

Independent Hospital Pricing Authority

# Australian National Subacute and Non-Acute Patient Classification Version 5.0

**Grouper Software (SNAP5Grouper) Version 1.1  
User Guide**

July 2022



**IHPA**

## Australian National Subacute and Non-Acute Patient Classification Version 5.0 – Grouper Software Version 1.1 (Snap5Grouper) User Guide – July 2022

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# Acronyms and Abbreviations

| Acronym / Abbreviation | Description   |
|------------------------|---|
| ABF                    | Activity based funding  |
| ABF APC DRS            | Activity Based Funding Admitted Patient Care - Data Request Specification       |
| ABF PCC DRS            | Activity Based Funding Palliative Phase of Care - Data Request Specification    |
| AIHW                   | Australian Institute of Health and Welfare                                      |
| AN-SNAP                | Australian National Subacute and Non-Acute Patient Classification               |
| APC                    | Admitted Patient Care data collection   |
| AROC                   | Australasian Rehabilitation Outcomes Centre                                     |
| ASNAHC NBEDS           | Admitted Subacute and Non-Acute Hospital Care National Best Endeavours Data Set |
| CLI                    | Command Line Interface  |
| DRS                    | Data request specification  |
| FIM™                   | Functional Independence Measure <sup>1</sup>                                    |
| FRIC                   | Frailty Related Index of Comorbidities  |
| GEM                    | Geriatric evaluation and management care type                                   |
| GUI                    | Graphical User Interface  |
| HoNOS                  | Health of the Nation Outcome Scale  |
| IHPA                   | Independent Hospital Pricing Authority  |
| LoS                    | Length of stay  |
| METeOR                 | Australian Institute of Health and Welfare's Metadata Online Data Registry      |
| RUG-ADL                | Resource Utilisation Groups - Activities of Daily Living                        |

<sup>1</sup> FIM™ is a trademark of the Uniform Data System for Medical Rehabilitation, a division of UB Foundation Activities Incorporated. The Australasian Rehabilitation Outcomes Centre (AROC) holds the territory license for the use of the FIM™ instrument in Australia.

# 1 Introduction

## 1.1 Background

Under the National Health Reform Agreement 2011, the Independent Hospital Pricing Authority (IHPA) is responsible for determining the activity based funding (ABF) system for public hospital subacute and non-acute care services. The classification system used for admitted subacute and non-acute care ABF in Australia is the Australian National Subacute and Non-Acute Patient Classification (AN-SNAP).

AN-SNAP is used for subacute and non-acute care funding as well as clinical management and other purposes such as benchmarking, epidemiological studies, safety and quality monitoring, and research to understand practice and cost variation. It was first developed in 1997 and has been refined four times since then.

The most recent version, AN-SNAP Version 5.0 (V5), was released in December 2021. IHPA developed AN-SNAP V5 as part of its regular reviews of all ABF classifications to ensure that they reflect contemporary clinical practice and terminology; and provide the best possible statistical explanation of care costs.

AN-SNAP classifies episodes of care across four subacute care types: rehabilitation, palliative care, geriatric evaluation and management (GEM) and psychogeriatric care; and one non-acute care type: maintenance. In AN-SNAP V5 there are a total of 97 end-classes: 83 admitted overnight; six admitted same-day; and eight ungroupable error classes that are used to class episodes with missing information or invalid data.

Further information about AN-SNAP V5 is available on the [IHPA website](#).

## 1.2 Purpose

The AN-SNAP V5 software grouper application (the SNAP5Grouper) version 1.1 groups records of admitted subacute and non-acute care into an AN-SNAP V5 class (or error class if there is missing information preventing grouping to a valid class).

The SNAP5Grouper uses variables defined according to the Australian Institute of Health and Welfare's (AIHW) Metadata Online Data Registry (METeOR)<sup>2</sup> metadata standards; and specified in the Admitted Patient Care National Minimum Data Set (APC NMDS)<sup>3</sup> and Admitted subacute and non-acute hospital care national best endeavours data set (ASNAHC NBEDS).<sup>4</sup>

The SNAP5Grouper application is available as a Graphical User Interface (GUI) or Command Line Interface (CLI) executable. The application provides the following functions:

- Group a Comma Separated Values (CSV) data file interactively
- View results through a user interface
- Output results as a CSV file containing the AN-SNAP V5 class appended to each row.

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<sup>2</sup> The Australian Institute of Health and Welfare's (AIHW) Metadata Online Data Registry (METeOR) is Australia's repository for national metadata standards for health statistics and information. Where ever possible, AN-SNAP V5 terms are defined using METeOR standards. METeOR references are correct as at the time of publication. Readers should always consider any superseded related metadata relationships when cross-referencing with METeOR identifiers.

<sup>3</sup> METeOR 742173

<sup>4</sup> METeOR 742177

### 1.2.1 Supporting information

This User Guide is intended to complement the:

- *Australian National Subacute and Non-Acute Patient Classification Version 5.0 - Classification Manual* (AN-SNAP V5 Classification Manual)<sup>5</sup>; and
- *Australian National Subacute and Non-Acute Patient Classification Version 5.0 - Classification logic flow* (AN-SNAP V5 Classification logic flow).<sup>6</sup>

Further details about the development of AN-SNAP V5 are also available in the *Development of the Australian National Subacute and Non-Acute Patient Classification Version 5.0 - Final report*<sup>7</sup> (AN-SNAP V5 Final Report) on the IHPA website.

## 1.3 Scope

The SNAP5Grouper only groups records of admitted patient care. AN-SNAP is not used by IHPA for non-admitted care pricing so this is out of scope for the SNAP5Grouper.

## 1.4 Application requirements

The SNAP5Grouper application has no specific requirements. The GUI and CLI executables are packed for Microsoft Windows. If the software is needed to be used on other operating systems, the python source code is available on request.

## 1.5 Input data preparation

The SNAP5Grouper application requires a single data file to be provided in the CSV format. Table 1 details the variables and the order of the variables required in the CSV.

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<sup>5</sup> [Independent Hospital Pricing Authority \(2021\) Australian National Subacute and Non-Acute Patient Classification Version 5.0 - Classification Manual.](#)

<sup>6</sup> [Independent Hospital Pricing Authority \(2021\) Australian National Subacute and Non-Acute Patient Classification Version 5.0 - Classification logic flow.](#)

<sup>7</sup> [Independent Hospital Pricing Authority \(2021\) Development of the Australian National Subacute and Non-Acute Patient Classification Version 5.0 - Final Report.](#)

**Table 1. SNAP5Grouper required variables for the Comma Separated Values (CSV) file**

| Column order | Field     | Column order | Field    | Column order | Field    | Column order | Field          | Column order | Field           |
|--------------|-----------|--------------|----------|--------------|----------|--------------|----------------|--------------|-----------------|
| 1            | stateid   | 31           | x12ddx25 | 61           | x12ddx55 | 91           | x12ddx85       | 121          | fim_score14     |
| 2            | care      | 32           | x12ddx26 | 62           | x12ddx56 | 92           | x12ddx86       | 122          | fim_score15     |
| 3            | bir_date  | 33           | x12ddx27 | 63           | x12ddx57 | 93           | x12ddx87       | 123          | fim_score16     |
| 4            | adm_date  | 34           | x12ddx28 | 64           | x12ddx58 | 94           | x12ddx88       | 124          | fim_score17     |
| 5            | sep_date  | 35           | x12ddx29 | 65           | x12ddx59 | 95           | x12ddx89       | 125          | fim_score18     |
| 6            | leavedays | 36           | x12ddx30 | 66           | x12ddx60 | 96           | x12ddx90       | 126          | honos65_score1  |
| 7            | X12ddx1   | 37           | x12ddx31 | 67           | x12ddx61 | 97           | x12ddx91       | 127          | honos65_score2  |
| 8            | x12ddx2   | 38           | x12ddx32 | 68           | x12ddx62 | 98           | x12ddx92       | 128          | honos65_score3  |
| 9            | x12ddx3   | 39           | x12ddx33 | 69           | x12ddx63 | 99           | x12ddx93       | 129          | honos65_score4  |
| 10           | x12ddx4   | 40           | x12ddx34 | 70           | x12ddx64 | 100          | x12ddx94       | 130          | honos65_score5  |
| 11           | x12ddx5   | 41           | x12ddx35 | 71           | x12ddx65 | 101          | x12ddx95       | 131          | honos65_score6  |
| 12           | x12ddx6   | 42           | x12ddx36 | 72           | x12ddx66 | 102          | x12ddx96       | 132          | honos65_score7  |
| 13           | x12ddx7   | 43           | x12ddx37 | 73           | x12ddx67 | 103          | x12ddx97       | 133          | honos65_score8  |
| 14           | x12ddx8   | 44           | x12ddx38 | 74           | x12ddx68 | 104          | x12ddx98       | 134          | honos65_score9  |
| 15           | x12ddx9   | 45           | x12ddx39 | 75           | x12ddx69 | 105          | x12ddx99       | 135          | honos65_score10 |
| 16           | x12ddx10  | 46           | x12ddx40 | 76           | x12ddx70 | 106          | x12ddx100      | 136          | honos65_score11 |
| 17           | x12ddx11  | 47           | x12ddx41 | 77           | x12ddx71 | 107          | impairmenttype | 137          | honos65_score12 |
| 18           | x12ddx12  | 48           | x12ddx42 | 78           | x12ddx72 | 108          | fim_score1     | 138          | rugadl_total    |
| 19           | x12ddx13  | 49           | x12ddx43 | 79           | x12ddx73 | 109          | fim_score2     | 139          | Phaseid         |
| 20           | x12ddx14  | 50           | x12ddx44 | 80           | x12ddx74 | 110          | fim_score3     | 140          | Phase_StartDate |
| 21           | x12ddx15  | 51           | x12ddx45 | 81           | x12ddx75 | 111          | fim_score4     | 141          | Phase_EndDate   |
| 22           | x12ddx16  | 52           | x12ddx46 | 82           | x12ddx76 | 112          | fim_score5     | 142          | PhaseType       |
| 23           | x12ddx17  | 53           | x12ddx47 | 83           | x12ddx77 | 113          | fim_score6     |              |                 |
| 24           | x12ddx18  | 54           | x12ddx48 | 84           | x12ddx78 | 114          | fim_score7     |              |                 |
| 25           | x12ddx19  | 55           | x12ddx49 | 85           | x12ddx79 | 115          | fim_score8     |              |                 |
| 26           | x12ddx20  | 56           | x12ddx50 | 86           | x12ddx80 | 116          | fim_score9     |              |                 |
| 27           | x12ddx21  | 57           | x12ddx51 | 87           | x12ddx81 | 117          | fim_score10    |              |                 |
| 28           | x12ddx22  | 58           | x12ddx52 | 88           | x12ddx82 | 118          | fim_score11    |              |                 |
| 29           | x12ddx23  | 59           | x12ddx53 | 89           | x12ddx83 | 119          | fim_score12    |              |                 |
| 30           | x12ddx24  | 60           | x12ddx54 | 90           | x12ddx84 | 120          | fim_score13    |              |                 |



# 2 SNAP5Grouper requirements

## 2.1 General requirements

### 2.1.1 No column headers

The SNAP5Grouper will attempt to process **all** rows in the CSV. This includes the header row. If a header row has been provided, the SNAP5Grouper will group it to an error class.

### 2.1.2 Date Format

The following fields are date fields:

- bir\_date
- adm\_date
- sep\_date
- Phase\_StartDate
- Phase\_EndDate

The required format for these date fields is dd/mm/yyyy. For example the date January 31st, 2021 would be formatted as: 31/01/2021.

## 2.2 Field requirements

### 2.2.1 Episode Number (stateid)

**METeOR Identifier:** 679557

**Expected Format for valid field:** String with up to 80 alphanumeric characters.

A logical combination of alphanumeric characters that uniquely identifies a record.

The field *stateid* is the stable and unique identifier of a patient episode of care. The grouper expects this field to be a string. This value is used in identifying the first in episode Palliative Care phase.

Variable used in sorting and linking episodes, used in grouping palliative care episodes.

### 2.2.2 Hospital Service - care type (care)

**METeOR Identifier:** 711010

**Expected Format for valid field:** Whole number - up to two numeric characters.

The overall nature of a clinical service provided to an admitted patient during an episode of care (admitted care), as represented by a code.

The field *care* is formatted as a whole integer number. If the grouper does not match a permissible care type value an error class will be returned for row.

Permissible values are as set out in Table 2.

**Table 2. SNAP5Grouper care type (care) permissible values**

| Value | Description                               |
|-------|---|
| 2     | Rehabilitation Care                       |
| 3     | Palliative Care                           |
| 4     | Geriatric evaluation and management (GEM) |
| 5     | Psychogeriatric Care                      |
| 6     | Maintenance Care                          |

### 2.2.3 Person Date of Birth - (bir\_date)

**METeOR Identifier:** 287007

**Expected Format for valid class:** DD/MM/YYYY - 10 alphanumeric characters.

The date of birth of the person, expressed as DD/MM/YYYY.

The field *bir\_date* is a date field in format of dd/mm/yyyy. For example, the following date entry will be considered as valid: 20/05/2021.

The field is used in calculating the individual's age. Age is derived from the start of patient care (*adm\_date*) - Individual's Date of Birth.

If *bir\_date* is greater than *adm\_date* or *sep\_date* the episode will return an error class. An error class will also be returned if *bir\_date* is less than 01/01/1900. If any of the date time formats are incorrect, an error class will be returned for that episode (CSV row).

### 2.2.4 Episode of admitted patient care - admission date (adm\_date)

**METeOR Identifier:** 695137

**Expected Format for valid class:** DD/MM/YYYY - 10 alphanumeric characters.

The date on which an admitted patient commences an episode of care, expressed as DD/MM/YYYY.

The field *adm\_date* is a date field in the format of DD/MM/YYYY. For example, the following date entry will be considered as valid: 20/05/2021.

The field is used in calculating the length of stay: *sep\_date* - *adm\_date* - *LeaveDays*.

### 2.2.5 Episode of admitted patient care - separation date (sep\_date)

**METeOR Identifier:** 270025

**Expected Format for valid class:** DD/MM/YYYY - 10 alphanumeric characters.

The date on which an admitted patient completes an episode of care, expressed as DD/MM/YYYY.

The field *sep\_date* is a date field in the format of DD/MM/YYYY. For example, the following date entry will be considered as valid: 20/05/2021.

The field is used in calculating the length of stay: *sep\_date* - *adm\_date* - *LeaveDays*.

### 2.2.6 Episode of admitted patient care – number of leave days (LeaveDays)

**METeOR Identifier:** 270251

**Expected Format for valid class:** Whole number  $\geq 0$

Sum of the length of leave (date returned from leave minus date went on leave) for all periods within the hospital stay.

The field *LeaveDays* is a whole number field greater or equal to 0. The variables should be consistent across the episode.

The field is used in calculating the length of stay: *sep\_date* - *adm\_date* - *LeaveDays*.

### 2.2.7 Episode of care - principal diagnosis, Primary and Additional - (x12ddx1 - x12ddx100)

**METeOR Identifier:** 746665

**Expected Format for valid class:** String of 8 alphanumeric characters.

The diagnosis established after study to be chiefly responsible for occasioning an episode of admitted patient care as represented by a code.

The Diagnosis code field is expected to be a string and is used in calculating the Frailty Related Index of Comorbidities (FRIC) which is used to group episodes of GEM and some non-acute care episodes.

The SNAP5Grouper also provides a Dementia or Delirium present flag (although this is not used as a binary variable in the classification). The flag will be true if the following diagnosis codes are present: F00.00, F00.01, F00.10, F00.11, F00.20, F00.21, F00.90, F00.91, F01.00, F01.01, F01.10, F01.11, F01.20, F01.21, F01.30, F01.31, F01.80, F01.81, F01.90, F01.91, F02.00, F02.01, F02.10, F02.11, F02.20, F02.21, F02.30, F02.31, F02.40, F02.41, F02.80, F02.81, F03.00, F03.01.

Data reported must be aligned with either the ICD-10-AM Eleventh or Twelfth Edition, this will be dependent on the edition that is utilised locally.

### 2.2.8 Episode of admitted patient care - primary impairment type - (Impairmenttype)

**METeOR Identifier:** 681412

**Expected Format for valid class:** String with up to 7 numeric characters.

The impairment which is the primary reason for the admission to an episode of care, as represented by a code.

The *Impairmenttype* code is expected to be a string that matches the Australasian Rehabilitation Outcomes Centre (AROC) Impairment codes used to classify rehabilitation episodes into like clinical groups.<sup>8</sup>

### 2.2.9 Person - level of functional independence, Functional Independence Measure score - (Fim\_Score1 - Fim\_Score18)

**METeOR Identifier:** 717982

---

<sup>8</sup> See Australasian Rehabilitation Outcomes Centre (2013) [AROC Impairment Coding Guidelines](#).

**Expected Format for valid class:** Whole number between 1 and 7 - 1 numeric character

A person's level of functional independence to carry out activities of daily living safely and autonomously, as represented by a Functional Independence Measure\_score-based code.

*Fim\_score 1* through to *Fim\_score13* are used to calculate the Functional Independence Motor Score. *Fim\_score14* through to *Fim\_score18* are also used to calculate the Functional Independence Cognition Score.

The grouper is expecting the values of each FIM item to be between 1 and 7 as set out in Table 3.

**Table 3. SNAP5Grouper Functional Independence Measure score (*Fim\_Score1* - *Fim\_Score18*) permissible values**

| Value | Description                          |
|-------|--------------------------------------|
| 1     | Total assistance with helper         |
| 2     | Maximal assistance with helper       |
| 3     | Moderate assistance with helper      |
| 4     | Minimal assistance with helper       |
| 5     | Supervision or setup with helper     |
| 6     | Modified independence with no helper |
| 7     | Complete independence with no helper |

### 2.2.10 Person - level of psychiatric symptom severity, Health of the Nation Outcome Scale 65+ score - (*Honos65\_score1* - *Honos65\_score12*)

**METeOR Identifier:** 730844

**Expected Format for Valid class:** Whole number between 0 and 4 - 1 numeric character

An assessment of the severity of a person's psychiatric symptoms, as represented by a Health of the Nation Outcome Scale (HoNOS) 65+ score-based code.

*Honos65\_score1* through to *Honos65\_score12* are used to calculate the HoNOS 65+ Total Score field.

The grouper is expecting the values of each HoNOS 65+ score item to be between 0 and 4 as set out in Table 4.

**Table 4. SNAP5Grouper Health of the Nation Outcome Scale 65+ score - (*Honos65\_score1* - *Honos65\_score12*) permissible values**

| Value | Description                         |
|-------|-------------------------------------|
| 0     | No problem within the period stated |
| 1     | Minor problem requiring no action   |
| 2     | Mild problem but definitely present |
| 3     | Moderately severe problem           |
| 4     | Severe to very severe problem       |

### 2.2.11 Person - level of functional independence, Resource Utilisation Groups– Activities of Daily Living total score - (*Rugadl\_total*)

**METeOR Identifier:** 717986

**Expected Format for Valid class:** Whole number between 4 and 18 - up to 2 numeric characters.

A person's level of functional independence to carry out activities of daily living safely and autonomously, as represented by a total Resource Utilisation Groups - Activities of Daily Living score-based code.

### 2.2.12 Phase ID - (*PhaseID*)

**METeOR Identifier:** N/A

**Expected Format for valid class:** String of up to 15 alphanumeric characters.

*PhaseID* is the stable and unique identification of a patient palliative phase of care.

A new *PhaseID* is created when the phase changes. These are linked via the *stateID*. The grouper expects this field to be a string.

### 2.2.13 Episode of admitted patient care - palliative care phase start date - (*Phase\_StartDate*)

**METeOR Identifier:** 681043

**Expected Format for valid class:** DD/MM/YYYY - 10 alphanumeric characters.

The date on which an admitted patient commences a palliative care phase, expressed as DD/MM/YYYY.

The field *Phase\_StartDate* is a date field in the format of DD/MM/YYYY.

In addition to being used for classifying an episode to a valid SNAP class it is also used in deriving if a phase ID is the First Phase in Episode, which is used for grouping some overnight adult palliative care phases.

### 2.2.14 Episode of admitted patient care - palliative care phase end date - (Phase\_EndDate)

**METeOR Identifier:** 681040

**Expected Format for valid class:** DD/MM/YYYY - 10 alphanumeric characters.

The field *Phase\_EndDate* is a date field in the format of DD/MM/YYYY.

In addition to being used for classifying an episode to a valid SNAP class it is also used in deriving if a phase ID is the First Phase in Episode, which is used for grouping some overnight adult palliative care phases.

### 2.2.15 Episode of admitted patient care - palliative care phase (PhaseType)

**METeOR Identifier:** 681029

**Expected Format for valid class:** Whole number between 1 and 4 - 1 numeric character.

The patient's stage of illness or situation within the episode of care in terms of the recognised palliative care phase, as represented by a code.

The field *PhaseType* is a date field in the format of a whole integer between 1 and 4.

In addition to being used for classifying a valid code, it is also used in deriving if a phase ID is the First Phase in Episode which is used for grouping some adult palliative care phases.

The grouper is expecting the values of the *PhaseType* item to be a whole number between 1 and 4 as set out in Table 5.

**Table 5. SNAP5Grouper palliative care phase (*PhaseType*) permissible values**

| Value | Description   |
|-------|---------------|
| 1     | Stable        |
| 2     | Unstable      |
| 3     | Deteriorating |
| 4     | Terminal      |

## 2.3 Variables required by care type

### 2.3.1 Rehabilitation - Care type 2

- *Bir\_date*
- *Adm\_date*
- *Sep\_date*
- *Leavedays*
- *Impairmenttype*
- *FIM\_score1* - *FIM\_Score18*

### 2.3.2 Palliative - Care type 3

- *Bir\_date*
- *Adm\_date*
- *Sep\_date*
- *Leavedays*
- *StateID*
- *PhaseType*
- *Phase\_StartDate*
- *Phase\_EndDate*
- *PhaseID*
- *RUGADL\_Total*

### 2.3.3 Geriatric evaluation and management - Care type 4

- *Bir\_date*
- *Adm\_date*
- *Sep\_date*
- *Leavedays*
- *FIM\_Score1 - FIM\_Score18*
- *Diagnosis codes: X12ddx1 - x12ddx100*

### 2.3.4 Psychogeriatric - Care type 5

- *Bir\_date*
- *Adm\_date*
- *Sep\_date*
- *Leavedays*
- *Honos65\_score1 - Honos65\_score12*

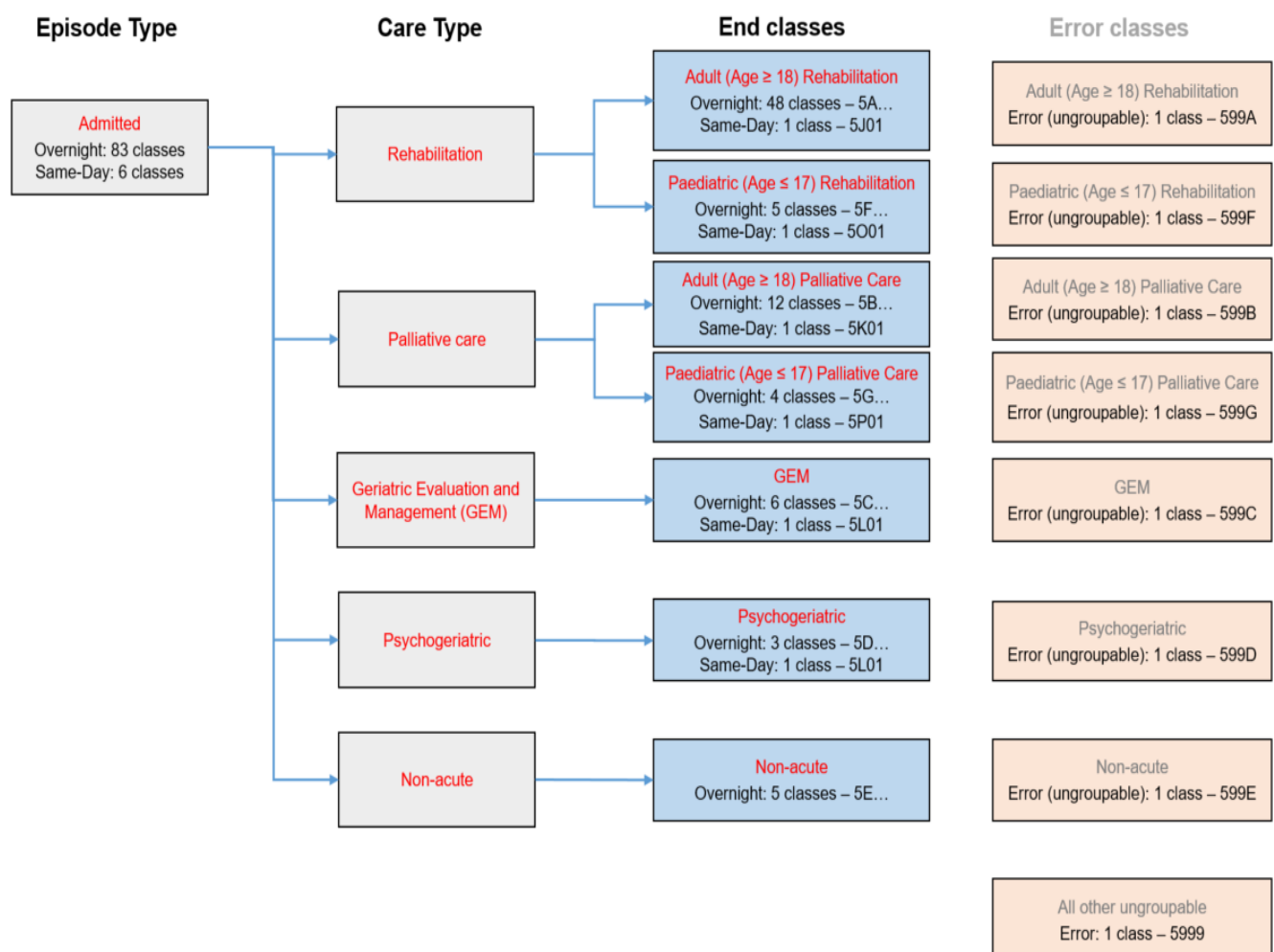
### 2.3.5 Non-acute (Maintenance) - Care type 6

- *Bir\_date*
- *Adm\_date*
- *Sep\_date*
- *Leavedays*
- *Diagnosis codes: X12ddx1 - x12ddx100*

# 3 SNAP5Grouper outputs

The SNAP5Grouper outputs valid classes and error classes according to the Australian National Subacute and Non-Acute Patient Version 5.0 (AN-SNAP V5) structure summarised in Figure 1.

**Figure 1. AN-SNAP V5 Classification Structure - Summary**



## 3.1 Valid classes

The SNAP5Grouper has 89 valid end classes for admitted care:

- 83 overnight classes across the five care types
- six same-day classes – one for each of adult rehabilitation, paediatric rehabilitation, adult palliative care, paediatric palliative care, GEM, and psychogeriatric care.



A complete table of all the AN-SNAP V5 classification admitted end classes including the grouping variables and thresholds is available in the Classification Manual.<sup>9</sup>

## 3.2 Error classes

The SNAP5Grouper has eight ungroupable error classes:

- five adult care type ungroupable error classes
- two paediatric ungroupable error classes (paediatric rehabilitation and paediatric palliative care)
- one other ungroupable error class applicable when a care type (or episode type) cannot be established.

**Table 6. SNAP5Grouper error classes.**

| Error class | Reason  |
|-------------|---|
| 599A        | Admitted Adult Rehabilitation - Ungroupable       |
| 599B        | Admitted Adult Palliative Care - Ungroupable      |
| 599C        | Admitted GEM - Ungroupable                        |
| 599D        | Admitted Psychogeriatric - Ungroupable            |
| 599E        | Admitted Non-Acute - Ungroupable                  |
| 599F        | Admitted Paediatric Rehabilitation - Ungroupable  |
| 599G        | Admitted Paediatric Palliative Care - Ungroupable |
| 5999        | Error with Care Type or Episode Type              |

## 3.3 Additional output column

The SNAP5Grouper also produces an additional output column with a Dementia or Delirium flag. This information was used for grouping in the AN-SNAP V4 classification but is superseded by the FRIC in the AN-SNAP V5 classification. The flag has been retained as a grouper output as a stakeholder request.

<sup>9</sup> Independent Hospital Pricing Authority (2021) Australian National Subacute and Non-Acute Patient Classification Version 5.0 - Classification Manual.

# 4 Processing a file from the SNAP5Grouper user interface

The application is run by double clicking the AN-SNAPv5.exe file. This will load the main application window shown in Figure 1, which will guide you through the rest of the process.

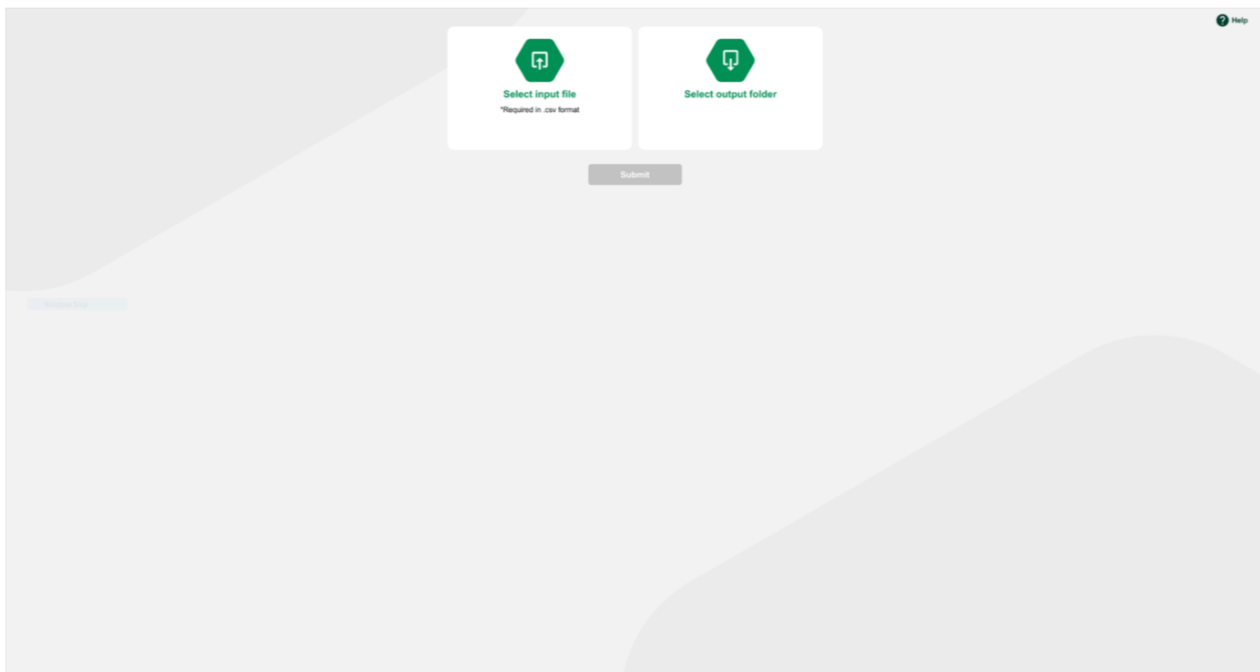
## 4.1 Main window

The main window includes the following three buttons:

- **Select Input File**, which is used to select the CSV data file to be grouped;
- **Select Output Directory**, which is used to select the folder for the grouper output file; and
- **Submit**, which runs the grouper.

*Note: the input file requires the data to be prepared as specified in the [Input Data Preparation](#) section.*

**Figure 2. SNAP5Grouper main window**



The main window also includes a table that displays a sample of the episodes being processed while the grouper is running; and displays the location of the output file when the grouper is complete. This table previews a subset of the CSV, displaying the following rows:

Stateid, care, bir\_date, adm\_date, sep\_date, leavedays, x12ddx1, x12ddx2, x12ddx3, x12ddx4, x12ddx5, impairmenttype, Phaseid, Phase\_startDate, Phase\_EndDate, PhaseType.

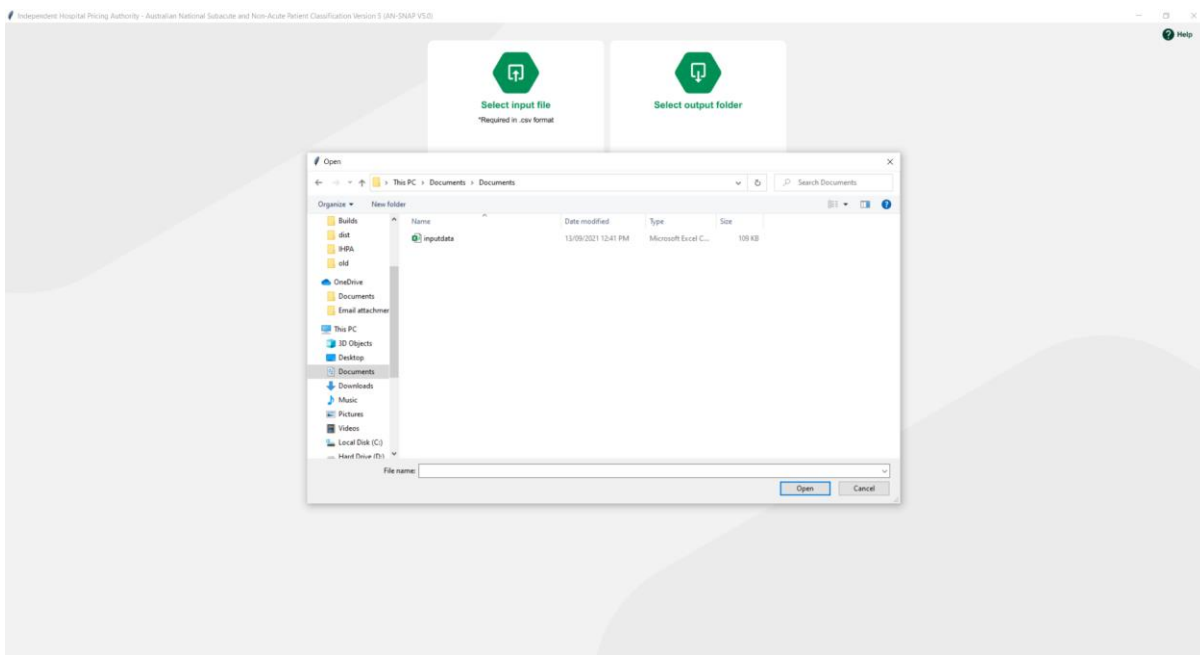
## 4.2 Steps to run the grouper

The steps to run the grouper are outlined below.

### Step 1: Select the Input File

To select a data file to be grouped, Click the Select Input File button, and select the .CSV data file from the Open window, as shown in Figure 2, and click Open.

**Figure 3. . Selecting data to be grouped**

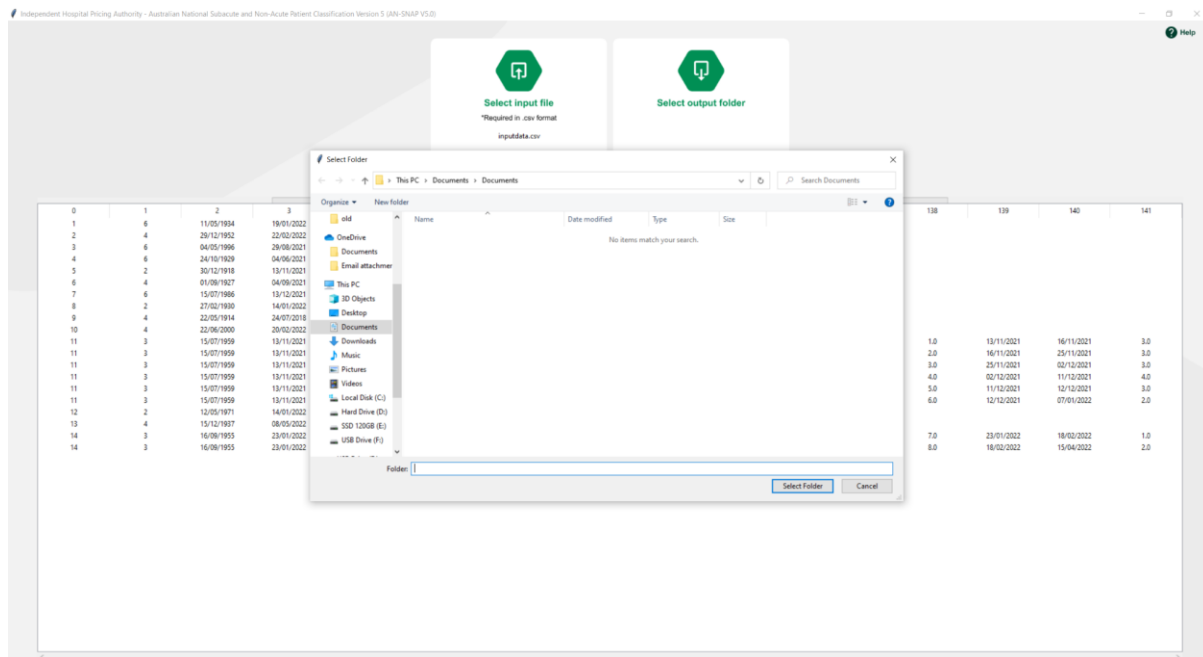


On completion of this step, the filename and path of the file populates the text field to the right of the Select Input File button. This will allow the running of the grouper on the selected file.

## Step 2: Selecting output folder

By default, the grouper outputs to the same folder of the input file. To output a different folder, select the Select Output folder button as shown in Figure 4.

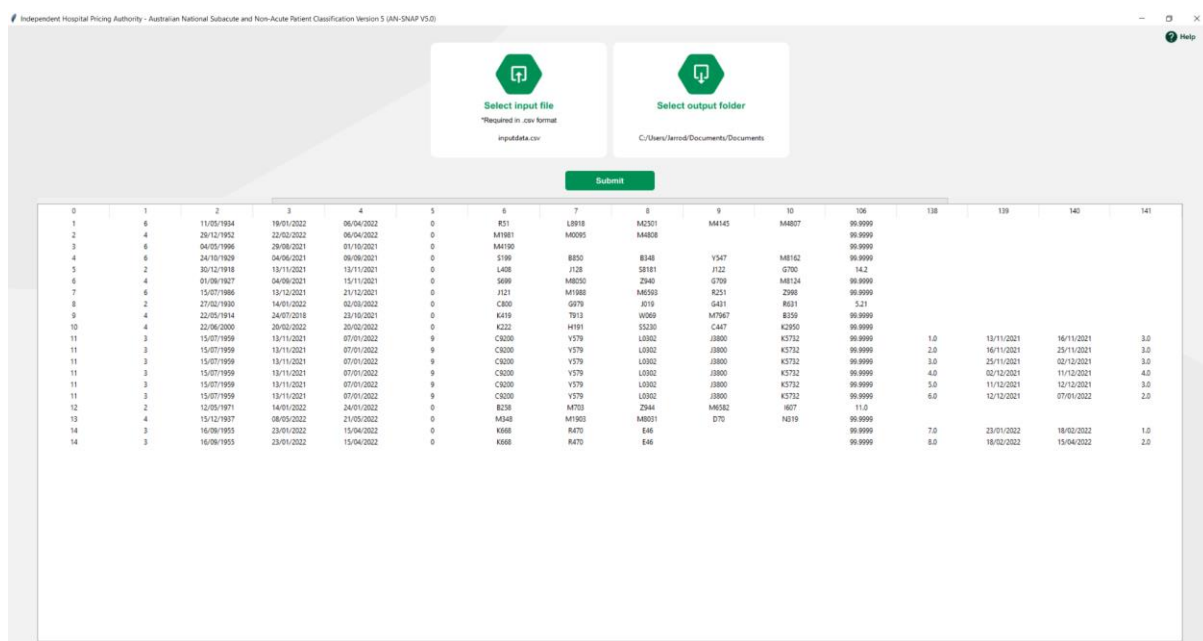
Figure 4. Selecting output folder



## Step 3: Running the grouper

To run the grouper, select the Submit button as shown in Figure 5.

Figure 5. Submitting the grouper





# 5 Processing a file from the SNAP5Grouper command line interface

The Command Line Interface (CLI) version of the grouper is run by executing the AN-SNAPv5cli.exe. The CLI version of the application uses the same logic as the Application version and has the same input CSV requirements.

The CLI accepts the following command-line arguments:

**Table 7. SNAP5Grouper command line arguments**

| Command argument | Required | Expected additional parameters  | Description  |
|------------------|----------|---------------------------------|--|
| -h               | No       |                                 | Displays information about the CLI, expected arguments and how to use the grouper.                                   |
| -i<br>--input    | Yes      | File path to input file         | Required parameter of the file path that the grouper will process.   |
| -o<br>--output   | Yes      | Folder path to output directory | Required parameter of the directory where the grouper will output the processed file.                                |
| -d               | No       |                                 | Debug flag, prints a few columns from the first 20 rows found in the CSV.  |
| -e               | No       |                                 | Error flag, creates a CSV output of all error classes and information about why a row was grouped to an error class. |
| -n               | No       | Filename                        | Optional parameter to name the CSV output file.  |

The following command will run the grouper:

```
AN-SNAPv5cli.exe -i \Documents\input.csv -o \Documents\
```

Below are some examples of using additional commands:

```
AN-SNAPv5cli.exe -i \Documents\input.csv -o \Documents\ -d
```

```
AN-SNAPv5cli.exe -i \Documents\input.csv -o \Documents\ -e
```

```
AN-SNAPv5cli.exe -i \Documents\input.csv -o \Documents\ -e -n new_file
```

```
AN-SNAPv5cli.exe -i \Documents\input.csv -o \Documents\ -d -e
```

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