

ANZHFRA Concordance tables

The concordance tables outline modifications to patient-level data variables that have occurred in the ANZHFRA over time.

Section 1

Number	Variable	Old definition	Revised definition			
1.11	NZ ethnicity	Was the patient of Māori or Pacific Peoples origin?	Which ethnic group or groups does the patient belong to? [Added 1 Jan 2022]			
		Old coding frame	Revised coding frame			
		1	European	10	European	
		2	Māori	11	New Zealand European	
		3	Pacific Peoples	12	Other European	
		4	Asian	21	Māori	
		5	Middle Eastern / Latin America / African	30	Pacific peoples not further defined	
		6	Other ethnicity	31	Samoan	
		9	Not elsewhere included		32	Cook Islands Māori
					33	Tongan
					34	Niuean
					35	Tokelauan
					36	Fijian
					37	Other Pacific Peoples
					40	Asian not further defined
					41	Southeast Asian
					42	Chinese
					43	Indian
					44	Other Asian
					51	Middle Eastern
					52	Latin American
					53	African
		61	Other ethnicity			
		94	Don't know			
		95	Refused to answer			
98	Response unidentifiable					
99	Not stated					
			[Added 1 Jan 2022]			
		Old DD comments	Revised DD comments			

		<p>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.</p>	<p>Patients should be asked to self-identify their ethnicity by asking them 'Which ethnic group or groups do you belong to?' For many patients it will not be possible to ask them this during their hospital admission. Therefore, the ethnicity that is recorded in the NZ hospital system should be used. The accuracy of ethnic group(s) can then be clarified at the 120 day follow up phone call. The collector must not limit the number of ethnicities given. Decisions around reporting of ethnic groups will be made in consultation with NZOA Nga Rata Koiwi representative on the NZIMC (New Zealand Implementation Committee). Collected New Zealand only</p> <p>[Added 1 Jan 2022]</p>
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Number	Variable	Definition
1.17	Patient email [New optional variable to enable interoperability with the FFR-added 1 Jan 2023]	Email address of patient or significant other (e.g., Enduring Power of Attorney, or family member).
		Justification
		To contact the patient for follow up and/or to send letters and other information.
		Status
		Optional, non-core

Section 2

Number	Variable	Old coding frame		Revised coding frame	
2.02	Admission via ED of operating hospital	1	Yes	1	Yes
		2	No - transferred from another hospital	2	No - transferred from another hospital (via ED) [Added 1 January 2023]
		3	No - in-patient fall	3	No - in-patient fall
		9	Other / not known	4	No - transferred from another hospital (direct to ward) [Added 1 January 2023]
				9	Other / not known

Number	Variable	
2.12	Pain assessment [New variable added 1 Jan 2017]	

Number	Variable	Old definition		Revised definition	
2.13	Pain management [New variable added 1 Jan 2017]	Did the patient receive appropriate analgesia within 30 minutes of presentation to the emergency department?		Did the patient receive analgesia within 30 minutes of presentation to the emergency department? ['appropriate' removed from 1 Jan 2021]	
		Old coding frame		Revised coding frame	
		1	Analgesia given within 30 minutes of ED presentation	1	Analgesia given within 30 minutes of ED presentation
		2	Analgesia given more than 30 minutes after ED presentation	2	Analgesia given more than 30 minutes after ED presentation
		3	Analgesia provided by paramedics	3	Analgesia not required – already provided by paramedics [Added 1 Jan 2022]
		4	Analgesia not required	4	Analgesia not required – no pain documented on assessment [Added 1 Jan 2022]
		9	Not known	9	Not known

Section 3

Number	Variable	Old DD comments	Revised DD comments
3.01	Pre-admission walking ability	(Blank)	If a person has different levels of mobility on different surfaces then record the level of most assistance. For example, inside their residence a person usually walks without a walking aid but when outside the residence the person usually walks with a frame, then the level of mobility recorded is option 3. [Added 1 Jan 2019]

Number	Variable	Old coding frame		Revised coding frame	
3.02	Pre-operative cognitive assessment [New variable added 1 Jan 2017]	1	Not assessed	1	Not assessed
		2	Cognition assessed using validated tool and recorded [Retired 31 December 2017]	2	Assessed and normal [Added 1 January 2018]
				3	Assessed and abnormal or impaired [Added 1 January 2018]
				9	Not known
		9	Not known		
Classification note:					

Number	Variable
3.04	Preoperative AMTS [Retired 31 Dec 2016]

Number	Variable	Old coding frame		Revised coding frame	
3.05	Pre-admission cognitive status	1	Normal cognition	1	Normal cognition
		2	Impaired cognition or known dementia	2	Impaired cognition or known dementia
		8	Not assessed [Retired 31 December 2017]	9	Not known
		9	Not known		
Classification note: Code '8' in the old coding frame does not equate to any codes in the revised coding frame. Any patient with a code '8' prior to 31 Dec 2017 should be coded '9' for pre-admission cognitive status.					

Number	Variable	Old coding frame		Revised coding frame	
3.06	Bone protection medication at admission	0	No bone protection medication	0	No bone protection medication
		1	Yes calcium and/or vitamin D only	1	Yes - Calcium and/or vitamin D only
		2	Yes bisphosphonates, denosumab or teriparatide (with or without calcium and/or vitamin D) [strontium removed from 1 January 2020]	2	Yes - Bisphosphonates, denosumab, romosozumab or teriparatide (with or without calcium and/or vitamin D) [romosozumab added 1 Jan 2022]
		9	Not known	9	Not known

Number	Variable	Old coding frame		Revised coding frame	
3.11	Surgical repair	1	No [retired 31 Dec 2020]		
		2	Yes	2	Yes
				3	No- surgical fixation not clinically indicated [Added 1 Jan 2021]
				4	No- patient for palliation [Added 1 Jan 2021]
				5	No- other reason [Added 1 Jan 2021]

Number	Variable	Definition	
3.13	Clinical Frailty Scale [New variable added 1 Jan 2021]	What was the patient's pre-injury frailty status?	
		Justification	
		To enable the identification of the patient's frailty status prior to their hip fracture as a person's level of frailty impacts outcomes. .	
		Coding source	
		Rockwood Clinical Frailty Scale	
		Coding frame	
		1	Very fit
		2	Well
		3	Well, with treated comorbid disease
		4	Vulnerable
		5	Mildly frail
		6	Moderately frail
		7	Severely frail
		8	Very severely frail
		9	Terminally ill
		99	Not known
DD comments			
NOTE: the Clinical Frailty Scale applies to the person's usual status prior to the hip fracture. Where the person has dementia or delirium the information will need to be provided by an informant who knows the person well.			
Coding Frame Definitions			
1 Very fit - robust, active, energetic and well-motivated. Exercise regularly and are among the fittest for their age.			
2 Well - without active disease symptoms but are less fit than category 1. Exercise occasionally.			

		<p>3 Well with treated comorbid disease - disease symptoms are well controlled compared to category four. Not regularly active beyond routine walking.</p> <p>4 Vulnerable - not dependent on others for daily help, but symptoms limit activities. Common complaint is being 'slowed up' or being tired during the day.</p> <p>5 Mildly frail - more evident slowing, and need help in instrumental activities of daily living (e.g. heavy housework, medications, transportation, shopping, using the phone, managing finances, meal preparation).</p> <p>6 Moderately frail - need help with both instrumental and non-instrumental activities of daily living. Includes mobility in bed, transferring on/off chairs, toilets and into/out of bed, walking, dressing, eating, toilet use, personal hygiene, bathing.</p> <p>7 Severely frail - completely dependent on others for all activities of daily living for whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months).</p> <p>8 Very severely frail - completely dependent on others for all activities of daily living, approaching the end of life. Typically, they could not recover even from a minor illness.</p> <p>9 Terminally ill - approaching the end of life. Applies to people with a life expectancy <6 months who are not otherwise evidently frail.</p>
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Section 4

Number	Variable	Old coding frame		Revised coding frame	
4.03	Surgery delay	1	No delay, surgery completed <48 hours	1	No delay, surgery completed <48 hours
		2	Delay due to patient deemed medically unfit	2	Delay due to patient deemed medically unfit
		3	Delay due to issues with anticoagulation	3	Delay due to issues with anticoagulation
		4	Delay due to theatre availability	4	Delay due to theatre availability
		5	Delay due to surgeon availability	5	Delay due to surgeon availability
		7	Other type of delay	6	Delay due to delayed diagnosis of hip fracture [Added 1 Jan 2017]
		9	Not known	7	Other type of delay
				9	Not known
		Old DD comments		Revised DD comments	
		<p>Delay is calculated from the time of presentation in the emergency department of the first hospital.</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>		<p>Delay is calculated from the time of presentation in the emergency department of the first hospital.</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> <p>If there is more than one delay to surgery, choose the reason for the first delay.</p> <p>[Added 1 Jan 2019]</p>	

Number	Variable	Old coding frame		Revised coding frame	
		1	General anaesthesia	1	General anaesthesia
4.05	Type of anaesthesia	5	Spinal / regional anaesthesia		
		97	Other	5	Spinal / regional anaesthesia
		99	Not known	6	General and spinal / regional anaesthesia [Added 1 Jan 2017]
				97	Other
				99	Not known

Number	Variable	Old DD comments	Revised DD comments
4.07	Consultant surgeon present	Identified by checking if the consultant surgeon is recorded on the operation sheet	To record yes, consultant must be scrubbed and operating. This variable can be found by checking if the consultant surgeon is recorded on the operation sheet [Added 1 Jan 2021]

Number	Variable
4.09	Intraoperative fracture [Retired 31 Dec 2017]

Number	Variable	Old coding frame		Revised coding frame	
4.11	First mobilisation	0	Patient out of bed and given opportunity to start mobilising day 1 post surgery	0	Patient given opportunity to start mobilising day 1 post surgery [Amended 1 Jan 2019]
		1	Patient not given opportunity to start mobilising day 1 post surgery	1	Patient not given opportunity to start mobilising day 1 post surgery
		9	Not known	9	Not known
		Old DD comments		Revised DD comments	
		Day 1 post-surgery means the next calendar day following the day of the patient's primary surgery for hip fracture. 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. Patients who have been given the opportunity to mobilise but are determined by the clinical team to be too unwell to mobilise are included provided both the opportunity to mobilise and the clinical determination are documented in the medical record. Patients that have declined to mobilise are included provided both the opportunity to mobilise and the reason for declining are documented in the medical record.	Day 1 post-surgery means the next calendar day following the day of the patient's primary surgery for hip fracture. This means the patient was given the opportunity to start mobilising on day 1 post hip fracture surgery. Mobilising may include transferring in/out of bed, stepping, or walking. Patients who have been given the opportunity to mobilise but are determined by the clinical team to be too unwell to mobilise are included provided both the opportunity to mobilise and the clinical determination are documented in the medical record. Patients that have declined to mobilise are included provided both the opportunity to mobilise and the reason for declining are documented in the medical record. Pedersen MM, Bodilsen AC, Petersen J, Beyer N, Andersen O, Lawson-Smith L, et al. 2013. Twenty-four-hour mobility during acute hospitalization in older medical patients. The Journals of Gerontology Series A: Biological Sciences and Medical Sciences 68(3):331-7. [Added 1 Jan 2020, revised 1 Jan 2022]		

Number	Variable	Old DD comments	Revised DD comments
4.15	Specialist falls assessment	A specialist falls assessment includes: a systematic assessment by a suitably trained person (i.e. geriatrician or a specialist assessment trained	A specialist falls assessment is undertaken by a multidisciplinary team and includes a systematic assessment by a suitably trained person (i.e. geriatrician or a

		<p>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</p>	<p>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 an individualised plan of action to prevent further falls. A specialist falls assessment is not a screening tool [Added 1 Jan 2019]</p>
		<p>A specialist falls assessment is undertaken by a multidisciplinary team and 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 an individualised plan of action to prevent further falls. A specialist falls assessment is not a screening tool</p>	<p>A specialist falls assessment is undertaken by a multidisciplinary team and 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 an individualised plan of action to prevent further falls. A specialist falls assessment is not a screening tool.</p> <p>Example 1: Patient admitted with a hip fracture and managed surgically. During the post-operative period in the acute ward, a specialist falls assessment was commenced with documented assessment of falls risk and medication review. In the medical record there was a documented referral to the specialist falls service to be actioned on discharge from acute care. Option 2 would be selected.</p> <p>Example 2: Patient admitted with a hip fracture and managed surgically. During the post-operative period in the acute ward, a specialist falls assessment was commenced with documented assessment of falls risk factors, falls history and cause of index fall. There was no other documentation of assessment or referral. Option 0 would be selected. [Added 1 Jan 2020]</p>

Number	Variable	Old coding frame		Revised coding frame	
4.16	Bone protection medication at discharge from acute hospital	0	No bone protection medication	0	No bone protection medication
		1	Yes calcium and/or vitamin D only	1	Yes - Calcium and/or vitamin D only
		2	Yes bisphosphonates, denosumab or teriparatide (with or without calcium and/or vitamin D) [strontium removed from 1 January 2020]	2	Yes - Bisphosphonates, denosumab, romosozumab or teriparatide (with or without calcium and/or vitamin D) [romosozumab added 1 Jan 2022]
		9	Not known	9	Not known

Number	Variable	Old DD comments	Revised DD comments
4.17	Delirium assessment [New variable added 1 Jan 2018]	<p>Assessment of delirium requires the use of a validated tool. There are a range of validated diagnostic tools for delirium and they include:</p> <ul style="list-style-type: none"> • Confusion Assessment Method (CAM) (Inouye et al. 2014; Shi et al. 2013) • Confusion Assessment Method (CAM-ICU) (Ely et al. 2001) • 3D-CAM (Marcantonio et al. 2014). <p>If a person declines assessment record as not assessed.</p> <p>Delirium is defined as an acute change in mental status that is common among older patients in hospital (Clinical Epidemiology and Health Service Evaluation Unit 2006). It is characterised by a disturbance of consciousness, attention, cognition and perception that develops over a short period of time (usually hours to a few days) (National Institute for Health and Clinical Excellence 2010; Inouye 2014). Patients with delirium may be agitated and restless (hyperactive delirium), quiet and withdrawn (hypoactive delirium), or move between these two subtypes (mixed delirium) (Clinical Epidemiology and Health Service Evaluation Unit 2006; National Institute for Health and Clinical Excellence 2010).</p>	<p>Assessment of delirium requires the use of a validated tool. There are a range of validated diagnostic tools for delirium and they include:</p> <ul style="list-style-type: none"> • Confusion Assessment Method (CAM) (Inouye et al. 2014; Shi et al. 2013) • Confusion Assessment Method (CAM-ICU) (Ely et al. 2001) • 3D-CAM (Marcantonio et al. 2014). • The 4AT (Bellelli et al. 2014) [Added 1 Jan 2020] <p>If a person declines assessment record as not assessed.</p> <p>Delirium is defined as an acute change in mental status that is common among older patients in hospital (Clinical Epidemiology and Health Service Evaluation Unit 2006). It is characterised by a disturbance of consciousness, attention, cognition and perception that develops over a short period of time (usually hours to a few days) (National Institute for Health and Clinical Excellence 2010; Inouye 2014). Patients with delirium may be agitated and restless (hyperactive delirium), quiet and withdrawn (hypoactive delirium), or move between these two subtypes (mixed delirium) (Clinical Epidemiology and Health Service Evaluation Unit 2006; National Institute for Health and Clinical Excellence 2010).</p>

Number	Variable	Definition	
4.18	Clinical malnutrition assessment [New variable added 1 Jan 2019]	Did the patient undergo clinical assessment of their protein/energy nutrition status during the acute phase of the episode of care?	
		Justification	
		Hip fracture patients are at high risk of malnutrition. Malnutrition in these patients is associated with increased morbidity and mortality, and a decrease in return to pre-fracture functioning.	
		Coding Source	
		Adapted from the UK National Hip Fracture Database	
		Coding frame	
		0	Not done
		1	Malnourished
		2	Not malnourished
		9	Not known
DD comments	<p data-bbox="528 651 1386 819">Clinical assessment of a person’s nutritional status is encouraged during the acute phase. Sites should use tools that are validated for such purposes, and are advised to discuss with their Dietitians how best to record the results using this variable’s options.</p> <p data-bbox="528 819 1386 999">If the nutritional assessment is performed more than once, please record the first assessment after admission that uses a validated tool.</p>		

Number	Variable	Definition
4.19	First day walking	Did the patient get out of bed and walk on day one post hip fracture surgery?
	[New variable added 1 Jan 2020]	Justification
		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).
		Coding Source
		Adapted from the UK National Hip Fracture Database
		Coding frame
		0 No
		1 Yes
		9 Not known
		DD comments
		Day 1 post-surgery means the next calendar day following the day of the patient's primary surgery for hip fracture.
		Mobilised means the patient managed to stand and step transfer out of bed onto a chair/commode and or walk. This does not include only sitting over the edge of the bed or standing up from the bed without stepping/walking.
		This data item is recording whether the patient actually stood and stepped or walked on day 1 post-surgery. Potential reasons a patient may not mobilise are: symptomatic postural hypotension, delirium (usually hypoactive) or uncontrolled pain despite pain relief. A reason must be recorded in the patient's medical record.
		Pedersen MM, Bodilsen AC, Petersen J, Beyer N, Andersen O, Lawson-Smith L, et al. 2013. Twenty-four-hour mobility during acute hospitalization in older medical patients. The Journals of Gerontology Series A: Biological Sciences and Medical Sciences 68(3):331-7.

Section 6

Number	Variable	Old	Revised
6.01	30 day follow up date	Definition	[Retired 31 Dec 2018]
		Date on which the 30 day follow-up was completed post the initial hip fracture surgery.	
		Justification	
		To monitor patient outcomes post-surgery	
		Coding frame	
		DDMMYYYY	
		DD comments	
Date not known is entered as: 99999999			

Number	Variable	Old	Revised
6.02	Survival at 30 days post-surgery	Definition	[Retired 1 Jan 2019]
		Is the patient alive at 30 days post-surgery?	
		Justification	
		To monitor patient outcomes post-surgery. Hip Fracture Care Clinical Care Standard Indicator 8b	
		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'			

Number	Variable	Old	Revised
6.03	Date health system discharge at 30 day follow-up	Definition	[Retired 31Dec 2018]
		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	
		Coding frame	
		DDMMYYYY	
		DD comments	
		If the patient is still in hospital, 00000000 is entered. Date not known is entered as: 99999999	

Number	Variable	Old	Revised	
6.04	Place of residence at 30 day follow-up	Definition	[Retired 31Dec 2018]	
		What is the place of residence of the person at 30 days post-surgery?		
		Justification		
		To monitor patient outcomes post-surgery		
		Coding frame		
		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
		DD comments		
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. 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>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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Number	Variable	Old	Revised
6.05	Full weight bear at 30 day follow-up	Definition	[Retired 31Dec 2018]
		Is the patient allowed full weight bearing at 30 day follow-up?	
		Justification	
		Ability to monitor variation in clinical practice	
		Coding frame	
		0 Unrestricted weight bearing	
		1 Restricted / non weight bearing	
		8 Not relevant	
		9 Not known	
		DD comments	
		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. 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	

Number	Variable	Old	Revised
6.06	Post-admission walking ability at 30 day follow-up	Definition	[Retired 31Dec 2018]
		What was the patient's walking ability at 30 days post-surgery?	
		Justification	
		To monitor patient mobility status post-discharge	
		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	
		8 Not relevant	
		9 Not known	
DD comments			
Usually walks with two aids or frame includes with or without assistance of a person			

Number	Variable	Old	Revised								
6.07	Bone protection medication at 30 day follow-up	<p align="center">Definition</p> <p>What bone protection medication was the patient using at 30 days post-surgery?</p> <p align="center">Justification</p> <p>Ability to monitor use of bone protection medication</p> <p align="center">Coding frame</p> <table border="1"> <tr> <td>0</td> <td>No bone protection medication</td> </tr> <tr> <td>3</td> <td>Yes - Calcium and/or vitamin D only</td> </tr> <tr> <td>4</td> <td>Yes - Bisphosphonates, strontium, denosumab or teriparitide (with or without calcium and/or vitamin D)</td> </tr> <tr> <td>9</td> <td>Not known</td> </tr> </table> <p align="center">DD comments</p> <p>Calcium or vitamin D includes Calcitriol, calcium and vitamin D or Alpha-calcidol (or one alpha).</p> <p>Bisphosphonates includes: Etidronate, Alendronate, Risedronate, Ibandronate, Zoledronate, Pamidronate.</p>	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	[Retired 31Dec 2018]
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										

Number	Variable	Old	Revised
6.08	Re-operation within 30 day follow-up	Definition	
		What kind of re-operation has been required (if any) for the patient within 30 days post-surgery?	Definition
			What kind of re-operation has been required (if any) for the patient within 30 days post-surgery?
		Justification	Justification
		To monitor patient outcomes post-surgery. Hip Fracture Care Clinical Care Standard Indicator 8a.	To monitor patient outcomes post-surgery. Hip Fracture Care Clinical Care Standard Indicator 8a.
		Coding frame	Coding frame
		0 No reoperation at 30 days post surgery	0 No reoperation at 30 days post surgery
		1 Reduction of dislocated prosthesis	1 Reduction of dislocated prosthesis
		2 Washout or debridement	2 Washout or debridement
		3 Implant removal	3 Implant removal
		4 Revision of internal fixation	4 Revision of internal fixation
		5 Conversion to hemiarthoplasty	5 Conversion to hemiarthoplasty
		6 Conversion to total hip replacement	6 Conversion to total hip replacement
		7 Excision arthroplasty	7 Excision arthroplasty
		8 Periprosthetic fracture	8 Periprosthetic fracture
		9 Revision arthroplasty	9 Revision arthroplasty
		99 Not know	99 Not know
DD comments	[Retired 31 Dec 2018]		
Option 2 washout or debridement includes liner changes. Note: record the most significant procedure only.			

Section 7

Number	Variable	Old	Revised	
7.05	Full weight bear at 120 day follow-up	Definition		
		Is the patient allowed full weight bearing at 120 day follow-up?		
		Justification		
		Ability to monitor variation in clinical practice		
		Coding frame		
		0	Unrestricted weight bearing	[Retired 31 Dec 2019]
		1	Restricted / non weight bearing	
		8	Not relevant	
		9	Not known	
		DD comments		
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.				
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				

Number	Variable	Old DD comments	Revised DD comments
7.06	Post-admission walking ability at 120 day follow-up	Usually walks with two aids or frame includes with or without assistance of a person	<p>Usually walks with two aids or frame includes with or without assistance of a person</p> <p>If a person has different levels of mobility on different surfaces then record the level of most assistance. For example, inside their residence a person usually walks with no walking aid but when outside the residence the person usually walks with a frame, then the level of mobility recorded is option 3.</p> <p style="text-align: right;">[Added 1 Jan 2019]</p>

Number	Variable	Old coding frame		Revised coding frame	
7.07	Bone protection medication at 120 day follow-up	0	No bone protection medication	0	No bone protection medication
		1	Yes - calcium and/or vitamin D only	1	Yes - calcium and/or vitamin D only
		2	Yes - bisphosphonates, denosumab or teriparatide (with or without calcium and/or vitamin D) [strontium removed 31 December 2019]	2	Yes - bisphosphonates, denosumab, romosozumab or teriparatide (with or without calcium and/or vitamin D) [romosozumab added 1 Jan 2022]
		9	Not known	9	Not known
Classification note: Code '2' in the revised coding frame does not include strontium from 31 December 2019					

Number	Variable	Old coding frame		Revised coding frame	
7.08	Re-operation within 120 day follow-up	0	No reoperation	0	No reoperation
		1	Reduction of dislocation prosthesis	1	Reduction of dislocation prosthesis
		2	Washout or debridement	2	Washout or debridement
		3	Implant removal	3	Implant removal
		4	Revision of internal fixation	4	Revision of internal fixation
		5	Conversion to hemiarthroplasty	5	Conversion to hemiarthroplasty
		6	Conversion to total hip replacement	6	Conversion to total hip replacement
		7	Excision arthroplasty	7	Excision arthroplasty
		8	Periprosthetic fracture [Retired 31 December 2016]	9	Revision arthroplasty
		9	Revision arthroplasty	99	Not known
		98	Not relevant [retired 31 December 2016]		
		99	Not known		
Classification note: Code '8' in the old coding frame does not equate to any codes in the revised coding frame. Any patient with a code '8' prior to 31 Jan 2016 should be coded '99' for Re-operation within 120 day follow-up.					
Code '98' in the old coding frame does not have an equivalent value in the revised coding frame. However, patient who have died within the 120-day follow-up period could be classified as '98 – not relevant' during data analysis.					

Number	Variable	Definition
7.09	Preliminary date of death [New variable-collected by sites, added 1 Jan 2020]	What was the date of death of the hip fracture patient?
		Justification
		To monitor patient outcomes and enable reporting of mortality after hip fracture Hip Fracture Care Clinical Care Standard Indicator 8b.
		Coding source
		National Health Data Dictionary, Version 15 (METeOR identifier 646025). Preliminary Australian date of death obtained from hospital records and/or during 120 day follow-up.
		Coding frame
		DD/MM/YYYY
		DD comments
Date not known is recorded as: 01011900 Date of death may be collected either at discharge or during 120-day follow-up. New Zealand date of death may be obtained from the New Zealand Ministry of Health.		

Number	Variable	Definition
7.10	Final date of death [New variable-collected by ANZHFR via data linkage with the National Death Index, added 1 Jan 2020]	What was the date of death of the hip fracture patient?
		Justification
		To monitor patient outcomes and enable reporting of mortality after hip fracture Hip Fracture Care Clinical Care Standard Indicator 8b.
		Coding Source
		National Health Data Dictionary, Version 15 (METeOR identifier 646025). Final Australian date of death obtained from the National Death Index. New Zealand date of death obtained from the New Zealand Ministry of Health.
		Coding frame
		DD/MM/YYYY
		DD comments
Date not known is recorded as: 01011900 Final Australian date of death will be obtained from the National Death Index and final New Zealand date of death will be obtained from the New Zealand Ministry of Health.		

Number	Variable	Definition
7.11	Underlying cause of death [New variable-collected by ANZHFR via data linkage with the National Death Index, added 1 Jan 2020]	What was the underlying cause of death of the hip fracture patient?
		Justification
		To enable identification of the underlying cause of death of the hip fracture patient
		Coding Source
		National Health Data Dictionary, Version 15 (METeOR identifier 307862). Australian underlying cause of death obtained from the National Death Index. New Zealand underlying cause of death obtained from the New Zealand Ministry of Health.
		Coding frame
		ICD-10
DD comments		
		The disease or injury which initiated the train of morbid events leading directly to a person's death or the circumstances of the incident or violence which produced the fatal injury.

Number	Variable	Definition
7.12	Other causes of death [New variable-collected by ANZHFR via data linkage with the National Death Index, added 1 Jan 2020]	What was the underlying cause of death of the hip fracture patient?
		Justification
		To enable identification of the underlying cause of death of the hip fracture patient
		Coding Source
		National Health Data Dictionary, Version 15 (METeOR identifier 307862). Australian other cause(s) of death obtained from the National Death Index. New Zealand other cause(s) of death obtained from the New Zealand Ministry of Health.
		Coding frame
		ICD-10
DD comments		
		The disease or injury which initiated the train of morbid events leading directly to a person's death or the circumstances of the incident or violence which produced the fatal injury.

Section 13

Number	Variable	Definition
13.01	Follow-up at 52 weeks [New optional variable to enable interoperability with the FFR-added 1 Jan 2023]	Was the patient followed up at 52 weeks after the index fracture?
		Justification
		To measure performance against Clinical Standards for Fracture Liaison Services
		Coding Source
		Adapted from UK FLS-DB V2.00
		Coding frame
		1 Yes 2 No 3 Uncontactable 4 Declined 5 Patient died
DD comments		
		This section is only for patients who are recommended bone therapy because of the FLS intervention. Follow up should be at between 48 and 54 weeks after the index fracture (not 52 weeks post assessment). Late follow up - If follow up has been completed, but took place after 54 weeks, please answer 'Yes'. 'No' should only be selected if no follow up is planned.

Number	Variable	Definition
13.02	52 Week Follow Up Date [New optional variable to enable interoperability with the FFR-added 1 Jan 2023]	The date that the "52 week follow up" happened
		Justification
		To measure performance against Clinical Standards for Fracture Liaison Services
		Coding Source
		Adapted from UK FLS-DB V2.00
		Coding frame
		dd/mm/yyyy
DD comments		

Number	Variable	Definition
13.03	52 Week Residence [New optional variable to enable interoperability with the FFR-added 1 Jan 2023]	What is the usual place of residence of the patient at the time of the 52 week follow up?
		Justification
		This enables comparison of the type of accommodation of the person before suffering a fragility fracture with that at follow up assessments. This is an indicator of patient outcome.
		Coding Source
		Adapted from the Australasian Rehabilitation Outcomes Centre Inpatient Dataset, Version 3.0; NSW SNAP Data Collection, Version 4.0
		Coding frame
		1 Private residence (including unit in retirement village) 2 Residential aged care facility 3 Other 4 Not done

		9 Not known
		DD comments
		Record the patient's usual accommodation type the time of the 52-week follow up. 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 is in respite care, record their usual place of residence when not in respite care.

Number	Variable	Definition
13.04	52 Week Mobility	The patient's mobility status at the 52-week follow-up
	[New optional variable to enable interoperability with the FFR-added 1 Jan 2023]	Justification
		To document the patient's mobility at the time of the 52 week follow up
		Coding Source
		Adapted from ANZHFR Data Dictionary V13
		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 5 Not done 9 Not known
		DD comments
		If a person has different levels of mobility on different surfaces, then record the level of most assistance. For example, inside their residence a person usually walks without a walking aid but when outside the residence the person usually walks with a frame, then the level of mobility recorded is option 3.

Number	Variable	Definition
13.05	52 Week Medication	Did the patient confirm adherence to osteoporosis specific treatment
	[New optional variable to enable interoperability with the FFR-added 1 Jan 2023]	Justification
		To document whether the patient was still taking osteoporosis specific treatment
		Coding Source
		Adapted from UK FLS-DB V2.00
		Coding frame
		1 No longer taking osteoporosis specific treatment 2 Alendronate 3 Risedronate 4 Zoledronate 5 Denosumab 6 Teriparatide 7 Testosterone 8 Systemic Oestrogens 9 Systemic Oestrogen & Progesterone 10 Romosozumab

		11 Raloxifene
		DD comments
		A patient is to be considered as 'on/taking bone protection medication' if: <ul style="list-style-type: none"> • For oral-osteoporosis agents patient prescribed in the last 4 weeks. • For Zoledronate, prescribed in the last 24 months • For Denosumab, prescribed the last 6 months. • For Teriparatide, prescribed in the last 7 days. • For Romosozumab, prescribed in the last month. Online review of prescriptions may indicate that the patient is taking osteoporosis medication regularly – this is satisfactory. If there is no evidence of this online – patient and / or GP interview will be required

Number	Variable	Definition
13.06	Reason for No Medication at 52 Weeks	What was the reason of the patient not continuing bone protection medication at 52 week follow up?
		Justification
		To document the reason the patient was no longer taking bone protection medication
		Coding Source
		Adapted from UK FLS-DB V2.00
		Coding frame
		1 No longer appropriate (clinician) 2 Informed decline (patient) 3 Side effects 4 Cost to patient 5 Nil obvious 6 Other 7 Not asked 9 Not known
		DD comments
		If the patient's GP or other healthcare professional stops the specific osteoporosis medication for whatever reason (including side effects), please select 'No longer appropriate (clinician). If the patient stops the medication by the time of the follow up, please select 'Informed decline (patient)'.

Number	Variable	Definition
13.07	Further Falls	The number of further falls the patient has suffered since the index fracture
		Justification
		To document the number of further falls since the index fragility fracture suffered by the patient as a measure of patient outcome.
		Coding Source
		Coding frame
		1 None 2 One 3 Two 4 Three or more

		5 Not asked 9 Not known
		DD comments
		This is a measure of patient outcome. This is the answer to the question “since the index fracture, have you had any further falls in the last 12 months” or similar.

Number	Variable	Definition
13.08	Strength and Balance	Is the patient still participating in a strength and balance programme?
	[New optional variable to enable interoperability with the FFR-added 1 Jan 2023]	Justification
		To document whether the patient is still participating in strength and balance training.
		Coding Source
		Coding frame
		1 Yes 2 No 3 Not asked 9 Not known
		DD comments
		In the context of this question, a strength and balance programme means that the patient is still carrying out some form of regular activity that aims to improve / maintain their strength and balance. This could be the continuation of an in-home programme that has previously been set or regular attendance at an appropriate community programme. A self-directed programme of regular exercise is also satisfactory.

Number	Variable	Definition
13.09	Further fractures	Has the patient had a further fragility fracture since the index fracture 52 weeks ago?
	[New optional variable to enable interoperability with the FFR-added 1 Jan 2023]	Justification
		To document whether the patient has had a further fragility fracture since the index fracture 52 weeks ago
		Coding Source
		Coding frame
		1 Yes 2 No 3 Not asked 9 Not known
		DD comments
		This is to ensure that a further fragility fracture has not occurred since the index fracture, and not been identified by the usual identification procedures