

AROC TECHNICAL GUIDELINES FOR IT DEVELOPERS V4.0 DATASET (IMPLEMENTED JULY 2012)

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WHAT IS AROC?

The Australasian Rehabilitation Outcomes Centre (AROC) is a joint initiative of the Australian rehabilitation sector (providers, funders, regulators and consumers). It commenced operation on 1 July 2002. With the support of its industry partners, AROC has been established by the Australasian Faculty of Rehabilitation Medicine (AFRM) of the Royal Australasian College of Physicians (RACP). A business plan for AROC to run as a not-for-profit self-funding organisation was developed by an AROC Planning Group, consisting of representatives from across the sector.

The purpose and aims of AROC were established as, and continue to be:

Develop a national benchmarking system to improve clinical rehabilitation outcomes in both the public and private sectors.

Produce information on the efficacy of interventions through the systematic collection of outcomes information in both the inpatient and ambulatory settings.

Develop clinical and management information reports based on functional outcomes, impairment groupings and other relevant variables that meet the needs of providers, payers, consumers, the States/Commonwealth and other stakeholders in both the public and private rehabilitation sectors.

Provide and coordinate ongoing education, training and certification in the use of the FIM and other outcome measures.

Provide annual reports that summarise the Australasian data.

Develop research proposals to refine the selected outcome measures over time.

The development of the AROC Version 4.0 data set has evolved after consultation with rehabilitation providers and representatives of peak organisations from across Australia. Where possible, National Health Data Dictionary definitions have been used. Rehabilitation services participating in AROC routinely collect data and submitted to the AROC Database.

AROC is funded by a combination of a Subscription model and a User Pays model. Members of AROC pay an annual subscription fee for which they receive a number of core services. AROC also provides additional services on a User Pays basis.

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DATA SUBMISSION AND REPORTING CYCLE

Data is expected to be submitted quarterly to AROC, however many facilities submit their data monthly to stay on top of their data quality and to use the online data reporting facilities available through AROC Online Services (AOS). Data may be submitted to AROC by direct data entry into AOS or via an upload to AOS of data extracted from the facilities own data entry system.

Facilities using AOS Data Entry are given error checks at the point of data entry, and can print the individual patients audit report and/or summary page for case meetings.

For facilities uploading data to AROC the process is iterative. First facilities create an AROC data extract using their data entry system based on episode discharge dates. Then upon uploading their data extract into AOS they receive a data audit, and are given the opportunity to amend their data, if required. Once corrected the data are again extracted and uploaded to AROC, to undergo the same process. This process of error checking may be required to happen multiple times until the data are free of errors or the facility determines that any remaining errors cannot be fixed.

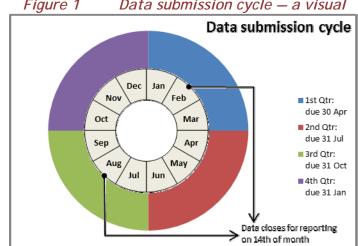


Figure 1 Data submission cycle — a visual

Following data submission AROC runs benchmark reports twice a year:

- Calendar year for the most recent Jan 01 Dec 31 period (Reporting data closes Feb 14)
- Financial year for the most recent Jul 01 Jun 30 period (Reporting data closes Aug 14)

After the closing date for the reporting data, AROC makes a copy of the live data and commences the reporting process. As part of the reporting process inpatient data are concatenated, data items for reporting are calculated (e.g. AN-SNAP class, length of stay, age on admission, FIM total scores) and then individualised benchmark reports are generated for participating services.

For more information on AROC visit ahsri.uow.edu.au/aroc

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THE AROC VERSION 4.0 DATASET STRUCTURE

As with previous versions of the AROC dataset, Version 4.0 consists of Patient and Episode level data submitted in one flat file. New to the Version 4.0 dataset is the concept of six care pathways:

- Pathway 1 Adult: Consult/Liaison, secondary provider & see patient once
- Pathway 2 Adult: In-reach, secondary provider & see patient more than once
- Pathway 3 Adult: Inpatient, primary provider
- Pathway 4 Adult: Ambulatory, only care provider
- Pathway 5 Adult: Ambulatory, shared care primary provider
- Pathway 6 Adult: Ambulatory, shared care secondary provider

Patient level data

Conceptually, the items collected at the patient level should not change, such as Unique Record Number (URN), Date of Birth (DOB) and Sex.

Episode level data

For the purposes of AROC, an Episode of care is defined as a continuous period of care for a patient in one setting (i.e. acute in-reach rehab, sub-acute inpatient rehab, ambulatory rehab, etc).

To clarify this, an episode of Rehabilitation care begins on the day the patient is admitted to the Rehabilitation care provider.

The way an episode of Rehabilitation care ends depends on the setting in which the care is being provided.

In the inpatient (overnight admitted) setting, an episode ends if the patient:

- Is discharged to community (e.g. private residence, residential aged care facility)
- Is discharged to another hospital
- Is care type changed to another sub-acute or non-acute, or to an acute, episode of care
- Dies
- Patient discharges at own risk

In the ambulatory setting, an episode ends if the patient:

- Is discharged from the care of the service
- Is admitted/transferred to hospital as an overnight patient (inpatient)
- Dies
- Patient discharges at own risk

Under this definition, a patient receiving rehabilitation care can have more than one episode of care.

Conceptually, the information collected at the episode level reflects the circumstances at the beginning and end of the particular episode. This information may be different in subsequent episodes.

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MINIMUM IT SYSTEM FUNCTIONALITY

An IT system incorporating the AROC Version 4 dataset should, at a minimum, allow users to:

- Create linked Patient and Episode records
- Enter all required AROC data items, as per the data rules specified by AROC, for the pathway(s) being collected
- Extract data from the system in the format required by AROC
- Search for records in order to complete, update or correct entered data

The IT system should also incorporate the business rules outlined by AROC, to ensure that data entry errors are minimised.

The structure of AROC data at the Patient and Episode level determines the processes for data entry. Users will create one flat file combining information from both Patient and Episode data:

Table 1 The Patient and Episode Data Relationship

Record Unique Identifier		Linked to	Linked by
Patient	Unique Record Number (URN)		
Episode	Episode end date	Patient	URN

Developers can choose the structure in which they wish to store AROC data. However the linking between Patient and Episode records must be considered, along with the data item and extract requirements (Specifications 1 and 2 in this document).

A typical data entry procedure where the rehabilitation was completed within the rehabilitation episode would be:

- 1 A new Patient Record is created and the information is entered into the system
- 2 The patient's first Episode Record is created and episode start information is entered
- 3 The **episode end** information is entered in the **Episode Record**.
- 4 If a patient were to have a subsequent episode of care a user would search for the Patient Record and begin at step 2 with the *next* episode.

A typical data entry procedure where a suspension of inpatient rehabilitation treatment occurred would be:

- 1 A new Patient Record is created and the information is entered into the system
- 2 The patient's first Episode Record is created and episode start information is entered
- 3 The patient's rehabilitation program is suspended and the patient
 - a. stays at the same facility and after the suspension:
 - i. returns to the same program → data entry will record suspension details in this Episode Record
 - ii. **requires a new program to be developed** → data entry will end this Episode Record (step 4) and will start a new Episode Record (step 5) for the subsequent episode
 - iii. does not return to rehab → data entry will end this Episode Record (step 4)
 - b. goes to a different facility and after the suspension:

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- i. returns to the same program → data entry will end this Episode Record (step 4) and will start a new Episode Record (step 5) for the subsequent episode AROC will re-join these Episode Records during concatenation
- ii. requires a new program to be developed → data entry will end this Episode Record (step 4) and will start a new Episode Record (step 5) for the subsequent episode
- iii. does not return to rehab → data entry will end this Episode Record (step 4)
- 4 The **episode end** information is entered in the **Episode Record**.
- 5 If a patient were to have a subsequent episode of care a user would search for the Patient Record and begin at step 2 with the *next* episode.

NOTE: Data concatenation — the joining of multiple Episode Records into one Reporting Record

Increasingly some jurisdictions have introduced business rules around data collection that have resulted in episode records of rehabilitation being ended and then re-commenced a few days later. AROC definitions would record these as one episode record with the period in between defined as a suspension of rehabilitation (3ai above). Such business rules result in two (or more) episode records of rehabilitation being reported to AROC when only one full episode record should be reported (Figure 2).

Whilst this happens much more frequently in some impairment groups (e.g. spinal cord injury & brain injury) it does impact all impairments to some degree. Reporting of multiple episode records impacts outcomes analysis, resulting in shorter than real length of stays and reduced FIM change being reported.

Concatenated episode records have a revised Length of stay and FIM change (start details will be taken from the identified primary episode recorded; end details from the identified final episode record), and will also have a revised number of suspensions (being the sum across all concatenated 'submitted episode records' plus the number of breaks between 'submitted episode records') and a revised number of suspension days (being the sum across all concatenated 'submitted episode records' plus the sum of all days between 'submitted episode records').

Patient Record

Time

Submitted data Episode Record Episode Record Episode Record

Reporting data Concatenated Episode Record Episode Record Episode Record

A user may also use the system to view and amend data. Users should be able to search for records using:

- A combination of Patient and Episode Identifiers, depending on the type of record
- Service and Team Identifiers
- Episode Start Date and End Dates

Items that do not change (e.g. facility in most cases) or are system generated (e.g. new patient identifier) should not be editable by the user.

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Summary of changes between the AROC Version 3 and Version 4.0 Dataset Items

This section provides a broad overview of the new data items and changes to existing items between Version 3 and Version 4.0 AROC datasets. To summarise the main changes are:

At Patient Level:

- New items added are:
 - o Letters of name (used for the Statistical Linkage Key)
 - o Date of birth estimate flag (used for the Statistical Linkage Key)
- The following item has a modified code set:
 - Indigenous status (NZ codes modified)
- No patient level items have been removed

At Episode Level:

- New items added are:
 - o Path (used to determine which data items to collect)
 - o Referral Date
 - Assessment date
 - Date clinically ready for rehab care
 - o Was there a delay in episode start? (flag) & if yes Reason(s) for any delay
 - Patient related issues
- Equipment issues

Service issues

- Behavioural issues
- External support issues
- o Carer Status prior to this impairment
- o Were any services received prior to this impairment? (flag) & if yes Service(s) received
 - Domestic assistance
 - Social support
 - Nursing care
 - Allied health care
 - Personal care

- Meals
- Provision of goods & equipment
- Transport services
- Case management
- Date of relevant acute episode
- o Employment status after, or anticipated after, discharge
- Date clinically ready for discharge
- o Was there a delay in discharge? (flag) & if yes Reason(s) for any delay
 - Patient related issues
- Equipment issues

Service issues

- Behavioural issues
- External support issues
- o Complication interfering with inpatient rehabilitation Episode?
- Interim destination
- Carer Status post discharge
- o Will any services be received post discharge? (flag) & if yes Service(s) received
 - Domestic assistance
 - Social support
 - Nursing care
 - Allied health care
 - Personal care

- Meals
- Provision of goods & equipment
- Transport services
- Case management
- The following items have new or modified code sets:
 - o Geographical residence of patient (NZ codes added, AU modified)
 - Funding source some code set values changed but options unchanged

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- o Employment status prior to this impairment has a completely new code set
- o Mode of episode start has had an extra code added
- o AROC impairment code has extra codes added
- Comorbidities interfering with rehabilitation episode has extra codes added and has been reordered
- Complications interfering with the inpatient rehabilitation episode has extra codes added
- o Final destination some code set values changed but options unchanged
- o Discharge plan available to patient changed from date field to flag
- The following items are no longer collected:
 - Level of support at episode start
 - o Was the current impairment the result of trauma
 - Assessment only
 - o Was the suspension of treatment unplanned?
 - Level of support at episode end

Refer to the Specification 3: Mapping from Version 3 to Version 4.0 Dataset for explicit details on the modified code sets.

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SPECIFICATION 1: AROC VERSION 4.0 DATA DICTIONARIES

The AROC Version 4.0 Dataset Data Dictionaries are designed with different audiences in mind:

Clinician Data Dictionary (AU and NZ versions)

This dictionary provides a clinical perspective of the AROC dataset through clinical guidelines and justifications for why each item is included for anyone involved in the collection of AROC data (e.g. rehabilitation clinicians, allied health staff, rehabilitation service managers) and/or data entry. Separate guidelines specific to the Functional Independence Measures (FIM) are also available from the AROC website: https://ahsri.uow.edu.au/aroc/fim

Data Analysts Data Dictionary

This dictionary provides researchers with an understanding of the AROC dataset for the purpose of analysis and includes the definitions and value ranges of all items in the AROC dataset, including calculated fields generated at the point of benchmark reporting.

Developers Data Dictionary (AU and NZ versions)

This dictionary provides full technical details required by IT developers to modify IT systems to collect the AROC Version 4.0 dataset, including business rules and dependencies. The technical guidelines are not prescriptive in how applications should be created but specify the required clinical inputs and data extract format that AROC requires in order for data to be accepted into the AROC database.

The data dictionaries are available from the AROC website at:

https://apps.ahsri.uow.edu.au/confluence/display/AD/AROC+Data+Dictionaries

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SPECIFICATION 2: AROC VERSION 4.0 DATA EXTRACTION

Rehabilitation facilities participating in AROC submit data for reporting a minimum of four times a year. As a result, users will require an interface that allows them to:

- 1. Specify a "date range" for the data to be extracted
- 2. Extract their data in the predefined format specified by AROC
- 3. Save the extracts in a predefined file type to a local drive

File Type

The AROC Database requires the data extract to be submitted in a fixed ASCII file format. Each extract can contain more than one pathways' data and can contain more than one facilities data.

In the AROC extract:

- There should be no header row
- There should be one, and only one, row for each episode of rehabilitation
- Each data item should begin at the begin position & end at the end position as per Specification 1
- Each row should be 705 characters long
- All codesets are numeric
- Where there is no value (i.e. conditional rules mean this data item is not relevant to this episode
 of rehabilitation) the column should be left blank.
- Alphanumeric and date data are left justified, and numeric data are right justified.
 - o Always use zeros in dates where the value is less than 10 (i.e. 7th is 07 not just 7).
 - o Alphanumeric items that do not occupy all columns allocated for the field can be right filled with blanks.

Extract File Naming Convention

AROC data extract files should conform to the following naming convention:

V4.0 extract: AROCFacilityNameYYYYMMDDV4.TXT

Where:

- FacilityName: The name of the facility submitting the data
- YYYYMMDD: The date the extract was created four digit year, two digit month, two digit day eg. 13 August 2016 would be represented as 20160813
- Vn: The 'n' is the version of the AROC data set.

Time period of data to be submitted to AROC

When creating the AROC extract data, it is recommended it include the most recent 12 months of completed episodes. If your facility's data goes back to October 2007, when submitting any quarter's data you are in fact submitting data covering 12 months up to the present and no longer submitting data from October 2007 to present as was the case with the V3 AROC extract data.

For example, if your facility is submitting data on 13 August 2017 and the most recent entered episode ended on 15 July 2017, your extract would include all episodes ending between 16/07/2016 and 15/07/2017 (inclusive). This ensures AROC always has the most up to date and accurate data possible.

Some facilities prefer to submit their data monthly sending one month at a time - if this is the case it is imperative that updated data is resubmitted and no month is forgotten. In this situation facilities will need to be able to enter an end of episode date range to select their data. Facilities can log in to AROC Online Services (AOS) to see where their data is up to at any time by clicking DATA...Data Summary.

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SPECIFICATION 3: MAPPING FROM VERSION 3 TO VERSION 4.0 DATASET

Indigenous status (Item D7 – Pathways 3, 4, 5)

In the Version 4 dataset this item has been changed to be numeric only – alpha codesets from New Zealand (NZ) have been converted to numeric and in line with that collected by Australia (AU), although some of the code set labels vary by country. In NZ this item is no longer mandatory. In AU missing data is not permitted for this item.

Mapping table:

Version 3 – Item 8 Code	Version 4 Mapped Code		NZ	Comment
1 Aboriginal but not Torres Strait	1 Aboriginal but not Torres Strait		×	No change
Islander origin	Islander origin			
2 Torres Strait Islander but not	2 Torres Strait Islander but not	\checkmark	×	No change
Aboriginal origin	Aboriginal origin			
3 Both Aboriginal and Torres Strait	3 Both Aboriginal and Torres Strait	$\overline{\checkmark}$	×	No change
Islander origin	Islander origin			
4 Neither Aboriginal nor Torres	4 Neither Aboriginal nor Torres	$\overline{\checkmark}$	×	No change
Strait Islander origin	Strait Islander origin			
9 Not stated or inadequately defined	9 Not stated or inadequately defined	$\overline{\mathbf{A}}$	×	No change
A Maori	1 Maori	×		Code changed
B Non-Maori	4 Non-Maori	×	\square	Code changed
C Not stated or inadequately defined	9 Not stated or inadequately defined	×		Code changed

Mapping logic:

```
if [Country]= AU & [V3_ Indigenous_Status] in (1, 2, 3, 4, 9) then [V4_ Indigenous_Status] = [V3_ Indigenous_Status] else if [Country]= NZ & [V3_ Indigenous_Status] = A then [V4_ Indigenous_Status] = 1 else if [Country]= NZ & [V3_ Indigenous_Status] = B then [V4_ Indigenous_Status] = 4 else if [Country]= NZ & [V3_ Indigenous_Status] = C then [V4_ Indigenous_Status] = 9 else [V4_ Indigenous_Status] = -2
```

Please note: The -2 code is not in the permissible code set to be used by clinicians. It is a flag used by AROC to indicate missing data – not supplied.

Geographical residence of patient (Item D9 – Pathways 3, 4, 5)

In the Version 3 data set this item was only collected in Australia (AU). In the Version 4 dataset this item will be collected by both Australia and New Zealand (NZ), although the codesets will vary by country. Missing data is not permitted for this item.

Mapping table:

Version 3 – Item 9 Code	Version 4 Mapped Code	\mathbf{AU}	NZ	Comment
1 NSW	01 NSW		×	Prefixed with a zero
2 VIC	02 VIC	\square	×	Prefixed with a zero
3 QLD	03 QLD	\square	×	Prefixed with a zero
4 SA	04 SA		×	Prefixed with a zero
5 WA	05 WA	\square	×	Prefixed with a zero
6 TAS	06 TAS		×	Prefixed with a zero
7 NT	07 NT	\square	×	Prefixed with a zero
8 ACT	08 ACT		×	Prefixed with a zero
9 Other Australian territory	09 Other Australian territory	$\overline{\square}$	×	Prefixed with a zero
	10 Not Australia		×	Added
	11 Northland	×	\square	Added
	12 Auckland	×		Added
	13 Waikato	×	$\overline{\mathbf{A}}$	Added
	14 Bay of Plenty	×	\square	Added
	15 Gisborne	×	$\overline{\checkmark}$	Added
	16 Hawkes Bay	×	\square	Added
	17 Taranaki	×	$\overline{\mathbf{A}}$	Added
	18 Manawatu-Wanganui	×		Added
	19 Wellington	×	$\overline{\checkmark}$	Added
	20 Tasman	×		Added
	21 Nelson	×	$\overline{\checkmark}$	Added
	22 Marlborough	×		Added
	23 West Coast	×	$\overline{\checkmark}$	Added
	24 Canterbury	×		Added
	25 Otago	×	$\overline{\checkmark}$	Added
	26 Southland	×	$\overline{\checkmark}$	Added
	27 Other	×	$\overline{\checkmark}$	Added
	28 Not New Zealand	×		Added

Mapping logic:

```
if [Country] = AU & [V3_ Geographical_residence] = 1 then [V4_ Geographical_residence] = 01
else if [Country] = AU & [V3_ Geographical_residence] = 2 then [V4_ Geographical_residence] = 02
else if [Country] = AU & [V3_ Geographical_residence] = 3 then [V4_ Geographical_residence] = 03
else if [Country] = AU & [V3_ Geographical_residence] = 4 then [V4_ Geographical_residence] = 04
else if [Country] = AU & [V3_ Geographical_residence] = 5 then [V4_ Geographical_residence] = 05
else if [Country] = AU & [V3_ Geographical_residence] = 6 then [V4_ Geographical_residence] = 06
else if [Country] = AU & [V3_ Geographical_residence] = 7 then [V4_ Geographical_residence] = 07
else if [Country] = AU & [V3_ Geographical_residence] = 8 then [V4_ Geographical_residence] = 08
else if [Country] = AU & [V3_ Geographical_residence] = 9 then [V4_ Geographical_residence] = 09
else if [Country] = AU & [V4_ Geographical_residence] = -4
else [V4_ Geographical_residence] = -2
```

Please note: The -2 code and -4 code are not in the permissible code set to be used by clinicians. They are flags used by AROC to indicate missing data — not supplied and not required.

Funding source (Item D11 – Pathways 3, 4, 5)

In Funding source some code set values have been changed but the options remain the same. In the Version 4 dataset this item will be collected by both Australia and New Zealand (NZ), although the codesets vary slightly by country. Missing data is not permitted for this item.

Mapping table:

Version 3 – Item 14 Code	Version 4 Mapped Code	AU	NZ	Comment
01 Public patient	01 Public patient	$\overline{\mathbf{Q}}$	×	No change
02 Private health insurance	02 Private health insurance		×	No change
03 Self-funded	03 Self-funded	\square	×	No change
04 Workers compensation	04 Workers compensation		×	No change
05 Motor vehicle third party personal claim	05 Motor vehicle third party personal claim	\square	×	No change
06 Other compensation	06 Other compensation	$\overline{\mathbf{Q}}$	×	No change
•	07 Department of Veterans' Affairs	V	×	
07 Department of Veterans' Affairs			×	No change
08 Department of Defence 09 Correctional facility	08 Department of Defence 09 Correctional facility		×	No change
•			×	No change
10 Other hospital or public authority (contracted care)	10 Other hospital or public authority (contracted care)	V	_	No change
11 Reciprocal health care agreement (other countries)	11 Reciprocal health care agreement (other countries)		×	No change
12 Other	98 Other	$\overline{\square}$	×	Code changed
99 Not known	99 Not known	$\overline{\checkmark}$	×	No change
A Public patient	01 Public patient	×	$\overline{\checkmark}$	Code changed
B NZ Disability	12 NZ Disability	×	$\overline{\checkmark}$	Code changed
C Accident Compensation Corporation	13 Accident Compensation Corporation	×	$\overline{\checkmark}$	Code changed
D Private health insurance	02 Private health insurance	×	$\overline{\checkmark}$	Code changed
E Self-funded	03 Self-funded	×	$\overline{\checkmark}$	Code changed
F Workers compensation	04 Workers compensation	×	$\overline{\mathbf{V}}$	Code changed
G Motor vehicle third party personal claim	05 Motor vehicle third party personal claim	×	$\overline{\checkmark}$	Code changed
H Other compensation	06 Other compensation	×	$\overline{\mathbf{V}}$	Code changed
I Other hospital or public authority	10 Other hospital or public authority	×	$\overline{\checkmark}$	Code changed
(contracted care)	(contracted care)			
J Reciprocal health care agreement (other	11 Reciprocal health care agreement (other	×	$\overline{\mathbf{V}}$	Code changed
countries)	countries)			· ·
K Other	98 Other	×	$\overline{\checkmark}$	Code changed
L Not known	99 Not known	×		Code changed

Mapping logic:

```
if [V3_ Funding_source] = 12 then [V4_ Funding_source] = 98
else if [V3_ Funding_source] = A then [V4_ Funding_source] = 01
else if [V3_ Funding_source] = B then [V4_ Funding_source] = 12
else if [V3_ Funding_source] = C then [V4_ Funding_source] = 13
else if [V3_ Funding_source] = D then [V4_ Funding_source] = 02
else if [V3_ Funding_source] = E then [V4_ Funding_source] = 03
else if [V3_ Funding_source] = F then [V4_ Funding_source] = 04
else if [V3_ Funding_source] = G then [V4_ Funding_source] = 05
else if [V3_ Funding_source] = H then [V4_ Funding_source] = 06
else if [V3_ Funding_source] = I then [V4_ Funding_source] = 10
else if [V3_ Funding_source] = J then [V4_ Funding_source] = 11
else if [V3_ Funding_source] = K then [V4_ Funding_source] = 98
else if [V3_ Funding_source] = L then [V4_ Funding_source] = 99
else [V4_ Funding_source] = -2
```

Please note: The -2 code is not in the permissible code set to be used by clinicians. It is a flag used by AROC to indicate missing data – not supplied.

Version Control: 1.0

Employment status prior to this impairment (Item E23 – Pathways 3, 4, 5)

This Version 4 dataset item can backward map 100% to the Version 3 item but does not map as well going from Version 3 to Version 4. This item is collected by both Australia (AU) and New Zealand (NZ). Missing data is not permitted for this item.

Mapping table:

Version 3 – Item 17 Code	Version 4 Mapped Code	AU	NZ	Comment
1 Employed	1 Employed	$\overline{\square}$	\square	No change
2 Not employed	2 Unemployed			No change
	3 Student	$\overline{\square}$	$\overline{\checkmark}$	New code
3 Not in labour force	4 Not in Labour force		$\overline{\checkmark}$	No change
	5 Retired for age	\square	$\overline{\checkmark}$	New code
	6 Retired for disability		$\overline{\checkmark}$	New code
9 Not stated or inadequately defined		\square	$\overline{\mathbf{A}}$	Not mapped

Mapping logic:

```
if [V3_ Employment_Status] in (1, 2) then [V4_ Employment _Status] = [V3_ Employment _Status] else if [V3_ Employment _Status] = 3 then [V4_ Employment _Status] = 4 else if [V3_ Employment _Status] = 9 then [V4_ Employment _Status] = -1 else [V4_ Employment _Status] = -2
```

Please note: The -1 code and -2 code are not in the permissible code set to be used by clinicians. They are flags used by AROC to indicate missing data – out of codeset and not supplied.

Mode of episode start (Item E29 – Pathways 2, 3)

In the Version 4 dataset this item has had an extra code added to the inpatient pathways (the ambulatory pathways 4 and 5 are unchanged). It is collected by both Australia and New Zealand; missing data is not permitted for this item.

Mapping table:

Version 3 – Item 23 Code	Version 4 Mapped Code	ΑU	NZ	Comment
1 Admitted from usual	1 Admitted from usual	\square	$\overline{\square}$	No change
accommodation	accommodation			
2 Admitted from other than usual	2 Admitted from other than usual	$\overline{\checkmark}$	$\overline{\checkmark}$	No change
accommodation	accommodation			
3 Transferred from another hospital	3 Transferred from another hospital	$\overline{\mathbf{A}}$	$\overline{\mathbf{A}}$	No change
4 Transferred from acute care in	4 Transferred from acute care in	$ \overline{\checkmark} $	\checkmark	No change
another ward	another ward			
	5 Transferred from acute specialist		$ \overline{\mathbf{A}} $	New code
	unit			
5 Change from acute care to sub/non	6 Change from acute care to sub/non		$ \overline{\checkmark} $	Code changed
acute care same ward	acute care same ward			
6 Change of sub/non acute care type	7 Change of sub/non acute care type	\square	$\overline{\mathbf{A}}$	Code changed
9 Other	8 Other	$\overline{\checkmark}$		Code changed

Mapping logic:

```
if [V3_ Mode_of_episode_start] in (1, 2, 3, 4) then [V4_ Mode_of_episode_start] = [V3_ Mode_of_episode_start] else if [V3_ Mode_of_episode_start] = 5 then [V4_ Mode_of_episode_start] = 6 else if [V3_ Mode_of_episode_start] = 6 then [V4_ Mode_of_episode_start] = 7 else if [V3_ Mode_of_episode_start] = 9 then [V4_ Mode_of_episode_start] = 8 else [V4_ Mode_of_episode_start] = -2
```

Please note: The -2 code is not in the permissible code set to be used by clinicians. It is a flag used by AROC to indicate missing data – not supplied.

AROC impairment code (Item E40 – Pathways 1, 2, 3, 4, 5, 6)

In the Version 4 dataset this item has had three new codes added plus Stroke impairments have been split into haemorrhagic and ischaemic and amputee impairments have been split into traumatic and non-traumatic. Both stroke and amputee backward map from Version 4 to Version 3 but do not forward map – a statistical codeset has been created for the importation of this data to ensure the detail is not lost. It is collected by both Australia and New Zealand; missing data is not permitted for this item.

Mapping table:

Version 3 – Item 33 Code	Version 4 Mapped Code	AU	NZ	Comment
	1.11 STROKE - Haemorrhagic - Left Body Involvement (Right Brain)			New code
	1.12 STROKE - Haemorrhagic - Right Body			New code
	Involvement (Left Brain)	[A]	Į¥.	NT 1
	1.13 STROKE - Haemorrhagic - Bilateral Involvement	$\overline{\checkmark}$		New code
	1.14 STROKE - Haemorrhagic - No Paresis	$\overline{\checkmark}$		New code
	1.19 STROKE - Haemorrhagic - Other	$\overline{\square}$	\square	New code
	1.21 STROKE - Ischaemic - Left Body Involvement (Right Brain)		\square	New code
	1.22 STROKE - Ischaemic - Right Body Involvement (Left Brain)	$\overline{\mathbf{V}}$		New code
	1.23 STROKE - Ischaemic - Bilateral Involvement	$\overline{\mathbf{Q}}$	$\overline{\mathbf{V}}$	New code
	1.24 STROKE - Ischaemic - No Paresis	$\overline{\checkmark}$	$\overline{\mathbf{A}}$	New code
	1.29 STROKE - Ischaemic - Other	$\overline{\mathbf{A}}$		New code
1.1 STROKE - Left Body Involvement (Right Brain)	1.31 STROKE - Left Body Involvement (Right Brain)	×	×	Statistical code for mapping
1.2 STROKE - Right Body Involvement (Left Brain)	1.32 STROKE - Right Body Involvement (Left Brain)	×	×	Statistical code for mapping
1.3 STROKE - Bilateral Involvement	1.33 STROKE - Bilateral Involvement	×	×	Statistical code for mapping
1.4 STROKE - No Paresis	1.34 STROKE - No Paresis	×	×	Statistical code for mapping
1.9 STROKE - Other stroke	1.39 STROKE - Other	×	×	Statistical code
		~	_	for mapping
2.11 Brain Dysfunction - Non-traumatic - Subarachnoid haemorrhage	2.11 BRAIN DYSFUNCTION - Non-traumatic - subarachnoid haemorrhage	\checkmark		No change
2.12 Brain Dysfunction - Non-traumatic - Anoxic	2.12 BRAIN DYSFUNCTION - Non-traumatic -	_	_	
Brain Damage	Anoxic brain damage	$\overline{\mathbf{A}}$		No change
2.13 Brain Dysfunction - Non-traumatic - Other non-	2.13 BRAIN DYSFUNCTION - Non-traumatic -	$\overline{\checkmark}$		No change
traumatic brain dysfunction	Other 2.21 BRAIN DYSFUNCTION - Traumatic - open			-
2.21 Brain Dysfunction - Traumatic - Open Injury	injury	Ø	$\overline{\mathbf{Q}}$	No change
2.22 Brain Dysfunction - Traumatic - Closed Injury	2.22 BRAIN DYSFUNCTION - Traumatic - closed	$\overline{\checkmark}$		No change
3.1 NEUROLOGICAL CONDITIONS-Multiple	injury 3.1 NEUROLOGICAL CONDITIONS-Multiple			
Sclerosis CONDITIONS-Multiple	sclerosis	$\overline{\mathbf{A}}$		No change
3.2 NEUROLOGICAL CONDITIONS-Parkinsonism	3.2 NEUROLOGICAL CONDITIONS-	$\overline{\mathbf{Q}}$		No change
	Parkinsonism 3.3 NEUROLOGICAL CONDITIONS-		_	1 to change
3.3 NEUROLOGICAL CONDITIONS- Polyneuropathy	3.3 NEUROLOGICAL CONDITIONS- Polyneuropathy	$\overline{\mathbf{Q}}$		No change
3.4 NEUROLOGICAL CONDITIONS-Guillian-Barre	3.4 NEUROLOGICAL CONDITIONS-Guillian-			No change
5.4 NEUROLOGICAL CONDITIONS-Guilliali-Balle	Barre	IV.	· ·	No change
3.5 NEUROLOGICAL CONDITIONS-Cerebral Palsy	3.5 NEUROLOGICAL CONDITIONS-Cerebral palsy			No change
3.8 NEUROLOGICAL CONDITIONS-	3.8 NEUROLOGICAL CONDITIONS-	$\overline{\mathbf{A}}$		No change
Neuromuscular Disorders 3.9 NEUROLOGICAL CONDITIONS-Other	Neuromuscular disorders 3.9 NEUROLOGICAL CONDITIONS-Other	- -		5 *
neurologic NEUROLOGICAL CONDITIONS-Other	neurologic	$\overline{\mathbf{A}}$		No change
4.111 SPINAL CORD DYSFUNCTION - Non-	4.111 SPINAL CORD DYSFUNCTION - Non-			No change
traumatic - Paraplegia, Incomplete	traumatic - Paraplegia, incomplete	<u></u>	ك	140 change
4.112 SPINAL CORD DYSFUNCTION - Non-traumatic - Paraplegia, Complete	4.112 SPINAL CORD DYSFUNCTION - Non-traumatic - Paraplegia, complete	Ø	\square	No change

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Version 3 – Item 33 Code	Version 4 Mapped Code	AU	NZ	Comment
4.1211 SPINAL CORD DYSFUNCTION - Non-	4.1211 SPINAL CORD DYSFUNCTION - Non-			No change
traumatic - Quadriplegia Incomplete C1-4 4.1212 SPINAL CORD DYSFUNCTION - Non-	traumatic - Quadriplegia incomplete C1-4 4.1212 SPINAL CORD DYSFUNCTION - Non-			
traumatic - Quadriplegia Incomplete C5-8	traumatic - Quadriplegia incomplete C5-8	\square		No change
4.1221 SPINAL CORD DYSFUNCTION - Non-	4.1221 SPINAL CORD DYSFUNCTION - Non-			No change
raumatic - Quadriplegia Complete C1-4	traumatic - Quadriplegia complete C1-4			140 change
4.1222 SPINAL CORD DYSFUNCTION - Non-	4.1222 SPINAL CORD DYSFUNCTION - Non-traumatic - Quadriplegia complete C5-8		$\overline{\checkmark}$	No change
raumatic - Quadriplegia Complete C5-8	4.13 SPINAL CORD DYSFUNCTION - Non-			
4.13 SPINAL CORD DYSFUNCTION - Non-	traumatic - Other non-traumatic spinal cord	abla	$\overline{\checkmark}$	No change
raumatic - Other non-traumatic SCI	dysfunction			
4.211 SPINAL CORD DYSFUNCTION - Traumatic -	4.211 SPINAL CORD DYSFUNCTION - Traumatic	$\overline{\square}$	$\overline{\mathbf{A}}$	No change
Paraplegia, Incomplete 4.212 SPINAL CORD DYSFUNCTION - Traumatic -	- Paraplegia, incomplete 4.212 SPINAL CORD DYSFUNCTION - Traumatic			
Paraplegia, Complete	- Paraplegia, complete		$\overline{\checkmark}$	No change
4.2211 SPINAL CORD DYSFUNCTION - Traumatic	4.2211 SPINAL CORD DYSFUNCTION -		Π	NT 1
Quadriplegia Incomplete C1-4	Traumatic - Quadriplegia incomplete C1-4	\square	$\overline{\square}$	No change
4.2212 SPINAL CORD DYSFUNCTION - Traumatic	4.2212 SPINAL CORD DYSFUNCTION -		$\overline{\checkmark}$	No change
Quadriplegia Incomplete C5-8	Traumatic - Quadriplegia incomplete C5-8			1 to enumbe
4.2221 SPINAL CORD DYSFUNCTION - Traumatic Quadriplegia Complete C1-4	4.2221 SPINAL CORD DYSFUNCTION - Traumatic - Quadriplegia complete C1-4		$\overline{\mathbf{V}}$	No change
4.2222 SPINAL CORD DYSFUNCTION - Traumatic	4.2222 SPINAL CORD DYSFUNCTION -	_	_	
Quadriplegia Complete C5-8	Traumatic - Quadriplegia complete C5-8		$\overline{\mathbf{Q}}$	No change
4.23 SPINAL CORD DYSFUNCTION - Traumatic -	4.23 SPINAL CORD DYSFUNCTION - Traumatic -	$\overline{\square}$	$\overline{\mathbf{Q}}$	No change
Other traumatic SCI	Other traumatic spinal cord dysfunction			
	5.11 AMPUTATION OF LIMB - no trauma - Single upper amputation above the elbow	$\overline{\checkmark}$	$\overline{\checkmark}$	New code
	5.12 AMPUTATION OF LIMB - no trauma - Single			New code
	upper amputation below the elbow		$\overline{\mathbf{A}}$	Tiew code
	5.13 AMPUTATION OF LIMB - no trauma - Single		$\overline{\mathbf{A}}$	New code
	lower amputation above the knee	V.	IV.	
	5.14 AMPUTATION OF LIMB - no trauma - Single	$\overline{\checkmark}$	$\overline{\mathbf{A}}$	New code
	lower amputation below the knee 5.15 AMPUTATION OF LIMB - no trauma -			New code
	Double lower amputation above the knee			ivew code
	5.16 AMPUTATION OF LIMB - no trauma -	$\overline{\square}$	$\overline{\mathbf{A}}$	New code
	Double lower amputation above/below the knee			
	5.17 AMPUTATION OF LIMB - no trauma -	\checkmark	$\overline{\checkmark}$	New code
	Double lower amputation below the knee 5.18 AMPUTATION OF LIMB - no trauma - Partial			New code
	foot amputation (includes single/double)		$\overline{\mathbf{A}}$	Tiew code
	5.19 AMPUTATION OF LIMB - no trauma - Other	\square	$\overline{\mathbf{A}}$	New code
	amputation		ت .	
	5.21 AMPUTATION OF LIMB - trauma - Single		$\overline{\checkmark}$	New code
	upper amputation above the elbow 5.22 AMPUTATION OF LIMB - trauma - Single			New code
	upper amputation below the elbow			Tiew code
	5.23 AMPUTATION OF LIMB - trauma - Single	$\overline{\square}$	$\overline{\mathbf{Q}}$	New code
	lower amputation above the knee			
	5.24 AMPUTATION OF LIMB - trauma - Single	\checkmark	\checkmark	New code
	lower amputation below the knee 5.25 AMPUTATION OF LIMB - trauma - Double	_		New code
	lower amputation above the knee			- 10 11 - 10 - 10
	5.26 AMPUTATION OF LIMB - trauma - Double	$\overline{\mathbf{Q}}$	$\overline{\mathbf{A}}$	New code
	lower amputation above/below the knee	_		NT 1
	5.27 AMPUTATION OF LIMB - trauma - Double lower amputation below the knee		$\overline{\mathbf{A}}$	New code
	5.28 AMPUTATION OF LIMB - trauma - Partial	_	_	New code
	foot amputation (includes single/double)	\square		
	5.29 AMPUTATION OF LIMB - trauma - Other	\square	$\overline{\mathbf{Q}}$	New code
5.1 AMDITATION OF LIMP C:1- U	amputation		_	Statistical - 1
5.1 AMPUTATION OF LIMB - Single Upper Amputation Above the Elbow	5.31 AMPUTATION OF LIMB - Single Upper Amputation Above the Elbow	×	×	Statistical cod for mapping
Amputation Above the Elbow 5.2 AMPUTATION OF LIMB - Single Upper	5.32 AMPUTATION OF LIMB - Single Upper	_	_	Statistical cod
Amputation Below the Elbow	Amputation Below the Elbow	×	×	for mapping
5.3 AMPUTATION OF LIMB - Single Lower	5.33 AMPUTATION OF LIMB - Single Lower	×	×	Statistical cod
Amputation Above the Knee	Amputation Above the Knee	<u>~</u>		for mapping
5.4 AMPUTATION OF LIMB - Single Lower	5.34 AMPUTATION OF LIMB - Single Lower	×	×	Statistical cod
Amputation Below the Knee	Amputation Below the Knee			for mapping

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Version 3 – Item 33 Code	Version 4 Mapped Code	AU	NZ	Comment
5.5 AMPUTATION OF LIMB - Double Lower Amputation Above the Knee	5.35 AMPUTATION OF LIMB - Double Lower Amputation Above the Knee	×	×	Statistical code for mapping
5.6 AMPUTATION OF LIMB - Double Lower Amputation Above/below the Knee	5.36 AMPUTATION OF LIMB - Double Lower Amputation Above/below the Knee	×	×	Statistical code for mapping
5.7 AMPUTATION OF LIMB - Double Lower Amputation Below the Knee	5.37 AMPUTATION OF LIMB - Double Lower Amputation Below the Knee	×	×	Statistical code for mapping
5.8 AMPUTATION OF LIMB - Partial Foot Amputation (includes single/double)	5.38 AMPUTATION OF LIMB - Partial Foot Amputation (includes single/double)	×	×	Statistical code for mapping
5.9 AMPUTATION OF LIMB - Other Amputation	5.39 AMPUTATION OF LIMB - Other Amputation	×	×	Statistical code
6.1 ARTHRITIS - Rheumatoid Arthritis	6.1 ARTHRITIS - Rheumatoid arthritis	$\overline{\mathbf{Q}}$	$\overline{\mathbf{V}}$	for mapping No change
6.2 ARTHRITIS - Osteoarthritis	6.2 ARTHRITIS - Osteoarthritis	\square	$\overline{\square}$	No change
6.9 ARTHRITIS - Other Arthritis	6.9 ARTHRITIS - Other arthritis	$\overline{\mathbf{Q}}$	$\overline{\square}$	No change
7.1 PAIN SYNDROMES - Neck Pain	7.1 PAIN SYNDROMES - Neck pain	$\overline{\checkmark}$		No change
7.2 PAIN SYNDROMES - Back Pain	7.2 PAIN SYNDROMES - Back pain	$\overline{\mathbf{Q}}$	\square	No change
7.3 PAIN SYNDROMES - Extremity Pain	7.3 PAIN SYNDROMES - Extremity pain		\square	No change
7.4 PAIN SYNDROMES - Headache (includes migraine)	7.4 PAIN SYNDROMES - Headache (includes migraine)	\square		No change
7.5 PAIN SYNDROMES - Multi-site pain	7.5 PAIN SYNDROMES - Multi-site pain			No change
7.9 PAIN SYNDROMES - Other Pain	7.9 PAIN SYNDROMES - Other pain	$\overline{\checkmark}$		No change
8.111 ORTHOPAEDIC CONDITIONS - Fracture of		$\overline{\mathbf{V}}$	$\overline{\checkmark}$	No change
hip, unilateral (includes #NOF) 8.112 ORTHOPAEDIC CONDITIONS - Fracture of	hip, unilateral (includes #NOF) 8.112 ORTHOPAEDIC CONDITIONS - Fracture of			
hip, bilateral (includes #NOF) 8.12 ORTHOPAEDIC CONDITIONS - Fracture of	hip, bilateral (includes #NOF) 8.12 ORTHOPAEDIC CONDITIONS - Fracture of	☑		No change
shaft of femur (excludes femur involving knee joint)	shaft of femur (excludes femur involving knee joint)	☑		No change
8.13 ORTHOPAEDIC CONDITIONS - Fracture of pelvis	8.13 ORTHOPAEDIC CONDITIONS - Fracture of pelvis			No change
8.141 ORTHOPAEDIC CONDITIONS - Fracture of knee (includes patella, femur involving knee joint, tibia	8.141 ORTHOPAEDIC CONDITIONS - Fracture of knee (includes patella, femur involving knee joint,	Ø	abla	No change
or fibula involving knee joint) 8.142 ORTHOPAEDIC CONDITIONS - Fracture of leg, ankle, foot	tibia or fibula involving knee joint) 8.142 ORTHOPAEDIC CONDITIONS - Fracture of leg, ankle, foot	Ø		No change
8.15 ORTHOPAEDIC CONDITIONS - Fracture of upper limb (includes hand, fingers, wrist, forearm, arm, shoulder)	8.15 ORTHOPAEDIC CONDITIONS - Fracture of upper limb (includes hand, fingers, wrist, forearm, arm, shoulder)	Ø		No change
8.16 ORTHOPAEDIC CONDITIONS - Fracture of spine (excludes where the major disorder is pain)	8.16 ORTHOPAEDIC CONDITIONS - Fracture of spine (excludes where the major disorder is pain)		$\overline{\checkmark}$	No change
8.17 ORTHOPAEDIC CONDITIONS - Fracture of	8.17 ORTHOPAEDIC CONDITIONS - Fracture of multiple sites	\square	\square	No change
multiple sites 8.19 ORTHOPAEDIC CONDITIONS - Other orthopaedic fracture	8.19 ORTHOPAEDIC CONDITIONS - Other orthopaedic fracture	Ø		No change
8.211 ORTHOPAEDIC CONDITIONS - Unilateral hip replacement	8.211 ORTHOPAEDIC CONDITIONS - Unilateral hip replacement	Ø	Ø	No change
8.212 ORTHOPAEDIC CONDITIONS - Bilateral hip replacement	8.212 ORTHOPAEDIC CONDITIONS - Bilateral hip replacement	\square	$\overline{\checkmark}$	No change
8.221 ORTHOPAEDIC CONDITIONS - Unilateral knee replacement	8.221 ORTHOPAEDIC CONDITIONS - Unilateral knee replacement	☑	\square	No change
8.222 ORTHOPAEDIC CONDITIONS - Bilateral knee replacement	8.222 ORTHOPAEDIC CONDITIONS - Bilateral knee replacement		$\overline{\checkmark}$	No change
8.231 ORTHOPAEDIC CONDITIONS - Knee and	8.231 ORTHOPAEDIC CONDITIONS - Knee and	V		No change
hip replacement same side 8.232 ORTHOPAEDIC CONDITIONS - Knee and hip replacement different sides	hip replacement same side 8.232 ORTHOPAEDIC CONDITIONS - Knee and hip replacement different sides	Ø		No change
8.24 ORTHOPAEDIC CONDITIONS - Shoulder	8.24 ORTHOPAEDIC CONDITIONS - Shoulder replacement or repair		$\overline{\checkmark}$	No change
replacement or repair 8.25 ORTHOPAEDIC CONDITIONS - Post spinal	8.25 ORTHOPAEDIC CONDITIONS - Post spinal		$\overline{\checkmark}$	No change
surgery 8.26 ORTHOPAEDIC CONDITIONS - Other orthopaedic surgery	surgery 8.26 ORTHOPAEDIC CONDITIONS - Other orthopaedic surgery			No change
ormophedic surgery	8.3 ORTHOPAEDIC CONDITIONS - Soft tissue injury	Ø	$\overline{\mathbf{A}}$	New code
9.1 CARDIAC - Following recent onset of new cardiac impairment	9.1 CARDIAC - Following recent onset of new cardiac impairment		$\overline{\checkmark}$	No change
9.2 CARDIAC - Chronic cardiac insufficiency	9.2 CARDIAC - Chronic cardiac insufficiency	$\overline{\checkmark}$		No change
	9.3 CARDIAC - Heart or heart/lung transplant	$\overline{\square}$	<u></u>	No change
10.1 PULMONARY - Chronic Obstructive Pulmonary	10.1 PULMONARY - Chronic obstructive	V	$\overline{\checkmark}$	
Disease	pulmonary disease			No change
	10.2 PULMONARY - Lung transplant	$\overline{\checkmark}$	\checkmark	New code

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Version 3 – Item 33 Code	Version 4 Mapped Code	AU	NZ	Comment
10.9 PULMONARY - Other	10.9 PULMONARY - Other	\square	\square	No change
11 BURNS	11 BURNS	$\overline{\checkmark}$	$\overline{\checkmark}$	No change
12.1 CONGENITAL DEFORMITIES - Spina Bifida	12.1 CONGENITAL DEFORMITIES - Spina bifida	$\overline{\mathbf{A}}$		No change
12.9 CONGENITAL DEFORMITIES - Other	12.9 CONGENITAL DEFORMITIES - Other	$\overline{\mathbf{A}}$		No change
13.1 OTHER DISABLING IMPAIRMENTS - Lymphoedema	13.1 OTHER DISABLING IMPAIRMENTS - Lymphoedema	\square		No change
	13.3 OTHER DISABLING IMPAIRMENTS - Conversion disorder			New code
13.2 OTHER DISABLING IMPAIRMENTS - Other Disabling Impairments. This classification should rarely be used.	13.9 OTHER DISABLING IMPAIRMENTS - Other disabling impairments. This classification should rarely be used.	Ø	Ø	Code changed
14.1 MAJOR MULTIPLE TRAUMA - Brain + Spinal Cord Injury	14.1 MAJOR MULTIPLE TRAUMA - Brain + spinal cord injury			No change
14.2 MAJOR MULTIPLE TRAUMA - Brain + Multiple Fracture/Amputation	14.2 MAJOR MULTIPLE TRAUMA - Brain + multiple fracture/amputation			No change
14.3 MAJOR MULTIPLE TRAUMA - Spinal Cord + Multiple Fracture/ Amputation	14.3 MAJOR MULTIPLE TRAUMA - Spinal cord + multiple fracture/ amputation			No change
14.9 MAJOR MULTIPLE TRAUMA - Other Multiple Trauma	14.9 MAJOR MULTIPLE TRAUMA - Other multiple trauma			No change
15.1 DEVELOPMENTAL DISABILITIES	15.1 DEVELOPMENTAL DISABILITIES	$\overline{\checkmark}$		No change
16.1 RE-CONDITIONING/RESTORATIVE - Reconditioning following surgery	16.1 RE-CONDITIONING/RESTORATIVE - Reconditioning following surgery	\square		No change
16.2 RE-CONDITIONING/RESTORATIVE - Reconditioning following medical illness	16.2 RE-CONDITIONING/RESTORATIVE - Reconditioning following medical illness	Ø		No change
16.3 RE-CONDITIONING/RESTORATIVE - Cancer rehab	16.3 RE-CONDITIONING/RESTORATIVE - Cancer rehabilitation	Ø		No change

Mapping logic:

```
if [V3_Impairment_Code] in (2.11, 2.12, 2.13, 2.21, 2.22, 3.1, 3.2, 3.3, 3.4, 3.5, 3.8, 3.9, 4.111, 4.112, 4.1211, 4.1212, 4.1221, 4.1222, 4.13, 4.211,
4.212, 4.2211, 4.2212, 4.2221, 4.2222, 4.23, 6.1, 6.2, 6.9, 7.1, 7.2, 7.3, 7.4, 7.5, 7.9, 8.111, 8.112, 8.12, 8.13, 8.141, 8.142, 8.15, 8.16, 8.17, 8.19,
8.211, 8.212, 8.221, 8.222, 8.231, 8.232, 8.24, 8.25, 8.26, 9.1, 9.2, 10.1, 10.9, 11, 12.1, 12.9, 13.1, 14.1, 14.2, 14.3, 14.9, 15.1, 16.1, 16.2, 16.3) then
[V4_Impairment_Code] = [V3_Impairment_Code]
else if [V3_Impairment_Code] = 1.1 then [V4_Impairment_Code] = 1.31
else if [V3_Impairment_Code] = 1.2 then [V4_Impairment_Code] = 1.32
else if [V3_Impairment_Code] = 1.3 then [V4_Impairment_Code] = 1.33
else if [V3 Impairment Code] = 1.4 then [V4 Impairment Code] = 1.34
else if [V3_Impairment_Code] = 1.9 then [V4_Impairment_Code] = 1.39
else if [V3_Impairment_Code] = 5.1 then [V4_Impairment_Code] = 5.31
else if [V3 Impairment Code] = 5.2 then [V4 Impairment Code] = 5.32
else if [V3_Impairment_Code] = 5.3 then [V4_Impairment_Code] = 5.33
else if [V3_Impairment_Code] = 5.4 then [V4_Impairment_Code] = 5.34
else if [V3 Impairment Code] = 5.5 then [V4 Impairment Code] = 5.35
else if [V3_Impairment_Code] = 5.6 then [V4_Impairment_Code] = 5.36
else if [V3_Impairment_Code] = 5.7 then [V4_Impairment_Code] = 5.37
else if [V3_Impairment_Code] = 5.8 then [V4_Impairment_Code] = 5.38
else if [V3_Impairment_Code] = 5.9 then [V4_Impairment_Code] = 5.39
else if [V3_Impairment_Code] =13.2 then [V4_Impairment_Code] = 13.9
else [V4_Impairment_Code] = -2
```

Please note: The 1.3* codes, 5.3* codes and -2 code are not in the permissible code set to be used by clinicians. They are flags used by AROC to indicate un-mappable stroke / amputee data and missing data – not supplied.

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Comorbidities interfering with rehabilitation episode (Items E104, E105, E106, E107 – Pathways 1, 2, 3, 4, 5)

In the Version 4 dataset this item has extra codes added and has been reordered. It is collected by both Australia and New Zealand. Missing data is only permitted for item E104 where the *Existing Comobidity?* item is "No". Items E105, E106 and E107 may or may not be missing depending upon how many comorbidities are being reported.

Mapping table:

Version 3 – Item 35 Code	Version 4 Mapped Code	AU	NZ	Comment
1 Ischaemic heart disease	01 Cardiac disease	\square	$\overline{\square}$	Code changed
2 Cardiac failure	01 Cardiac disease	$\overline{\checkmark}$	$\overline{\checkmark}$	Code changed
3 Atrial fibrillation	01 Cardiac disease	\square	$\overline{\mathbf{A}}$	Code changed
4 Osteoporosis	20 Osteoporosis		$\overline{\checkmark}$	Code changed
5 Osteoarthritis	19 Osteoarthritis	\square	$\overline{\mathbf{Q}}$	Code changed
6 Upper limb amputation	99 Other		$\overline{\checkmark}$	Code changed
7 Lower limb amputation	99 Other	\square	$\overline{\mathbf{A}}$	Code changed
8 Depression	06 Mental health problem			Code changed
9 Bipolar Affective Disorder	06 Mental health problem	\square	$\overline{\mathbf{A}}$	Code changed
10 Drug and alcohol abuse	03 Drug and alcohol abuse			Code changed
11 Dementia	04 Dementia	\square	$\overline{\mathbf{A}}$	Code changed
12 Asthma	02 Respiratory disease		\checkmark	Code changed
13 CAL/COPD	02 Respiratory disease	\square	$\overline{\mathbf{Q}}$	Code changed
14 Renal failure	07 Renal failure with dialysis		$\overline{\checkmark}$	Code changed
15 Epilepsy	09 Epilepsy	$\overline{\checkmark}$	$\overline{\mathbf{V}}$	Code changed
16 Parkinsons disease	10 Parkinsons disease		$\overline{\checkmark}$	Code changed
17 Stroke	11 Stroke	\square	$\overline{\mathbf{A}}$	Code changed
18 Spinal cord injury/disease	12 Spinal cord injury/disease		$\overline{\checkmark}$	Code changed
19 Visual impairment	24 Visual impairment	\square	$\overline{\mathbf{A}}$	Code changed
20 Hearing impairment	15 Hearing impairment			Code changed
21 Diabetes mellitus	16 Diabetes mellitus	\square	$\overline{\mathbf{A}}$	Code changed
22 Delirium	05 Delirium, pre-existing		\checkmark	Code changed
23 Morbid obesity	17 Morbid obesity	\square	$\overline{\mathbf{Q}}$	Code changed
99 Other	99 Other	$\overline{\checkmark}$	$\overline{\checkmark}$	No change
	08 Renal failure NO dialysis	\square	$\overline{\mathbf{A}}$	New code
	13 Brain injury	$\overline{\checkmark}$	$\overline{\checkmark}$	New code
	14 Multiple sclerosis	\square	$\overline{\checkmark}$	New code
	18 Inflammatory arthritis		$\overline{\checkmark}$	New code
	21 Chronic pain	\square	$\overline{\mathbf{A}}$	New code
	22 Cancer		$\overline{\checkmark}$	New code
	23 Pressure ulcer, pre-existing	Ø	\square	New code

Mapping logic:

```
if [V3_Comorbidity] = 1 then [V4_ Comorbidity] = 01
else if [V3_ Comorbidity] = 2 then [V4_ Comorbidity] = 01
else if [V3_ Comorbidity] = 3 then [V4_ Comorbidity] = 01
else if [V3_ Comorbidity] = 4 then [V4_ Comorbidity] = 20
else if [V3_ Comorbidity] = 5 then [V4_ Comorbidity] = 19
else if [V3_ Comorbidity] = 6 then [V4_ Comorbidity] = 99
else if [V3_ Comorbidity] = 7 then [V4_ Comorbidity] = 99
else if [V3_ Comorbidity] = 8 then [V4_ Comorbidity] = 06
else if [V3_ Comorbidity] = 9 then [V4_ Comorbidity] = 06
else if [V3_ Comorbidity] = 10 then [V4_ Comorbidity] = 03
else if [V3_ Comorbidity] = 11 then [V4_ Comorbidity] = 04
else if [V3_ Comorbidity] = 12 then [V4_ Comorbidity] = 02
```

```
else if [V3_ Comorbidity] = 13 then [V4_ Comorbidity] =02
else if [V3_ Comorbidity] = 14 then [V4_ Comorbidity] =07
else if [V3_ Comorbidity] = 15 then [V4_ Comorbidity] =09
else if [V3_ Comorbidity] = 16 then [V4_ Comorbidity] =10
else if [V3_ Comorbidity] = 17 then [V4_ Comorbidity] =11
else if [V3_ Comorbidity] = 18 then [V4_ Comorbidity] =12
else if [V3_ Comorbidity] = 19 then [V4_ Comorbidity] =24
else if [V3_ Comorbidity] =20 then [V4_ Comorbidity] =15
else if [V3_ Comorbidity] =21 then [V4_ Comorbidity] =16
else if [V3_ Comorbidity] =22 then [V4_ Comorbidity] =05
else if [V3_ Comorbidity] =23 then [V4_ Comorbidity] =17
else if [V3_ Comorbidity] =99 then [V4_ Comorbidity] =99
else if[V3_ Existing_ Comorbidity] = 2 then [V4_ Comorbidity] =-4
else [V4_ Comorbidity] = -2
```

Please note: The -2 code and -4 code are not in the permissible code set to be used by clinicians. They are flags used by AROC to indicate missing data – not supplied and not required.

Version Control: 1.0

Complication interfering with inpatient rehabilitation Episode? (Item E108 – Pathways 2, 3)

This is a new item in the Version 4 dataset that can be mapped from the V3 item *Complications interfering with the rehabilitation episode – complication 1*. It is collected by both Australia and New Zealand. Missing data is not permitted.

Mapping table:

Version 3 – Item 36 Code	Version 4 Mapped Code	AU	NZ	Comment
1 No Complications	2 No	$\overline{\square}$	$\overline{\mathbf{A}}$	New data item
2 UTI	1 Yes			New data item
3 Pressure ulcer	1 Yes	$\overline{\square}$	$\overline{\mathbf{A}}$	New data item
4 Wound infection	1 Yes	$\overline{\checkmark}$		New data item
5 DVT/PE	1 Yes	$\overline{\square}$	$\overline{\mathbf{A}}$	New data item
6 Chest infection	1 Yes	$\overline{\checkmark}$		New data item
7 Significant electrolyte imbalance	1 Yes	$\overline{\mathbf{A}}$	\square	New data item
8 Fall	1 Yes	$\overline{\mathbf{A}}$		New data item
9 Faecal impaction	1 Yes	$\overline{\square}$	$\overline{\mathbf{A}}$	New data item
99 Other	1 Yes		\square	New data item

Mapping logic:

```
if [V3_Complication1] = 1 then [V4_Complication_Flag] = 2
else if [V3_Complication1] = 2 then [V4_Complication_Flag] = 1
else if [V3_Complication1] = 3 then [V4_Complication_Flag] = 1
else if [V3_Complication1] = 4 then [V4_Complication_Flag] = 1
else if [V3_Complication1] = 5 then [V4_Complication_Flag] = 1
else if [V3_Complication1] = 6 then [V4_Complication_Flag] = 1
else if [V3_Complication1] = 7 then [V4_Complication_Flag] = 1
else if [V3_Complication1] = 8 then [V4_Complication_Flag] = 1
else if [V3_Complication1] = 9 then [V4_Complication_Flag] = 1
else if [V3_Complication1] = 99 then [V4_Complication_Flag] = 1
else [V4_Complication_Flag] = -2
```

Please note: The -2 code is not in the permissible code set to be used by clinicians. It is a flag used by AROC to indicate missing data – not supplied.

Complications 1—4 interfering with the inpatient rehabilitation episode (Items E109, E110, E111, E112 – Pathways 2, 3)

In the Version 4 dataset these items have extra codes added. They are collected by both Australia and New Zealand. Missing data is only permitted for item E109 where the *Complication Interfering with inpatient rehabilitation Episode?* item is "No". Items E110, E111 and E112 may or may not be missing depending upon how many complications are being reported.

Mapping table:

Version 3 - Item 36 Code	Version 4 Mapped Code	AU	NZ	Comment
1 No Complications		×	×	Mapped to a new data item E108
2 UTI	01 UTI		$\overline{\checkmark}$	Code changed
	02 Incontinence faecal	$\overline{\checkmark}$	$\overline{\mathbf{Q}}$	New code
	03 Incontinence urinary	$\overline{\checkmark}$	$\overline{\checkmark}$	New code
	04 Delirium		$\overline{\mathbf{A}}$	New code
	05 Fracture			New code
3 Pressure ulcer	06 Pressure ulcer	$\overline{\checkmark}$	$\overline{\checkmark}$	Code changed
4 Wound infection	07 Wound infection	\checkmark	$\overline{\checkmark}$	Code changed
5 DVT/PE	08 DVT/PE	$\overline{\checkmark}$	$\overline{\checkmark}$	Code changed
6 Chest infection	09 Chest infection	$\overline{\checkmark}$	$\overline{\checkmark}$	Code changed
7 Significant electrolyte imbalance	10 Significant electrolyte imbalance	$\overline{\checkmark}$	$\overline{\checkmark}$	Code changed
8 Fall	11 Fall	$\overline{\checkmark}$	$\overline{\checkmark}$	Code changed
9 Faecal impaction	12 Faecal impaction	$\overline{\mathbf{A}}$	$\overline{\mathbf{A}}$	Code changed
99 Other	99 Other	\checkmark	\checkmark	No change

Mapping logic:

```
if [V3_Complication1] = 1 then [V4_Complication1] = -4
else if [V3_Complication1] = 2 then [V4_Complication1] = 01
else if [V3_Complication1] = 3 then [V4_Complication1] = 06
else if [V3_Complication1] = 4 then [V4_Complication1] = 07
else if [V3_Complication1] = 5 then [V4_Complication1] = 08
else if [V3_Complication1] = 6 then [V4_Complication1] = 09
else if [V3_Complication1] = 7 then [V4_Complication1] = 10
else if [V3_Complication1] = 8 then [V4_Complication1] = 11
else if [V3_Complication1] = 9 then [V4_Complication1] = 12
else if [V3_Complication1] = 99 then [V4_Complication1] = 99
else [V4_Complication1] = -2

Repeat for Complication2, Complication3 and Complication4
```

Please note: The -2 code and -4 code are not in the permissible code set to be used by clinicians. They are flags used by AROC to indicate missing data – not supplied and not required.

Final destination (Item E116 – Pathways 2, 3, 4, 5)

In the Version 4 dataset this item has been changed to be numeric only – alpha codesets from New Zealand (NZ) have been converted to numeric and in line with that collected by Australia (AU), although some of the code set labels vary by country. In NZ this item is no longer mandatory. In AU missing data is not permitted for this item.

Mapping table:

Version 3 - Item 31 Code	Version 4 Mapped Code	ΑU	NZ	Comment
1 Private residence (including unit in	1 Private residence (including unit in	\square	×	No change
retirement village)	retirement village)			
2 Residential, low level care (hostel)	2 Residential, low level care (hostel)	$ \overline{\checkmark} $	×	No change
3 Residential, high level care	3 Residential, high level care (nursing	$\overline{\mathbf{V}}$	×	No change
(nursing home)	home)			
4 Community group home	4 Community group home	$ \overline{\checkmark} $	×	No change
5 Boarding house	5 Boarding house	$\overline{\checkmark}$	×	No change
6 Transitional living unit	6 Transitional living unit	$ \overline{\checkmark} $	×	No change
7 Other	8 Other	$\overline{\mathbf{V}}$	×	Code changed
9 Unknown	9 Unknown	\checkmark	×	No change
A Private residence (including unit	1 Private residence (including unit in	×	$ \overline{\mathbf{A}} $	Code changed
in retirement village)	retirement village)			
B Rest home level care	2 Rest home level care	×	\checkmark	Code changed
C Hospital level care (requires 24 hr	3 Hospital level care (requires 24 hr	×	$\overline{\mathbf{V}}$	Code changed
nursing)	nursing)			
D Community group home	4 Community group home	×	$ \overline{\checkmark} $	Code changed
E Boarding house	5 Boarding house	×	$ \overline{\mathbf{A}} $	Code changed
F Transitional living unit	6 Transitional living unit	×	\checkmark	Code changed
G Other	8 Other	×	$\overline{\mathbf{A}}$	Code changed
H Unknown	9 Unknown	×		Code changed

Mapping logic:

```
if [V3_Final_destination] in (1, 2, 3, 4, 5, 6, 9) then [V4_Final_destination] = [V3_Final_destination]
else if [V3_Final_destination] = 7 then [V4_Final_destination] = 8
else if [V3_Final_destination] = A then [V4_Final_destination] = 1
else if [V3_Final_destination] = B then [V4_Final_destination] = 2
else if [V3_Final_destination] = C then [V4_Final_destination] = 3
else if [V3_Final_destination] = D then [V4_Final_destination] = 4
else if [V3_Final_destination] = E then [V4_Final_destination] = 5
else if [V3_Final_destination] = F then [V4_Final_destination] = 6
else if [V3_Final_destination] = G then [V4_Final_destination] = 8
else if [V3_Final_destination] = H then [V4_Final_destination] = 9
else if [V3_Mode_of_episode_end] in (1,2,) then [V4_Final_destination] = -2
else [V4_Final_destination] = -4
```

Please note: The -2 code and -4 code are not in the permissible code set to be used by clinicians. They are flags used by AROC to indicate missing data – not supplied and not required.

Version Control: 1.0

Discharge plan available to patient (Item E143 – Pathways 3, 4, 5)

In the Version 4 dataset this item changed from date field to a yes/no flag. It is collected by both Australia (AU) and New Zealand (NZ), missing data is not permitted for this item.

Mapping table:

Version 3 – Item 42 Code	Version 4 Mapped Code	AU	NZ	Comment
Has a date	1 Yes		$\overline{\mathbf{A}}$	New code
Does not have a date	2 No	\checkmark	\checkmark	New code

Mapping logic:

```
if [V3_Discharge_plan] <> Null then [V4_ Discharge_plan] = 1
else [V4_ Discharge_plan] = 2
```

Please note: The 2 code has been used for all episodes that did not provide a date as it is not possible to determine the difference between no date=not provided and no date = not answered.

CONTACTS

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