1.11
<b>Variable</b>	<b>NZ ethnic status</b>
<b>Variable Name</b>	ethnic
<b>Definition</b>	Was the patient of Māori or Pacific Peoples origin?
<b>Justification</b>	Basic demographic details
<b>Format</b>	1 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	Statistical Standard for Ethnicity, 2005
<b>Coding Frame</b>	1 European 2 Māori 3 Pacific Peoples 4 Asian 5 Middle Eastern / Latin America / African 6 Other Ethnicity 9 Not elsewhere included
<b>DD Comments</b>	There is no classification for people who might identify as more than one ethnicity in New Zealand. Statistics NZ has an algorithm that is used to determine primary ethnic status. The double identification is handled by inviting individuals to record up to 3 ethnicities that they identify with. The algorithm is then used to identify a primary ethnicity. The ethnicity that is derived in the NZ hospital system should be used here as this ethnicity will be the primary ethnicity. Collected New Zealand only.

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<b>Variable Number</b>	1.12
<b>Variable</b>	<b>Patient's postcode</b>
<b>Variable Name</b>	Apostcode
<b>Definition</b>	What was the postcode of the suburb of the usual residence of the patient?
<b>Justification</b>	Basic demographic details
<b>Format</b>	4 digit numeric, {NNNN}
<b>Status</b>	Core
<b>Coding Source</b>	Australia Post or New Zealand Post websites ( <a href="http://www.auspost.com.au">www.auspost.com.au</a> or <a href="http://www.nzpost.co.nz">www.nzpost.co.nz</a> ) provide up-to-date postcodes and localities
<b>Coding Frame</b>	1000 No fixed abode 9998 Overseas 9999 Postcode not known
<b>DD Comments</b>	Use a valid Australian or New Zealand postcode

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<b>Variable Number</b>	1.13
<b>Variable</b>	<b>Medicare number (Australia) / National Health Index (New Zealand)</b>
<b>Variable Name</b>	Medicare
<b>Definition</b>	Patient's Medicare number
<b>Justification</b>	To allow for checking of duplicate entries for the one person and for multiple admissions
<b>Format</b>	Characters, N(11)
<b>Status</b>	Non-core
<b>Coding Source</b>	
<b>Coding Frame</b>	
<b>DD Comments</b>	Enter the full Medicare number for an individual (i.e. family number plus person individual reference number).  Key field New Zealand: must be entered to create a patient record. New Zealand will provide the National Health Index (NHI) which is a unique number assigned to every person who uses health and disability services in New Zealand. New Zealand will use this variable as the main mechanism to identify each patient.

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<b>Variable Number</b>	1.14
<b>Variable</b>	<b>Patient type</b>
<b>Variable Name</b>	ptype
<b>Definition</b>	Payment status
<b>Justification</b>	To identify the source of revenue received by a health industry relevant organisation
<b>Format</b>	3 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	Adapted from the National Health Data Dictionary, Version 15
<b>Coding Frame</b>	1 Public 2 Private 3 Overseas 9 Not known
<b>DD Comments</b>	<p>For New Zealand all surgery for hip fractures takes place in the public sector. There will be the occasional patient from overseas and this should be noted accordingly.</p> <p>In Australia, private sector patients include those with treatment funded by: private health insurance, workers' compensation insurance, motor vehicle third party insurance, other compensation (e.g. Public liability, common law, medical negligence), private households (i.e. self-funded and out-of-pocket expenditure), non-profit institutions serving households, corporations (other than health insurance), other private sector revenue</p> <p>In Australia, public sector patients include those with treatment funded by: Medicare, Pharmaceutical Benefits Scheme and Repatriation Pharmaceutical Benefits Scheme, Department of Veterans' Affairs, National Health and Medical Research Council, Australian Health Care Agreements, other Special Purpose payments, Other Australian Government Departments, State/Territory non-health departments, or other public sector revenue</p>

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<b>Variable Number</b>	1.15
<b>Variable</b>	<b>Usual place of residence</b>
<b>Variable Name</b>	uresidence
<b>Definition</b>	What is the usual place of residence of the patient?
<b>Justification</b>	Type of accommodation before and after admission are collected to compare where the patient has come from (what was their usual accommodation) and where they are going to (what will become their usual accommodation). This is an indicator of patient outcome.
<b>Format</b>	1 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	Adapted from the Australasian Rehabilitation Outcomes Centre Inpatient Dataset, Version 3.0; NSW SNAP Data Collection, Version 4.0
<b>Coding Frame</b>	1 Private residence (including unit in retirement village) 2 Residential aged care facility 3 Other 4 Not known
<b>DD Comments</b>	Record the patient's usual accommodation type at admission. Residential aged care refers to a supported facility that provides accommodation and care for a person on a long-term basis. This may include multi-purpose services in Australia and private hospitals or rest homes in New Zealand. If the patient lives with a relative or in a community group home or boarding house code 'private residence'. If the patient was admitted from respite care, record their usual place of residence when not in respite care.

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<b>Variable Number</b>	1.16
<b>Variable</b>	<b>Statistical linkage key 581</b>
<b>Variable Name</b>	slk581
<b>Definition</b>	A specific code (key) that can be used to bring together two or more records belonging to the same individual. It is represented by a code consisting of characters from the person's surname, first name, date of birth and gender.
<b>Justification</b>	Brings together data from different sources to enable greater understanding of the utilisation of health care and/or services. Clinical quality registries should have the capacity to enhance their value through the use of linkage to other datasets (Australian Commission on Safety and Quality in Health Care Framework for Australian Clinical Quality Registries 2014)
<b>Format</b>	14 Characters XXXXXDDMMYYYYN
<b>Status</b>	Core (created centrally)
<b>Coding Source</b>	National Health Data Dictionary, Version 16 (METeOR identifier 349895)
<b>Coding Frame</b>	
<b>DD Comments</b>	It is represented by a code consisting of the second, third and fifth characters of a person's family name, the second and third letters of the person's given name, the day, month and year when the person was born and the sex of the person, concatenated in that order.  In Australia, the linkage key is designed to make it possible to count number of clients and services they received, without counting the same client more than once. It can also be used for linking to other related data collections. In New Zealand, linkage will use the NHI.

<b>Section 2</b>	<b>Admission</b>
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<b>Variable Number</b>	2.01
<b>Variable</b>	<b>Establishment identifier of operating hospital</b>
<b>Variable Name</b>	Ahoscode
<b>Definition</b>	Name of the operating hospital where the patient received surgery for the hip fracture
<b>Justification</b>	To allow for the identification of the establishment for benchmarking and comparison purposes
<b>Format</b>	Character
<b>Status</b>	Core
<b>Coding Source</b>	
<b>Coding Frame</b>	
<b>DD Comments</b>	Note: For data analysis each hospital will have to be given a unique number

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<b>Variable Number</b>	2.02
<b>Variable</b>	<b>Admission via ED of operating hospital</b>
<b>Variable Name</b>	EDadmit
<b>Definition</b>	Did the patient present directly to the ED of the operating hospital?
<b>Justification</b>	Ability to monitor the time spent in ED.
<b>Format</b>	1 digit
<b>Status</b>	Core
<b>Coding Source</b>	
<b>Coding Frame</b>	1 Yes 2 No transferred from another hospital 3 No was an inpatient fall 9 Other / Not known
<b>DD Comments</b>	If the patient was admitted via the ED of the operating hospital, information on the date and time that the patient arrived and left the ED of the operating hospital will be recorded.

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<b>Variable Number</b>	2.03
<b>Variable</b>	<b>Transfer hospital</b>
<b>Variable Name</b>	Athoscode
<b>Definition</b>	Name of the hospital where the patient first presented and was diagnosed with a hip fracture
<b>Justification</b>	To allow for the identification of the establishment for benchmarking and comparison purposes
<b>Format</b>	Character
<b>Status</b>	Core
<b>Coding Source</b>	
<b>Coding Frame</b>	Not transferred If transferred enter originating hospital name
<b>DD Comments</b>	If the patient has not been transferred, this will need to be indicated by recording 'not transferred'. Note: For data analysis, each hospital will be given a unique number.  If patient is not transferred, data variables 2.04 and 2.05 regarding transfer date/time should be automatically filled in as 'not relevant'

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<b>Variable Number</b>	2.04
<b>Variable</b>	<b>ED / hospital arrival date (transfer hospital)</b>
<b>Variable Name</b>	tarrdate
<b>Definition</b>	Date on which the patient presented to the transferring hospital with a hip fracture
<b>Justification</b>	To enable the identification of the date of arrival in transferring hospital. Will allow for quantification of true time to surgery and overall LOS
<b>Format</b>	8 digit date, date in DDMMYYYY
<b>Status</b>	Core
<b>Coding Source</b>	National Health Data Dictionary, Version 15
<b>Coding Frame</b>	DDMMYYYY
<b>DD Comments</b>	If the patient is transferred several times, this should be the hospital where the patient first presented with the hip fracture.  If the presenting hospital has no ED or the patient wasn't admitted through ED, state the date presenting to the transferring hospital with a hip fracture. If the hip fracture occurred as an in-patient, record the date the fracture was diagnosed. Note: 00000000 indicates that the patient did not present through the ED and 99999998 indicates that patient was not transferred (i.e. not relevant) and 99999999 indicates that the date was not known. To be used in the calculation of time to surgery and total LOS in the health system for the care episode.

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<b>Variable Number</b>	2.05
<b>Variable</b>	<b>ED arrival time (transfer hospital)</b>
<b>Variable Name</b>	tarrtime
<b>Definition</b>	Time at which the patient arrived in the ED of the transferring hospital
<b>Justification</b>	To enable the identification of the time of arrival in the ED
<b>Format</b>	4 digit
<b>Status</b>	Core
<b>Coding Source</b>	National Health Data Dictionary, Version 15
<b>Coding Frame</b>	hhmm
<b>DD Comments</b>	Time is recorded using the 24 hour clock.

If the patient is transferred several times, this should be the hospital where the patient first presented with a hip fracture.

If the presenting hospital has no ED or the patient wasn't admitted through ED, state the time presenting to the transferring hospital with a hip fracture.

If the hip fracture occurred as an in-patient, record the time the fracture was diagnosed.

Note: 0000 indicates that the patient did not present through the ED, 9998 indicates that patient was not transferred (i.e. not relevant), and 9999 indicates that time was not known. To be used in the calculation of total LOS in the health system for the care episode.

<b>Variable Number</b>	2.06
<b>Variable</b>	<b>ED / other ward arrival date (operating hospital)</b>
<b>Variable Name</b>	arrdate
<b>Definition</b>	Date on which the patient arrived in the ED / other ward of the operating hospital
<b>Justification</b>	To enable calculation of age at presentation, time spent in ED, time to surgery and LOS
<b>Format</b>	8 digit date, date in DDMMYYYY
<b>Status</b>	Core
<b>Coding Source</b>	National Health Data Dictionary, Version 15
<b>Coding Frame</b>	DDMMYYYY
<b>DD Comments</b>	If the patient was not admitted through the ED but was transferred from another hospital and admitted directly to a ward of the operating hospital, state the date admitted to the ward of the operating hospital. If the patient was admitted via the ED of the operating hospital, information on the date and time that the patient left the ED of the operating hospital will be recorded. The Australian National Emergency Access Target (NEAT) aims that by 2015, 90% of patients will leave the ED within 4 hours – either by discharge, being admitted to hospital or through transfer to another hospital for treatment ( <a href="http://www.ecinsw.com.au/node/128">http://www.ecinsw.com.au/node/128</a> ). For New Zealand patients are expected to be discharged or admitted to hospital within 6 hours.

<b>Variable Number</b>	2.07
<b>Variable</b>	<b>ED / other ward arrival time (operating hospital)</b>
<b>Variable Name</b>	arrtime
<b>Definition</b>	Time at which the patient arrived at the ED / other ward of the operating hospital
<b>Justification</b>	To enable calculation of time spent in ED, time to surgery and LOS
<b>Format</b>	4 digit
<b>Status</b>	Core
<b>Coding Source</b>	National Health Data Dictionary, Version 15
<b>Coding Frame</b>	hhmm
<b>DD Comments</b>	Time is recorded using the 24 hour clock.

If the patient was not admitted through the ED but was transferred from another hospital and admitted directly to a ward of the operating hospital, state the time admitted to the ward of the operating hospital.

Note: 9999= time not known. If the patient was admitted via the ED of the operating hospital, information on the date and time that the patient left the ED of the operating hospital will be recorded

<b>Variable Number</b>	2.08
<b>Variable</b>	<b>ED departure date (operating hospital)</b>
<b>Variable Name</b>	deptime
<b>Definition</b>	Date on which the patient departed from the ED of the operating hospital
<b>Justification</b>	To enable calculation of time spent in ED, time to surgery and LOS
<b>Format</b>	8 digit date, date in DDMMYYYY
<b>Status</b>	Core
<b>Coding Source</b>	National Health Data Dictionary, Version 15
<b>Coding Frame</b>	DDMMYYYY
<b>DD Comments</b>	Note: 99999999 indicates that the patient did not present through the ED. If the patient was admitted via the ED of the operating hospital, information on the date and time that the patient left the ED of the operating hospital will be recorded

<b>Variable Number</b>	2.09
<b>Variable</b>	<b>ED departure time (operating hospital)</b>
<b>Variable Name</b>	deptime
<b>Definition</b>	Time at which the patient departed from the ED of the operating hospital
<b>Justification</b>	To enable calculation of time spent in ED, time to surgery and LOS
<b>Format</b>	4 digit
<b>Status</b>	Core
<b>Coding Source</b>	National Health Data Dictionary, Version 15
<b>Coding Frame</b>	hhmm
<b>DD Comments</b>	Time is recorded using the 24 hour clock.

Note: 9999= time not known. If the patient was admitted via the ED of the operating hospital, information on the date and time that the patient left the ED of the operating hospital will be recorded.

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<b>Variable Number</b>	2.10
<b>Variable</b>	<b>In-patient fracture date</b>
<b>Variable Name</b>	admdateop
<b>Definition</b>	Date on which the admitted patient commences the episode of care at the operating hospital with radiological-confirmed diagnosis of hip fracture
<b>Justification</b>	To enable the identification of the date of hip fracture occurring as an in-patient and calculation of time to surgery and LOS
<b>Format</b>	8 digit date, date in DDMMYYYY
<b>Status</b>	Core
<b>Coding Source</b>	National Health Data Dictionary, Version 15
<b>Coding Frame</b>	DDMMYYYY
<b>DD Comments</b>	Note: 99999999 = date not known

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<b>Variable Number</b>	2.11
<b>Variable</b>	<b>In-patient fracture time</b>
<b>Variable Name</b>	admtimeop
<b>Definition</b>	24-hour time at which the admitted patient commences the episode of care at the operating hospital with radiological-confirmed diagnosis of hip fracture
<b>Justification</b>	To enable the identification of the time of hip fracture occurring as an in-patient and calculation of time to surgery and LOS
<b>Format</b>	4 digit
<b>Status</b>	Core
<b>Coding Source</b>	National Health Data Dictionary, Version 15
<b>Coding Frame</b>	hhmm
<b>DD Comments</b>	Time is recorded using the 24 hour clock. Note: 9999 = time not known

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<b>Variable Number</b>	2.12
<b>Variable</b>	<b>Pain assessment</b>
<b>Variable Name</b>	painassess
<b>Definition</b>	Did the patient have a documented assessment of pain within 30 minutes of presentation to the emergency department
<b>Justification</b>	Acute pain associated with the hip fracture can have adverse effects on outcome. Hip Fracture Care Clinical Care Standard Indicator 2b.
<b>Format</b>	1 digit
<b>Status</b>	Core
<b>Coding Source</b>	
<b>Coding Frame</b>	1 Documented assessment of pain within 30 minutes of ED presentation 2 Documented assessment of pain greater than 30 minutes of ED presentation 3 Pain assessment not documented or not done 9 Not known
<b>DD Comments</b>	A standardised pain assessment system should be used that specifically addresses the needs of patients with cognitive impairment and those unable to communicate pain. Time to pain assessment in the ED to be identified from clinical notes. Time is calculated from date and time of presentation to the emergency department of the first hospital.

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<b>Variable Number</b>	2.13
<b>Variable</b>	<b>Pain management</b>
<b>Variable Name</b>	painmanage
<b>Definition</b>	Did the patient receive appropriate analgesia within 30 minutes of presentation to the emergency department?
<b>Justification</b>	Acute pain associated with the hip fracture can have adverse effects on outcome. Hip Fracture Care Clinical Care Standard Indicator 2b.
<b>Format</b>	1 digit
<b>Status</b>	Core
<b>Coding Source</b>	
<b>Coding Frame</b>	1 Analgesia given within 30 minutes of ED presentation 2 Analgesia given more than 30 minutes after ED presentation 3 Analgesia provided by paramedics 4 Analgesia not required 9 Not known
<b>DD Comments</b>	Time to analgesia in the ED to be identified from clinical notes. Time is calculated from date and time of presentation to the emergency department of the first hospital.

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<b>Variable Number</b>	2.14
<b>Variable</b>	<b>Ward type</b>
<b>Variable Name</b>	ward
<b>Definition</b>	What type of ward was the patient admitted to from ED?
<b>Justification</b>	To enable the identification of the ward where the patient commenced their episode of care
<b>Format</b>	1 digit
<b>Status</b>	Core
<b>Coding Source</b>	
<b>Coding Frame</b>	1 Hip fracture unit/Orthopaedic ward/ Preferred ward 2 Outlying ward 3 HDU / ICU / CCU 9 Other / Not known
<b>DD Comments</b>	HDU refers to High Dependency Unit. ICU refers to Intensive Care Unit. CCU refers to Coronary Care Unit. An outlying ward refers to a ward not clinically appropriate to meet the patient's current needs.

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<b>Section 3</b>	<b>Assessment</b>
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**Variable Number** 3.01  
**Variable** **Pre-admission walking ability**  
**Variable Name** walk  
**Definition** What was the patient’s walking ability pre-admission?  
**Justification** To enable the identification of the mobility status pre-admission  
**Format** 1 digit numeric  
**Status** Core  
**Coding Source** Adapted from the UK National Hip Fracture Database  
**Coding Frame** 1 Usually walks without walking aids  
2 Usually walks with either a stick or crutch  
3 Usually walks with two aids or frame (with or without assistance of a person)  
4 Usually uses a wheelchair / bed bound  
9 Not known

**DD Comments**

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**Variable Number** 3.02  
**Variable** **Pre-operative cognitive assessment**  
**Variable Name** cogassess  
**Definition** Following admission to hospital, preoperative cognitive status is assessed using a validated tool and recorded in the medical record  
**Justification** Hip fracture patients are at high risk of having an existing cognitive impairment or developing delirium. Cognitive impairment and delirium in these patients is associated with increased morbidity and mortality, and a decrease in rehabilitation potential and return to pre-fracture functioning.  
Care at Presentation Hip Fracture Care Clinical Care Standard Indicator 1b.  
**Format** 1 digit  
**Status** Core  
**Coding Source** Adapted from the UK National Hip Fracture Database  
**Coding Frame** 1 Cognition assessed using validated tool and recorded  
2 Cognition not assessed  
9 Not known

**DD Comments** Some validated tools for assessing cognitive function include:

- Abbreviated Mental Test Score (AMTS) (Hodkinson 1972)
- Standardised Mini-Mental State Examination (SMMSE) (Molloy & Standish 1997)
- Modified Mini Mental State Exam (3MS) (Teng & Chui 1987)
- General Practitioner’s Assessment of Cognition (GPCOG) (Brodaty et al. 2002)
- The 4AT (Bellelli et al. 2014)
- Other tools, such as the Rowland Universal Dementia Assessment Scale (RUDAS) (Storey et al. 2004) and the Kimberly Indigenous Cognitive Assessment (KICA) (LoGiudice et al. 2006), may be more appropriate for some people from culturally and linguistically diverse groups

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<b>Variable Number</b>	3.05
<b>Variable</b>	<b>Pre-operative cognitive status</b>
<b>Variable Name</b>	cogstat
<b>Definition</b>	What was the pre-operative cognitive status of the patient?
<b>Justification</b>	To enable the identification of the pre-operative cognitive status of the patient
<b>Format</b>	1 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	
<b>Coding Frame</b>	1 Normal cognition 2 Impaired cognition or known dementia 8 Not assessed 9 Not known
<b>DD Comments</b>	Record the result of the preoperative cognitive assessment variable 3.02. Normal cognition refers to 'no history of cognitive impairment or dementia'. Impaired cognition or known dementia refers to a 'loss of cognitive ability and/or a decline in memory or other thinking skills severe enough to reduce a person's ability to perform everyday activities' (Alzheimer's Association).

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<b>Variable Number</b>	3.06
<b>Variable</b>	<b>Bone protection medication at admission</b>
<b>Variable Name</b>	bonemed
<b>Definition</b>	Was the patient taking bone protection medication prior to sustaining the hip fracture?
<b>Justification</b>	Ability to monitor use of bone protection medication prior to hip fracture
<b>Format</b>	1 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	Adapted from the UK National Hip Fracture Database
<b>Coding Frame</b>	0 No bone protection medication 1 Yes - Calcium and/or vitamin D only 2 Yes - Bisphosphonates, strontium, denosumab or teriparitide (with or without calcium and/or vitamin D) 9 Not known
<b>DD Comments</b>	Calcium or vitamin D includes Calcitriol, calcium and vitamin D or Alpha-calcidol (or one alpha).  Bisphosphonates includes: Etidronate, Alendronate, Risedronate, Ibandronate, Zoledronate, Pamidronate.

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<b>Variable Number</b>	3.07
<b>Variable</b>	<b>Pre-operative medical assessment</b>
<b>Variable Name</b>	passess
<b>Definition</b>	Who conducted the pre-operative medical assessment apart from anaesthetic and orthopaedic review?
<b>Justification</b>	To determine level of pre-operative medical assessment. Hip Fracture Care Clinical Care Standard Indicator 3a.
<b>Format</b>	1 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	Adapted from the UK National Hip Fracture Database
<b>Coding Frame</b>	0 No assessment conducted 1 Geriatrician / Geriatric Team 2 Physician / Physician Team 3 GP 4 Specialist nurse 9 Not known
<b>DD Comments</b>	The pre-operative assessment is conducted in addition to an anaesthetic review and orthopaedic assessment. If the pre-operative assessment is conducted by a number of assessment team members, select the highest numerical option in the coding frame drop down list eg. the highest numerical option to select is '1' geriatrician.

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<b>Variable Number</b>	3.08
<b>Variable</b>	<b>Side of hip fracture</b>
<b>Variable Name</b>	side
<b>Definition</b>	What was the side of the patient's hip fracture?
<b>Justification</b>	To enable the identification of the side of the hip fracture
<b>Format</b>	1 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	
<b>Coding Frame</b>	1 Left hip fracture 2 Right hip fracture
<b>DD Comments</b>	Key field: must be entered to create a patient record.  If the patient has bilateral hip fractures, a separate record should be created for each fracture.

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<b>Variable Number</b>	3.09
<b>Variable</b>	<b>Atypical fracture</b>
<b>Variable Name</b>	afraction
<b>Definition</b>	Was the type of the patient's hip fracture either pathological or atypical?
<b>Justification</b>	To enable the identification of fractures which are not consistent with the nature of the injury
<b>Format</b>	1 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	Adapted from the UK National Hip Fracture Database
<b>Coding Frame</b>	0 Not a pathological or atypical fracture 1 Pathological fracture 2 Atypical fracture
<b>DD Comments</b>	A pathological fracture is considered to be a fracture that has occurred when a bone breaks in an area that has been weakened by another disease process (except osteoporosis), such as a tumour, infection or an inherited bone disorder.  An atypical fracture is one where the radiologically observed fracture pattern is not consistent with the mechanism of injury described and is not thought to be attributable to a discrete underlying disease process

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<b>Variable Number</b>	3.10
<b>Variable</b>	<b>Type of fracture</b>
<b>Variable Name</b>	ftype
<b>Definition</b>	What was the type of the patient's hip fracture?
<b>Justification</b>	To enable the identification of the type of hip fracture
<b>Format</b>	1 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	Adapted from the UK National Hip Fracture Database
<b>Coding Frame</b>	1 Intracapsular undisplaced/impacted displaced 2 Intracapsular displaced 3 Per/intertrochanteric 4 Subtrochanteric
<b>DD Comments</b>	Basal/basicervical fractures are to the classified as per/intertrochanteric

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<b>Variable Number</b>	3.11
<b>Variable</b>	<b>Surgical repair</b>
<b>Variable Name</b>	surg
<b>Definition</b>	Did the patient undergo surgical repair of the hip fracture?
<b>Justification</b>	To enable quantification of percentage patients undergoing surgery
<b>Format</b>	1 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	Adapted from the UK National Hip Fracture Database
<b>Coding Frame</b>	1 No 2 Yes
<b>DD Comments</b>	

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<b>Variable Number</b>	3.12
<b>Variable</b>	<b>ASA grade</b>
<b>Variable Name</b>	asa
<b>Definition</b>	What is the ASA grade for the patient?
<b>Justification</b>	A marker of disease severity and operative risk and used for case-mix adjustment
<b>Format</b>	1 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	American Society of Anaesthesiologists
<b>Coding Frame</b>	1 healthy individual with no systemic disease 2 Mild systemic disease not limiting activity 3 Severe systemic disease that limits activity but is not incapacitating 4 Incapacitating systemic disease which is constantly life threatening 5 Moribund not expected to survive 24 hours with or without surgery 9 Not known
<b>DD Comments</b>	ASA grade is used in case-mix adjustment for outcome at 30 and 120 days post-surgery

<b>Section 4</b>	<b>Treatment</b>
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<b>Variable Number</b>	4.01
<b>Variable</b>	<b>Date of surgery for hip fracture</b>
<b>Variable Name</b>	sdate
<b>Definition</b>	Date on which the surgery for the hip fracture takes place
<b>Justification</b>	To enable the identification of the date of primary surgery. Hip Fracture Care Clinical Care Standard Indicator 4a.
<b>Format</b>	8 digit date, date in DDMMYYYY
<b>Status</b>	Core
<b>Coding Source</b>	National Health Data Dictionary, Version 15
<b>Coding Frame</b>	DDMMYYYY
<b>DD Comments</b>	If there was no surgery, enter 00000000. Date not known is classified as: 99999999

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<b>Variable Number</b>	4.02
<b>Variable</b>	<b>Time of surgery for hip fracture</b>
<b>Variable Name</b>	stime
<b>Definition</b>	24-hour time at which the surgery for the hip fracture commences. This time is taken from the start of the anaesthetic process.
<b>Justification</b>	To enable the identification of the start time of the primary surgery. Hip Fracture Care Clinical Care Standard Indicator 4a.
<b>Format</b>	4 digit
<b>Status</b>	Core
<b>Coding Source</b>	National Health Data Dictionary, Version 15
<b>Coding Frame</b>	Hhmm
<b>DD Comments</b>	Time is recorded using the 24 hour clock  The time of surgery for the hip fracture is taken from the start of the anaesthetic process. Unknown time is classified as: 9999.

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<b>Variable Number</b>	4.03
<b>Variable</b>	<b>Surgery delay</b>
<b>Variable Name</b>	delay
<b>Definition</b>	What was the primary reason for the delay if the delay was greater than 48 hours from the time of arrival in the emergency department, or diagnosis of a fracture if the fracture occurred as an in-patient?
<b>Justification</b>	Ability to monitor time to surgery as a standard of care
<b>Format</b>	1 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	Adapted from the UK National Hip Fracture Database
<b>Coding Frame</b>	1 No delay, surgery completed <48 hours 2 Yes, delay due to patient deemed medically unfit 3 Yes, delay due to issues with anticoagulation 4 Yes, delay due to theatre availability 5 Yes, delay due to surgeon availability 6 Yes, delay due to delayed diagnosis of hip fracture 7 Other type of delay 9 Not known
<b>DD Comments</b>	<p>Delay is calculated from the time of presentation in the emergency department.</p> <p>A person is considered medically unfit if he/she have acute health-related issues which need to be stabilised/optimised or reversed prior to proceeding with anaesthesia and a surgical procedure.</p>

<b>Variable Number</b>	4.04
<b>Variable</b>	<b>Surgery delay other text</b>
<b>Variable Name</b>	delay_txt
<b>Definition</b>	What was the reason for the other delay, if the delay was greater than 48 hours from the time of arrival in the emergency department?
<b>Justification</b>	Ability to monitor time to surgery as a standard of care
<b>Format</b>	Character
<b>Status</b>	Core
<b>Coding Source</b>	
<b>Coding Frame</b>	
<b>DD Comments</b>	

<b>Variable Number</b>	4.05
<b>Variable</b>	<b>Type of anaesthesia</b>
<b>Variable Name</b>	anaesth
<b>Definition</b>	What type of anaesthesia for the hip fracture surgery?
<b>Justification</b>	Ability to monitor variation, post-operative complications and patient choice
<b>Format</b>	2 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	
<b>Coding Frame</b>	1 General anaesthesia 2 5 Spinal / regional anaesthesia 6 General and spinal/regional anaesthesia 97 Other 99 Not known
<b>DD Comments</b>	CSE=Combined Spinal/Epidural. Recorded in anaesthetic chart

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<b>Variable Number</b>	4.06
<b>Variable</b>	<b>Analgesia - nerve block</b>
<b>Variable Name</b>	analges
<b>Definition</b>	Did the patient have a nerve block?
<b>Justification</b>	Monitoring against Guideline recommendation
<b>Format</b>	2 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	
<b>Coding Frame</b>	1 Nerve block administered before theatres 2 Nerve block administered in theatres 3 Both 4 Neither 97 Other 99 Not known
<b>DD Comments</b>	

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<b>Variable Number</b>	4.07
<b>Variable</b>	<b>Consultant surgeon present</b>
<b>Variable Name</b>	consult
<b>Definition</b>	Was the consultant surgeon operating or assisting with the operation?
<b>Justification</b>	Ability to monitor the impact of consultant surgeon presence on the quality and safety of patient outcome
<b>Format</b>	1 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	
<b>Coding Frame</b>	0 No 1 Yes 9 Not known
<b>DD Comments</b>	Identified by checking if the consultant surgeon is recorded on the operation sheet

<b>Variable Number</b>	4.08
<b>Variable</b>	<b>Type of operation performed</b>
<b>Variable Name</b>	optype
<b>Definition</b>	What type of operation was performed for the hip fracture?
<b>Justification</b>	To enable the identification of the patient's type of hip fracture operation
<b>Format</b>	2 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	Adapted from the UK National Hip Fracture Database
<b>Coding Frame</b>	1 Cannulated screws (e.g. multiple screws) 2 Sliding hip screw 3 Intramedullary nail short 4 Intramedullary nail long 5 Hemiarthroplasty stem cemented 6 Hemiarthroplasty stem uncemented 7 Total hip replacement stem cemented 8 Total hip replacement stem uncemented 97 Other 99 Not known
<b>DD Comments</b>	Intramedullary nail includes: Proximal femoral nail, Antegrade femoral nail, Proximal femoral nail antirotation (PFNA), and Gamma nail.  For cemented versus uncemented procedures, this only includes whether the stem was cemented or not. This does not include whether or not the cup was cemented.  Austin Moore prosthesis to be included in hemiarthroplasty – uncemented.  Sliding hip screws include dynamic hip screws (DHS)



<b>Variable Number</b>	4.09
<b>Variable</b>	<b>Intraoperative fracture</b>
<b>Variable Name</b>	ifract
<b>Definition</b>	Did the operative procedure lead to an intra-operative fracture?
<b>Justification</b>	Ability to monitor the incidence of intra-operative fracture
<b>Format</b>	1 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	
<b>Coding Frame</b>	0 No 1 Yes 8 No operation 9 Not known
<b>DD Comments</b>	An intra-operative fracture is a fracture that occurs unintentionally during the surgical procedure

<b>Variable Number</b>	4.10
<b>Variable</b>	<b>Full weight bear</b>
<b>Variable Name</b>	wbear
<b>Definition</b>	What is the patient's immediate post-operative weight bearing status?
<b>Justification</b>	Ability to monitor variation in practice. Hip Fracture Care Clinical Care Standard Indicator 5b.
<b>Format</b>	1 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	
<b>Coding Frame</b>	0 Unrestricted weight bearing 1 Restricted / non weight bearing 9 Not known
<b>DD Comments</b>	<p>Unrestricted weight bearing refers to a patient who is able to mobilise with full use of the affected limb to weight bear as pain allows.</p> <p>Restricted weight bearing refers to a patient where there is a specific instruction that prevents the patient being allowed to fully utilise the leg irrespective of degree of pain. Restricted weight bearing includes terms such as partial weight bear, touch-weight bear and non-weight bear</p>

<b>Variable Number</b>	4.11
<b>Variable</b>	<b>First day mobilisation</b>
<b>Variable Name</b>	mobil
<b>Definition</b>	Was the patient with a hip fracture provided with the opportunity to be mobilised on day one post hip fracture surgery?
<b>Justification</b>	Hip Fracture Care Clinical Care Standard Indicator 5a. Low mobility during hospitalisation is associated with death, and declining function in activities of daily living at discharge and at one month follow-up, which induces a risk of staying dependent in these activities (Pedersen et al. 2013).
<b>Format</b>	1 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	Adapted from the UK National Hip Fracture Database
<b>Coding Frame</b>	0 Patient out of bed and given opportunity to start mobilising day 1 post surgery 1 Patient not given opportunity to start mobilising day 1 post surgery 9 Not known
<b>DD Comments</b>	<p>Day 1 post-surgery means the next calendar day following the day of the patient's primary surgery for hip fracture.</p> <p>Mobilised means the patient was sat out of bed and given the opportunity to start mobilising on day 1 post hip fracture surgery. Mobility may include getting in/out of bed, standing up from a chair, and/or walking.</p> <p>Patients who have been given the opportunity to mobilise but have refused are included provided both the opportunity to mobilise and their refusal is documented in their medical record.</p>

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<b>Variable Number</b>	4.12
<b>Variable</b>	<b>New pressure injuries of the skin</b>
<b>Variable Name</b>	Pulcers
<b>Definition</b>	Did the patient acquire a new pressure injury (Stage II or above) during their stay in hospital for the treatment of their hip fracture?
<b>Justification</b>	Hip Fracture Care Clinical Care Standard Indicator 5bc Pressure injuries of the skin are potentially preventable. They can affect a person's level of pain, quality of life, cost of care, and mortality.
<b>Format</b>	1 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	Adapted from the UK National Hip Fracture Database
<b>Coding Frame</b>	0 No 1 Yes 9 Not known
<b>DD Comments</b>	<p>A pressure injury is an area of localised damage to the skin and underlying tissue caused by pressure, shear or friction forces, or a combination of these. Grading for pressure ulcers consists of 4 levels:</p> <p>Stage I pressure injury: non-blanchable erythema (intact skin with non-blanchable redness of a localised area usually over a bony prominence).</p> <p>Stage II pressure injury: partial thickness skin loss (Partial thickness loss of dermis presenting as a shallow open ulcer with a red pink wound bed, with slough).</p> <p>Stage III pressure injury: full thickness skin loss (Subcutaneous fat may be visible but bone, tendon, or muscle, are not fully exposed).</p> <p>Stage IV pressure injury: full thickness tissue loss (Full thickness tissue loss with exposed bone, tendon or muscle).</p> <p>The pressure injury classification is from the National Pressure Ulcer Advisory Panel (NPUAP) and European Pressure Ulcer Advisory Panel (EPUAP), Prevention and Treatment of Pressure Ulcers: Clinical Practice Guideline. 2009, Washington DC: NPUAP</p>

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<b>Variable Number</b>	4.13
<b>Variable</b>	<b>Assessed by geriatric medicine</b>
<b>Variable Name</b>	gerimed
<b>Definition</b>	Was the patient assessed by geriatric medicine during the acute phase of the episode of care?
<b>Justification</b>	Ability to monitor quality of care. Hip Fracture Care Clinical Care Standard Indicator 3a.
<b>Format</b>	1 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	
<b>Coding Frame</b>	0 No 1 Yes 8 No geriatric medicine service available 9 Not known
<b>DD Comments</b>	<p>An assessment by geriatric medicine refers to an assessment by a geriatrician or a medical practitioner (Registrar) working under the supervision of a geriatrician</p> <p>The acute phase (IHPA Admitted Hospital Care Types: Guide For Use 2015) is care in which the primary clinical purpose or treatment goal is to:</p> <ul style="list-style-type: none"> <li>• cure illness or provide definitive treatment of injury</li> <li>• perform surgery</li> <li>• relieve symptoms of illness or injury (excluding palliative care)</li> <li>• reduce severity of an illness or injury</li> <li>• protect against exacerbation and/or complication of an illness and/or injury which could threaten life or normal function</li> <li>• perform diagnostic or therapeutic procedures</li> </ul>

<b>Variable Number</b>	4.14
<b>Variable</b>	<b>Geriatric medicine assessment date</b>
<b>Variable Name</b>	gdate
<b>Definition</b>	Date on which an admitted patient was first assessed by geriatric medicine during the acute phase of their episode of care
<b>Justification</b>	To enable the identification of the date of geriatric assessment. Hip Fracture Care Clinical Care Standard Indicator 3a.
<b>Format</b>	8 digit date, date in DDMMYYYY
<b>Status</b>	Core
<b>Coding Source</b>	National Health Data Dictionary, Version 15
<b>Coding Frame</b>	DDMMYYYY
<b>DD Comments</b>	<p>A geriatric assessment is considered to include an assessment by a geriatrician or a medical practitioner (Registrar) working under the supervision of a geriatrician.</p> <p>If no geriatric assessment was conducted enter: 0000000. Date not known is entered as: 99999999</p>

<b>Variable Number</b>	4.15
<b>Variable</b>	<b>Specialist falls assessment</b>
<b>Variable Name</b>	fassess
<b>Definition</b>	Did the patient undergo a specialist falls assessment?
<b>Justification</b>	Ability to monitor secondary hip fracture prevention
<b>Format</b>	1 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	
<b>Coding Frame</b>	0 No 1 Yes performed during admission 2 Yes awaits falls clinic assessment 3 Yes further intervention not appropriate 8 Not relevant, e.g. patient died 9 Not known
<b>DD Comments</b>	A specialist falls assessment includes: a systematic assessment by a suitably trained person (i.e. geriatrician or a specialist assessment trained nurse) which must go over the following domains: (i) falls history (noting previous falls); (ii) cause of index fall (including medication review); (iii) risk factors for falling and injury (including fracture) and from this information formulate and document a plan of action to prevent further falls

<b>Variable Number</b>	4.16
<b>Variable</b>	<b>Bone protection medication at discharge from acute hospital</b>
<b>Variable Name</b>	dbonemed1
<b>Definition</b>	What bone protection medication was the patient using at discharge from acute hospital?
<b>Justification</b>	Ability to monitor use of bone protection medication. Hip Fracture Care Clinical Care Standard Indicator 6a.
<b>Format</b>	1 digit numeric
<b>Status</b>	Code
<b>Coding Source</b>	Adapted from the UK National Hip Fracture Database
<b>Coding Frame</b>	0 No bone protection medication 1 Yes - Calcium and/or vitamin D only 2 Yes - Bisphosphonates, strontium, denosumab or teriparitide (with or without calcium and/or vitamin D) 9 Not known
<b>DD Comments</b>	Calcium or vitamin D includes Calcitriol, calcium and vitamin D or Alpha-calcidol (or one alpha).  Bisphosphonates includes: Etidronate, Alendronate, Risedronate, Ibandronate, Zoledronate, Pamidronate.

<b>Section 5</b>	<b>Discharge</b>
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<b>Variable Number</b>	5.01
<b>Variable</b>	<b>Discharge date from acute ward</b>
<b>Variable Name</b>	wdisch
<b>Definition</b>	Date on which the patient was discharged from an acute ward during their episode of care
<b>Justification</b>	To enable the identification of the date of discharge from an acute ward so as to calculate LOS
<b>Format</b>	8 digit date, date in DDMMYYYY
<b>Status</b>	Core
<b>Coding Source</b>	National Health Data Dictionary, Version 15
<b>Coding Frame</b>	DDMMYYYY
<b>DD Comments</b>	The discharge date refers to the patient physically leaving the acute ward. Record the date the patient was physically discharged from the acute orthopaedic stay. Date not known is entered as: 99999999

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<b>Variable Number</b>	5.02
<b>Variable</b>	<b>Discharge destination from acute orthopaedic episode</b>
<b>Variable Name</b>	wdest
<b>Definition</b>	What is the discharge (geographical) destination of the patient from the acute/ orthopaedic ward?
<b>Justification</b>	To assess patient outcome
<b>Format</b>	2 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	Adapted from the UK National Hip Fracture Database
<b>Coding Frame</b>	1 Private residence (including unit in retirement village) 2 Residential aged care facility 3 Rehabilitation unit public 4 Rehabilitation unit private 5 Other hospital / ward / specialty 6 Deceased 7 Short term care in residential care facility (New Zealand only) 97 Other 99 Not known
<b>DD Comments</b>	<p>Record the patient's discharge destination at discharge from the acute orthopaedic stay. If the patient is discharged to live with a relative or in a community group home or boarding house code 'private residence'. Private rehabilitation units will not be applicable in New Zealand.</p> <p>Residential aged care refers to a supported facility that provides accommodation and care for a person on a long-term basis. This may include multi-purpose services in Australia and private hospitals or rest homes in New Zealand.</p> <p>Short-term care in residential care facility may be relevant if the patient is non-weight bearing, and is used in New Zealand and, to a lesser degree, in Australia. For example, in New Zealand, some District Health Boards have programmes that fund patients who are non-weight bearing to be cared for in a residential care facility. When they are approved by the Orthopaedic Department to fully weight bear they are either admitted to Older Peoples Health for rehabilitation or discharged home.</p>

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<b>Variable Number</b>	5.03
<b>Variable</b>	<b>Discharge from hospital date</b>
<b>Variable Name</b>	hdisch
<b>Definition</b>	Date on which an admitted patient was discharged from the operating hospital following their episode of care
<b>Justification</b>	To enable the identification of the date of discharge from hospital and calculation of LOS
<b>Format</b>	8 digit date, date in DDMMYYYY
<b>Status</b>	Core
<b>Coding Source</b>	National Health Data Dictionary, Version 15
<b>Coding Frame</b>	DDMMYYYY
<b>DD Comments</b>	Date not known is entered as: 99999999 Discharge from hospital date may be the same as discharge from acute ward if patient discharged from hospital system on discharge from acute ward date.

<b>Variable Number</b>	5.04
<b>Variable</b>	<b>Length of stay (operating hospital)</b>
<b>Variable Name</b>	olos
<b>Definition</b>	The length of stay of a patient at the operating hospital, excluding leave days or days before fracture if occurred in hospital, measured in days
<b>Justification</b>	To enable the identification of the length of stay at the operating hospital
<b>Format</b>	3 digit numeric
<b>Status</b>	Non-core
<b>Coding Source</b>	National Health Data Dictionary, Version 15
<b>Coding Frame</b>	NNN
<b>DD Comments</b>	Formula: Length of Stay (LOS) = Separation date - Admission date - Total leave days. The calculation is inclusive of admission and separation dates. LOS will be calculated automatically from the operating hospital separation and admission dates.  If the hip fracture occurred as an in-patient then the length of stay should be from time hip fracture was diagnosed.



<b>Variable Number</b>	5.05
<b>Variable</b>	<b>Length of stay (health system)</b>
<b>Variable Name</b>	TLOS
<b>Definition</b>	The length of stay of a patient from admission/diagnosis of a hip fracture to final date of discharge from an inpatient facility (public or private), excluding leave days, measured in days
<b>Justification</b>	To enable the identification of the total length of stay in the health system
<b>Format</b>	4 digit, unit of measure (day)
<b>Status</b>	Non-core
<b>Coding Source</b>	National Health Data Dictionary, Version 15
<b>Coding Frame</b>	NNNN
<b>DD Comments</b>	<p>Formula: Length of stay (LOS) = Separation date - Admission date - Total leave days. The calculation is inclusive of admission and separation dates.</p> <p>LOS will be calculated automatically from the ED arrival date of the transferring hospital (or the ED arrival date of the operating hospital, if no transfer occurred) and the discharge from hospital date. If the final date of discharge from the hospital system is known, this date should be used.</p> <p>It should be noted that the total length of stay in the hospital system will be difficult to calculate in some jurisdictions, due to differences in treatment settings for rehabilitation-based care.</p>

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<b>Variable Number</b>	5.06
<b>Variable</b>	<b>Discharge place of residence</b>
<b>Variable Name</b>	dresidence
<b>Definition</b>	What is the usual place of residence of the person following discharge from the whole hospital system?
<b>Justification</b>	Type of accommodation before and after admission are collected to compare where the patient has come from (what was their usual accommodation) and where they are going to (what will become their usual accommodation). Comparison of accommodation pre and post admission is an indicator of patient outcome.
<b>Format</b>	1 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	Adapted from Australasian Rehabilitation Outcomes Centre Inpatient Dataset, Version 3.0; NSW SNAP Data Collection, Version 4.0
<b>Coding Frame</b>	1 Private residence (including unit in retirement village) 2 Residential aged care / rest home 3 Deceased 7 Other 9 Not known
<b>DD Comments</b>	Record the patient's accommodation type at discharge from the whole hospital system.  If the patient lives with a relative or in a community group home or boarding house code 'private residence'.  Residential aged care refers to a supported facility that provides accommodation and care for a person on a long-term basis. This may include multi-purpose services in Australia and private hospitals or rest homes in New Zealand.

<b>Section 6</b>	<b>30 day follow-up</b>
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**Variable Number** 6.01  
**Variable** **30 day follow-up date**  
**Variable Name** fdate1  
**Definition** Date on which the 30 day follow-up was completed post the initial hip fracture surgery.  
**Justification** To monitor patient outcomes post-surgery  
**Format** 8 digit date, date in DDMMYYYY  
**Status** Core  
**Coding Source** National Health Data Dictionary, Version 15  
**Coding Frame** DDMMYYYY  
**DD Comments** Date not known is entered as: 99999999

**Variable Number** 6.02  
**Variable** **Survival at 30 days post-surgery**  
**Variable Name** fsurvive1  
**Definition** Is the patient alive at 30 days post-surgery?  
**Justification** To monitor patient outcomes post-surgery. Hip Fracture Care Clinical Care Standard Indicator 8b.  
**Format** 1 digit numeric  
**Status** Core  
**Coding Source**  
**Coding Frame** 0 No  
1 Yes  
9 Not known  
**DD Comments** If the answer is no, variables 6.03 to 6.08 are automatically filled as 'not relevant'

**Variable Number** 6.03  
**Variable** **Date health system discharge at 30 day follow-up**  
**Variable Name** date30  
**Definition** What date was the patient finally discharged from the health system?  
**Justification** To enable the identification of the total length of stay in the health system  
**Format** 8 digit date, date in DDMMYYYY  
**Status** Core  
**Coding Source** National Health Data Dictionary, Version 15  
**Coding Frame** DDMMYYYY  
**DD Comments** If the patient is still in hospital, 00000000 is entered. Date not known is entered as: 99999999

<b>Variable Number</b>	6.04
<b>Variable</b>	<b>Place of residence at 30 day follow-up</b>
<b>Variable Name</b>	fresidence1
<b>Definition</b>	What is the place of residence of the person at 30 days post-surgery?
<b>Justification</b>	To monitor patient outcomes post-surgery
<b>Format</b>	2 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	Adapted from the Australasian Rehabilitation Outcomes Centre Inpatient Dataset, Version 3.0; NSW SNAP Data Collection, Version 4.0
<b>Coding Frame</b>	1 Private residence (including unit in retirement village) 2 Residential aged care / rest home 3 Rehabilitation unit public 4 Rehabilitation unit private 5 Other hospital / ward / specialty 6 Deceased 7 Short term care in residential care facility (New Zealand only) 97 Other 99 Not known
<b>DD Comments</b>	<p>Record the patient's discharge destination at 30 days post-surgery. If the patient is discharged to live with a relative or in a community group home or boarding house code 'private residence'. Private rehabilitation units will not be applicable in New Zealand.</p> <p>Residential aged care refers to a supported facility that provides accommodation and care for a person on a long-term basis. This may include multi-purpose services in Australia and private hospitals or rest homes in New Zealand.</p> <p>Short-term care in residential care facility may be relevant if the patient is non-weight bearing and is used in New Zealand and to a lesser degree in Australia. For example, in New Zealand, some District Health Boards have programmes that fund patients who are non-weight bearing to be cared for in a residential care facility. When they are approved by the Orthopaedic Department to fully weight bear they are either admitted to Older Peoples Health for rehabilitation or discharged home.</p>

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<b>Variable Number</b>	6.05
<b>Variable</b>	<b>Full weight bear at 30 day follow-up</b>
<b>Variable Name</b>	wbearf1
<b>Definition</b>	Is the patient allowed full weight bearing at 30 day follow-up?
<b>Justification</b>	Ability to monitor variation in clinical practice
<b>Format</b>	1 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	
<b>Coding Frame</b>	0 Unrestricted weight bearing 1 Restricted / non weight bearing 8 Not relevant 9 Not known
<b>DD Comments</b>	<p>Unrestricted weight bearing refers to a patient who is able to mobilise with full use of the affected limb to weight bear as pain allows.</p> <p>Restricted weight bearing refers to a patient where there is a specific instruction that prevents the patient being allowed to fully utilise the leg irrespective of degree of pain. Restricted weight bearing includes terms such as partial weight bear, touch-weight bear and non-weight bear</p>

<b>Variable Number</b>	6.06
<b>Variable</b>	<b>Post-admission walking ability at 30 day follow-up</b>
<b>Variable Name</b>	fwalk1
<b>Definition</b>	What was the patient's walking ability at 30 days post-surgery?
<b>Justification</b>	To monitor patient mobility status post-discharge
<b>Format</b>	2 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	Adapted from the UK National Hip Fracture Database
<b>Coding Frame</b>	1 Usually walks without walking aids 2 Usually walks with either a stick or crutch 3 Usually walks with two aids or frame (with or without assistance of a person) 4 Usually uses a wheelchair / bed bound 8 Not relevant 9 Not known
<b>DD Comments</b>	Usually walks with two aids or frame includes with or without assistance of a person

<b>Variable Number</b>	6.07
<b>Variable</b>	<b>Bone protection medication at 30 day follow-up</b>
<b>Variable Name</b>	fbonemed1
<b>Definition</b>	What bone protection medication was the patient using at 30 days post-surgery?
<b>Justification</b>	Ability to monitor use of bone protection medication
<b>Format</b>	1 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	Adapted from the UK National Hip Fracture Database
<b>Coding Frame</b>	0 No bone protection medication 3 Yes - Calcium and/or vitamin D only 4 Yes - Bisphosphonates, strontium, denosumab or teriparitide (with or without calcium and/or vitamin D) 9 Not known
<b>DD Comments</b>	Calcium or vitamin D includes Calcitriol, calcium and vitamin D or Alpha-calcidol (or one alpha).  Bisphosphonates includes: Etidronate, Alendronate, Risedronate, Ibandronate, Zoledronate, Pamidronate.

<b>Variable Number</b>	6.08
<b>Variable</b>	<b>Re-operation within 30 day follow-up</b>
<b>Variable Name</b>	fop1
<b>Definition</b>	What kind of re-operation has been required (if any) for the patient within 30 days post-surgery?
<b>Justification</b>	To monitor patient outcomes post-surgery. Hip Fracture Care Clinical Care Standard Indicator 8a.
<b>Format</b>	2 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	Adapted from the UK National Hip Fracture Database
<b>Coding Frame</b>	0 No reoperation at 30 days post surgery 1 Reduction of dislocated prosthesis 2 Washout or debridement 3 Implant removal 4 Revision of internal fixation 5 Conversion to hemiarthroplasty 6 Conversion to total hip replacement 7 Excision arthroplasty 9 Revision arthroplasty  99 Not known
<b>DD Comments</b>	Option 2 washout or debridement includes liner changes. Note: record the most significant procedure only.

<b>Section 7</b>	<b>120 day follow-up</b>
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**Variable Number** 7.01  
**Variable** **120 day follow-up date**  
**Variable Name** fdate2  
**Definition** Date on which the 120 day follow-up was completed post the initial hip fracture surgery  
**Justification** To monitor patient outcomes post-surgery  
**Format** 8 digit date, date in DDMMYYYY  
**Status** Core  
**Coding Source** National Health Data Dictionary, Version 15  
**Coding Frame** DDMMYYYY  
  
**DD Comments** Date not known is entered as: 99999999

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**Variable Number** 7.02  
**Variable** **Survival at 120 days post-surgery**  
**Variable Name** fsurvive2  
**Definition** Is the patient alive at 120 days post-surgery  
**Justification** To monitor patient outcomes post-surgery  
**Format** 1 digit numeric  
**Status** Core  
**Coding Source**  
**Coding Frame** 0 No  
1 Yes  
9 Not known

**DD Comments**

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**Variable Number** 7.03  
**Variable** **Date health system discharge at 120 day follow-up**  
**Variable Name** date120  
**Definition** What date was the patient discharged from the hospital system?  
**Justification** To enable the identification of the total length of stay in the health system  
**Format** 8 digit date, date in DDMMYYYY  
**Status** Core  
**Coding Source** National Health Data Dictionary, Version 15  
**Coding Frame** DDMMYYYY  
  
**DD Comments** If the patient is still in hospital, 00000000 is entered.

Date not known is entered as: 99999999

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<b>Variable Number</b>	7.04
<b>Variable</b>	<b>Place of residence at 120 day follow-up</b>
<b>Variable Name</b>	fresidence2
<b>Definition</b>	What is the place of residence of the person at 120 days post-surgery?
<b>Justification</b>	To monitor patient outcomes post-surgery. Hip Fracture Care Clinical Care Standard Indicator 7b.
<b>Format</b>	2 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	Adapted from the Australasian Rehabilitation Outcomes Centre Inpatient Dataset, Version 3.0; NSW SNAP Data Collection, Version 4.0
<b>Coding Frame</b>	1 Private residence (including unit in retirement village) 2 Residential aged care / rest home 3 Rehabilitation unit public 4 Rehabilitation unit private 5 Other hospital / ward / specialty 6 Deceased 7 Short term care in residential care facility (New Zealand only) 97 Other 99 Not known
<b>DD Comments</b>	<p>Record the patient's discharge destination at 120 days post-surgery. If the patient is discharged to live with a relative or in a community group home or boarding house code 'private residence'. Private rehabilitation units will not be applicable in New Zealand.</p> <p>Residential aged care refers to a supported facility that provides accommodation and care for a person on a long-term basis. This may include multi-purpose services in Australia and private hospitals or rest homes in New Zealand.</p> <p>Short-term care in residential care facility may be relevant if the patient is non-weight bearing and is used in New Zealand and to a lesser degree in Australia. For example, in New Zealand, some District Health Boards have programmes that fund patients who are non-weight bearing to be cared for in a residential care facility. When they are approved by the Orthopaedic Department to fully weight bear they are either admitted to Older Peoples Health for rehabilitation or discharged home.</p>

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<b>Variable Number</b>	7.05
<b>Variable</b>	<b>Full weight bear at 120 day follow-up</b>
<b>Variable Name</b>	wbearf2
<b>Definition</b>	Is the patient allowed full weight bearing at 120 day follow-up?
<b>Justification</b>	Ability to monitor variation in clinical practice
<b>Format</b>	1 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	
<b>Coding Frame</b>	0 Unrestricted weight bearing 1 Restricted / non weight bearing 8 Not relevant 9 Not known
<b>DD Comments</b>	<p>Unrestricted weight bearing refers to a patient who is able to mobilise with full use of the affected limb to weight bear as pain allows.</p> <p>Restricted weight bearing refers to a patient where there is a specific instruction that prevents the patient being allowed to fully utilise the leg irrespective of degree of pain. Restricted weight bearing includes terms such as partial weight bear, touch-weight bear and non-weight bear</p>

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<b>Variable Number</b>	7.06
<b>Variable</b>	<b>Post-admission walking ability at 120 day follow-up</b>
<b>Variable Name</b>	fwalk2
<b>Definition</b>	What was the patient's walking ability at 120 days post-surgery?
<b>Justification</b>	To monitor patient mobility status post-discharge. Hip Fracture Care Clinical Care Standard Indicator 5d.
<b>Format</b>	2 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	Adapted from the UK National Hip Fracture Database
<b>Coding Frame</b>	1 Usually walks without walking aids 2 Usually walks with either a stick or crutch 3 Usually walks with two aids or frame (with or without assistance of a person) 4 Usually uses a wheelchair / bed bound 8 Not relevant 9 Not known
<b>DD Comments</b>	Usually walks with two aids or frame includes with or without assistance of a person

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<b>Variable Number</b>	7.07
<b>Variable</b>	<b>Bone protection medication at 120 day follow-up</b>
<b>Variable Name</b>	fbonemed2
<b>Definition</b>	What bone protection medication was the patient using at 120 days post-surgery?
<b>Justification</b>	Ability to monitor use of bone protection medication
<b>Format</b>	1 digit numeric
<b>Status</b>	Code
<b>Coding Source</b>	Adapted from the UK National Hip Fracture Database
<b>Coding Frame</b>	0 No bone protection medication 5 Yes - Calcium and/or vitamin D only 6 Yes - Bisphosphonates, strontium, denosumab or teriparitide (with or without calcium and/or vitamin D) 9 Not known
<b>DD Comments</b>	Calcium or vitamin D includes Calcitriol, calcium and vitamin D or Alpha-calcidol (or one alpha).  Bisphosphonates includes: Etidronate, Alendronate, Risedronate, Ibandronate, Zoledronate, Pamidronate.

<b>Variable Number</b>	7.08
<b>Variable</b>	<b>Re-operation within 120 day follow-up</b>
<b>Variable Name</b>	fop2
<b>Definition</b>	What kind of re-operation has been required (if any) for the patient within 120 days post-surgery?
<b>Justification</b>	To monitor patient outcomes post-surgery
<b>Format</b>	2 digit numeric
<b>Status</b>	Core
<b>Coding Source</b>	Adapted from the UK National Hip Fracture Database
<b>Coding Frame</b>	0 No reoperation at 30 days post surgery 1 Reduction of dislocated prosthesis 2 Washout or debridement 3 Implant removal 4 Revision of internal fixation 5 Conversion to hemiarthroplasty 6 Conversion to total hip replacement 7 Excision arthroplasty 9 Revision arthroplasty  99 Not known
<b>DD Comments</b>	Option 2 washout and debridement includes liner change. Note: record the most significant procedure only.

## ANZHFR Facility Level Audit

Hospitals are identified using the variable 2.01: Establishment identifier of operating hospital

<b>Section 8</b>	<b>Hospital information</b>
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Variable #	8.01
Variable	<b>Major trauma centre</b>
Variable Name	maj_trauma_centre
Definition	Is the hospital a designated major trauma centre?
Justification	To identify the Level 1 trauma centres
Format	Numerical, N
Status	non core
Coding Source	
Coding Frame	0 No 1 Yes 9 Not known
FLA Comments	Investigators can determine this using the Australasian trauma verification program manual. The manual is available at: <a href="https://www.surgeons.org/media/21043200/march-2016-trauma-verification-manual.pdf">https://www.surgeons.org/media/21043200/march-2016-trauma-verification-manual.pdf</a>

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Variable #	8.02
Variable	<b>Hip fractures</b>
Variable Name	est_num_b_hipfrac
Definition	Estimated number of hip fractures in the calendar year just ended January to December inclusive
Justification	To estimate the number of hip fractures being treated at the hospital
Format	Numerical, NNNN
Status	core
Coding Source	
Coding Frame	1 0-50 2 51-100 3 101-150 4 151-200 5 201-300 6 301-400 7 401+ 9 Not known
FLA Comments	Record the estimated number of fractures treated annually.

<b>Section 9</b>	<b>Model of care</b>
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Variable #	9.01
Variable	<b>Orthogeriatric service</b>
Variable Name	ogs
Definition	Was there a formal orthogeriatric service in place?
Justification	To determine if there was an orthogeriatric service available for hip fracture patients at the hospital
Format	Numerical, N
Status	core
Coding Source	
Coding Frame	0 No 1 Yes 9 Not known
FLA Comments	Orthogeriatric care involves a shared care arrangement of hip fracture patients between the specialties of orthopaedics and geriatric medicine. The geriatrician is involved in the pre-operative optimisation of the patient in preparation for surgery and then takes a lead in the post-operative medical care and coordinates the discharge planning process. Implicit in this role are many of the aspects of basic care including nutrition, hydration, pressure care, bowel and bladder management, and monitoring of cognition (ANZHFR Guideline 2014, p.68).

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Variable #	9.02
Variable	<b>Model of care</b>
Variable Name	moc
Definition	Select the model of care that best describes the service provided for care of older hip fracture patients in your hospital.
Justification	To determine the model of care used to treat hip fracture patients. Hip Fracture Care Clinical Care Standard Indicator 3a.
Format	Numerical, N
Status	core
Coding Source	
Coding Frame	1 Orthopaedics and Geriatric Medicine shared care 2 Orthogeriatric Liaison Service where Geriatric Medicine provides daily review during working week 3 Medical Liaison Service where Physician or GP provide daily review during working week 4 Orthogeriatric Liaison Service where Geriatric Medicine provides intermittent review once or more per week 5 3 Medical Liaison Service where Physician or GP provides intermittent review once or more per week 6 A geriatric service provided on referral 7 A 3 Medical Service provided on referral 8 No formal service 9 Other 99 Not known
FLA Comments	<p>Documented local arrangements for the management of hip fracture patients according to an orthogeriatric (or alternative physician or medical practitioner) model of care. The documentation should be an agreement showing acceptance of a "shared care" model for all hip fracture patients, and signed by the heads of both Geriatric Medicine and Orthopaedic Surgery.</p> <p>The key features of an orthogeriatric model of care are:</p> <ul style="list-style-type: none"> <li>- regular medical assessment including medication review;</li> <li>- managing patient comorbidities;</li> <li>- optimisation for surgery;</li> <li>- early identification of each patient's goals and care co-ordination. If appropriate and clinically indicated, provision of multidisciplinary rehabilitation aimed at increasing mobility and independence, and to facilitate a return to pre-fracture residence and support long-term wellbeing;</li> <li>- early identification of most appropriate service to deliver rehabilitation, if indicated;</li> <li>- ongoing orthogeriatric and multidisciplinary review including reassessment of cognition after surgery, and discharge planning liaison with primary care, including falls prevention and secondary fracture prevention.</li> </ul>

<b>Section 10</b>	<b>Protocols and processes</b>
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Variable #	10.01
Variable	<b>Imaging protocol</b>
Variable Name	ct_mri
Definition	For a suspected hip fracture, does your hospital have a protocol or pathway for access to CT / MRI for inconclusive plain imaging?
Justification	To determine if the hospital has a protocol for the imaging of patients suspected of having a hip fracture
Format	Numerical, N
Status	core
Coding Source	
Coding Frame	0 No 1 Yes 9 Not known
FLA Comments	CT is Computed Tomography MRI is Magnetic Resonance Imaging  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).

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Variable #	10.02
Variable	<b>Hip fracture pathway</b>
Variable Name	hipfrac_path
Definition	The hospital has a hip fracture pathway that is used for the management of patients admitted with a hip fracture.
Justification	To determine if the hospital has a hip fracture pathway. Hip Fracture Care Clinical Care Standard Indicator 1a.
Format	Numerical, N
Status	core
Coding Source	
Coding Frame	0 No 1 Yes - ED only 2 Yes - whole acute journey 9 Not known
FLA Comments	Evidence of local arrangements for the management of patients with hip fracture in the emergency department. Documented local arrangements for the management of patients with hip fracture in the emergency department that address timely assessment and management of the patient's medical conditions, including but not limited to: diagnostic imaging; pain control; cognitive assessment. The documentation may be in the form of local protocols and/or a clinical pathway.

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Variable #	10.03
Variable	<b>Venous thromboembolism protocol</b>
Variable Name	vte
Definition	Does your hospital have a VTE protocol?
Justification	To determine if the hospital has a VTE protocol for hip fracture patients
Format	Numerical, N
Status	core
Coding Source	
Coding Frame	0 No 1 Yes 9 Not known
FLA Comments	VTE refers to venous thrombo-embolism

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Variable #	10.04
Variable	<b>Pain protocol</b>
Variable Name	pain_path
Definition	Does your hospital have a protocol or pathway for the management of pain in hip fracture patients?
Justification	To determine if the hospital has a pain protocol for hip fracture patients. Hip Fracture Care Clinical Care Standard Indicator 2a.
Format	Numerical, N
Status	core
Coding Source	
Coding Frame	0 No 1 Yes - ED only 2 Yes - whole acute journey 9 Not Known
FLA Comments	<p>Documented local arrangements include a written clinical protocol to ensure patients with a hip fracture receive prompt and effective pain management. The protocol should take into account the hierarchy of pain management medicine for managing pain associated with hip fracture and aim to minimise the use of opioid medicine.</p> <p>Pain should be assessed 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.</p> <p>Protocols should include the use of a standardised pain assessment system, which specifically addresses the assessment of pain for patients with cognitive impairment and those unable to communicate pain, particularly with regard to minimising the use of opioid medicine in this group.</p>

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Variable #	10.05
Variable	<b>Planned theatre list</b>
Variable Name	oplist_planned
Definition	Does your hospital have a planned list / planned trauma list for hip fracture patients?
Justification	To determine if the hospital has access to an appropriately skilled operating team for patients admitted with a hip fracture.
Format	Numerical, N
Status	core
Coding Source	
Coding Frame	0 No 1 Yes 9 Not known
FLA Comments	A planned list or planned trauma list provides access to an appropriately skilled team to undertake the surgical procedure.

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Variable #	10.06
Variable	<b>Anaesthesia</b>
Variable Name	anaes_choice
Definition	Are hip fracture patients routinely offered a choice of anaesthesia?
Justification	To determine if the hospital routinely offers a choice of anaesthesia for hip fracture patients
Format	Numerical, N
Status	core
Coding Source	
Coding Frame	0 Never 1 Rarely 2 Frequently 3 Always 9 Not known
FLA Comments	Patients should be involved in the decision as of the approach to anaesthesia taken. They should be made aware of the potential risks and benefits of both general and regional anaesthesia so as to be able to make an informed decision about their care.

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Variable #	10.07
Variable	<b>Nerve block for pain pre-surgery</b>
Variable Name	nvblock_preop
Definition	Are hip fracture patients offered local nerve blocks as part of pain management prior to surgery?
Justification	To determine if the hospital offers hip fracture patients local nerve blocks as part of pain management pre-surgery
Format	Numerical, N
Status	core
Coding Source	
Coding Frame	0 Never 1 Rarely 2 Frequently 3 Always 9 Not known
FLA Comments	Nerve blocks offer an alternative to systemic analgesia and have the potential to reduce the dose requirements of potent systemic analgesic agents, which may reduce unwanted side effects such as sedation, respiratory complications and delirium.

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Variable #	10.08
Variable	<b>Nerve block for pain post-surgery</b>
Variable Name	nvblock_postop
Definition	Are local nerve blocks used at the time of surgery to help with postoperative pain?
Justification	To determine if the hospital offers hip fracture patients local nerve blocks as part of pain management post-surgery
Format	Numerical, N
Status	core
Coding Source	
Coding Frame	0 Never 1 Rarely 2 Frequently 3 Always 9 Not known
FLA Comments	Nerve blocks offer an alternative to systemic analgesia and have the potential to reduce the dose requirements of potent systemic analgesic agents, which may reduce unwanted side effects such as sedation, respiratory complications and delirium.

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Variable #	10.09
Variable	<b>Therapy access</b>
Variable Name	therapy_we
Definition	Does your hospital offer hip fracture patients routine access to therapy services at weekends?
Justification	To determine if the hospital offers hip fracture patients therapy services at weekends
Format	Numerical, N
Status	core
Coding Source	
Coding Frame	0 No 1 Yes - Physiotherapy only 2 Yes – other 9 Not known
FLA Comments	Early mobilisation is also associated with short term gains related to a reduction in postoperative complications. Unless medically or surgically contraindicated, mobilisation should start the day after surgery. Patients should be offered an opportunity to mobilise at least once a day with regular physiotherapy review ensured.

<b>Section 11</b>	<b>Beyond the Acute Hospital Stay</b>
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Variable # 11.01  
Variable **Information on treatment and care**  
Variable Name hipfrac\_written  
Definition Does your hospital routinely provide patients and/or family and carers with written information about treatment and care for a hip fracture?  
Justification To determine if the hospital routinely provides hip fracture patients and/or their family/carers with written information about their hip fracture treatment and care  
Format Numerical, N  
Status core  
Coding Source  
Coding Frame 0 No  
1 Yes  
9 Not known  
FLA Comments

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Variable # 11.02  
Variable **Inpatient rehabilitation**  
Variable Name inpt\_rehab  
Definition Access to in-patient rehabilitation  
Justification To determine if the hospital provides on- or off-site hip fracture rehabilitation for patients unable to meet the criteria for early supported discharge  
Format Numerical, N  
Status core  
Coding Source  
Coding Frame 1 Onsite  
2 Offsite  
3 Both  
4 No inpatient rehabilitation available  
9 Not known  
FLA Comments Consider in-patient rehabilitation for those in whom further improvement with a structured multidisciplinary programme is anticipated.

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Variable #	11.03
Variable	<b>Home-based rehabilitation</b>
Variable Name	homebased_serv
Definition	Does your hospital have access to an early supported home-based rehabilitation service (not the same as the Commonwealth funded transitional aged care program or community services)?
Justification	To determine if the hospital has access to early supported home-based hip fracture rehabilitation for patients recovering from a hip fracture.
Format	Numerical, N
Status	core
Coding Source	
Coding Frame	0 No 1 Yes 9 Not known
FLA Comments	Early supported discharge should be considered provided the patient is medically stable and has the mental ability to participate in continued rehabilitation and is able to transfer and mobilise short distances and has not yet achieved their full rehabilitation potential, as discussed with the patient, carer and family.

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Variable #	11.04
Variable	<b>Injury prevention</b>
Variable Name	prevention_written
Definition	Does your service provide individualised <u>written</u> information to patients on discharge that includes recommendations for future falls and fracture prevention? (not the same as a copy of a discharge summary)
Justification	To determine if the hospital provides written information to patients on discharge regarding fall and fracture-related injury prevention. Hip Fracture Care Clinical Care Standard Indicator 7a.
Format	Numerical, N
Status	core
Coding Source	
Coding Frame	0 No 1 Yes 9 Not known
FLA Comments	<p>Evidence of local arrangements for the development of an individualised care plan for hip fracture patients prior to the patient's separation from hospital. Documented local arrangements for patients with a hip fracture to have an individualised care plan developed prior to the patients separation from hospital, and provisions to make this available to them (and/or their carer), and to their general practitioner and other ongoing clinical care provider within 48 hours of the patient leaving the hospital.</p> <p>The plan should describe the care received by the patient during their hospital stay and ongoing care and goals of care. The plan must include a summary of any changes to medicines, any new medicines, and equipment and contact details for rehabilitation services they may require. It should also describe mobilisation activities, wound care and function post-surgery, and include information and recommendations for secondary fracture prevention.</p>

Variable #	11.05
Variable	<b>Falls clinic</b>
Variable Name	falls_clinic
Definition	Does your service have access to a Falls Clinic (Public)
Justification	To determine if the hospital has access to a Falls clinic for the prevention of future falls
Format	Numerical, N
Status	core
Coding Source	
Coding Frame	0 No 1 Yes 9 Not known
FLA Comments	

Variable # 11.06  
Variable **Osteoporosis clinic**  
Variable Name op\_clinic  
Definition Does your service have access to an Osteoporosis Clinic (Public)  
Justification To determine if the hospital has access to an osteoporosis clinic for the management of bone health  
Format Numerical, N  
Status core  
Coding Source  
Coding Frame 0 No  
1 Yes  
9 Not known  
FLA Comments

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Variable # 11.07  
Variable **Falls and bone health clinic**  
Variable Name falls\_bone\_clinic\_comb  
Definition Does your service have access to a combined Falls and Bone Health Clinic (Public)  
Justification To determine if the hospital has access to a Falls and Bone Health clinic for the management and prevention of future injury.  
Format Numerical, N  
Status core  
Coding Source  
Coding Frame 0 No  
1 Yes  
9 Not known  
FLA Comments

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Variable # 11.08  
Variable **Orthopaedic clinic**  
Variable Name ortho\_clinic  
Definition Does your service have access to an Orthopaedic Clinic (Public)  
Justification To determine if the hospital has access to an Orthopaedic clinic  
Format Numerical, N  
Status core  
Coding Source  
Coding Frame 0 No  
1 Yes  
9 Not known  
FLA Comments

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Variable # 11.09  
Variable **Fracture liaison service**  
Variable Name fls  
Definition Do you have a Fracture Liaison Service, whereby there is systematic identification of fracture patients by a fracture liaison nurse, with a view to onward referrals and management of osteoporosis?  
Justification To determine if the hospital has access to a fracture liaison service  
Format Numerical, N  
Status core  
Coding Source  
Coding Frame 0 No  
1 Yes – hip fracture patients only  
2 Yes – all fracture patients (including hip)  
9 Not known  
FLA Comments A Fracture Liaison Service may employ health care professionals who are not nurses, such as physiotherapists, and who are called Fracture Liaison Coordinators.

<b>Section 12</b>	<b>Other aspects of care</b>
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Variable # 12.01  
Variable **Hip fracture data**  
Variable Name data\_collect  
Definition Does your hospital routinely collect hip fracture data?  
Justification To determine if the hospital routinely collects hip fracture data to enable review of service provision and outcomes  
Format Numerical, N  
Status core  
Coding Source  
Coding Frame 0 No  
1 ANZ Hip Fracture Registry  
2 Local System  
9 Not known  
FLA Comments

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Variable # 12.02  
Variable **Service provision plans**  
Variable Name serv\_alt\_12mths  
Definition Do you have any plans to alter any of your service provision for hip fracture patients over the next 12 months – if so please give details?  
Justification To determine if the hospital will alter any service provision for hip fracture patients  
Format Numerical, N  
Status non core  
Coding Source  
Coding Frame 0 No  
1 Yes  
9 Not known  
FLA Comments

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Variable # 12.03  
Variable **Service provision plan details**  
Variable Name serv\_alt\_detail  
Definition Type of service provision plans  
Justification To determine the type of service provision changes that are to be made  
Format Text  
Status non core  
Coding Source  
Coding Frame  
FLA Comments

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Variable #	12.04
Variable	<b>Service provision barriers</b>
Variable Name	serv_alt_barriers
Definition	Are there identified barriers to any proposed service redesign?
Justification	To determine if there are any perceived barriers to service provision changes
Format	Numerical, N
Status	non core
Coding Source	
Coding Frame	0 No 1 Yes 9 Not known
FLA Comments	

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Variable #	12.05
Variable	<b>Service provision barrier details</b>
Variable Name	serv_barriers_detail
Definition	Type of barriers to proposed service redesign
Justification	To determine the type of perceived barriers to service provision changes
Format	Text
Status	non core
Coding Source	
Coding Frame	
FLA Comments	