

Quality Improvement

DATA CLEANSING GUIDE

July 2023



Leadership



Collaboration



Respect



Accountability



Innovation

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IMPROVING DATA QUALITY

Introduction to data cleansing

There are several tools and reports available in the Pen CS CAT Plus suite to assist general practices to improve the quality of their patient records.

The 5th Edition of the RACGP Standards for General Practice requires that:

“Each active patient Health Record has the patient’s current health summary that includes, where relevant: adverse drug reactions, current medicines list, current health problems, past health history, immunisations, family history, health risk factors (e.g. smoking, nutrition, alcohol, physical activity), social history, including cultural background.”

A complete patient record contains all the items listed above, and a good practice database contains complete and clean records. Having no free text diagnosis in your patient records will enable efficient and reliable recall for patients with chronic conditions and make your reporting more reliable.

Data cleansing is generally the first step in any Quality Improvement (QI) activity, however data cleansing can be a stand-alone QI activity, provided it is planned and documented accordingly. Working with clean and accurate data will also support other QI activities in future.

MyMedicare responds to the [Strengthening Medicare Taskforce](#) recommendation for the Australian government to introduce a system of voluntary patient registration (VPR). It aims to strengthen the relationship between patients, their general practice, general practitioner (GP) and primary care teams. Registration in MyMedicare is voluntary for patients, practices, and providers. This also aligns to [Australia's Primary Health Care 10 Year Plan - 2022-2032](#).

This document has been designed to assist your practice with data cleansing activities that align to the above.

To learn more about data quality

The [Data Quality and CAT Plus video](#) will give you an overview on how to use the CAT Plus tools to monitor and improve data quality in your practice. Reports and filters in CAT4 aligned with the accreditation guidelines will be demonstrated, and Topbar apps assisting with data quality at the point of care will be shown.

Some other helpful videos to watch are:

- [Why does having good quality health data matter? - Pen CS](#)
- [What does good quality coded data look like? - Pen CS](#)
- [How to Improve Data Quality in your Practice - Pen CS](#)
- [Webinar - Quality Coding using CAT4 and Topbar on Vimeo](#)

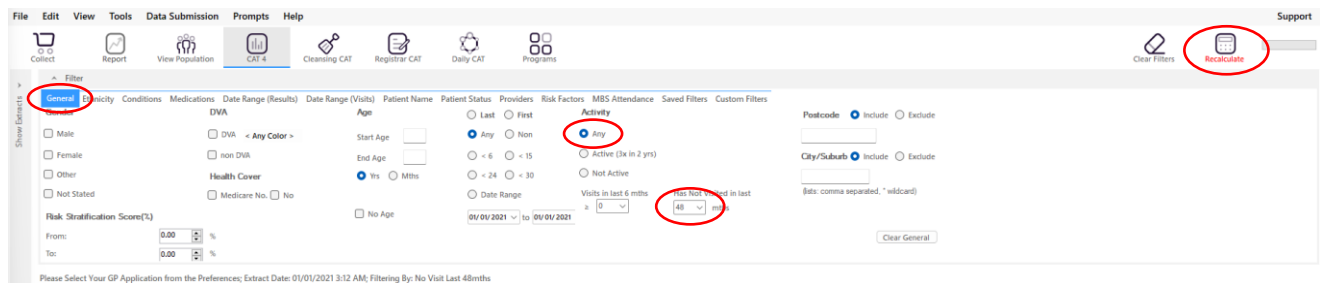
The Basics: Clinical Audit Tool (CAT 4)

Archiving inactive patients

You can use Pen CS CAT 4 to find patients that need to be archived. Your practice should decide on which patient data to archive. This is generally based on the time elapsed since the patient last visited the general practice. For example, if no visit in the last 48 months is the level at which patients are archived, you can filter in CAT 4 as below:

- Click on the 'clear filter' button from the menu bar before starting a new search
- From the filters panel under the 'general' tab, select "has not visited in last 48 months"
- Click on the 'Recalculate' and click on Export.

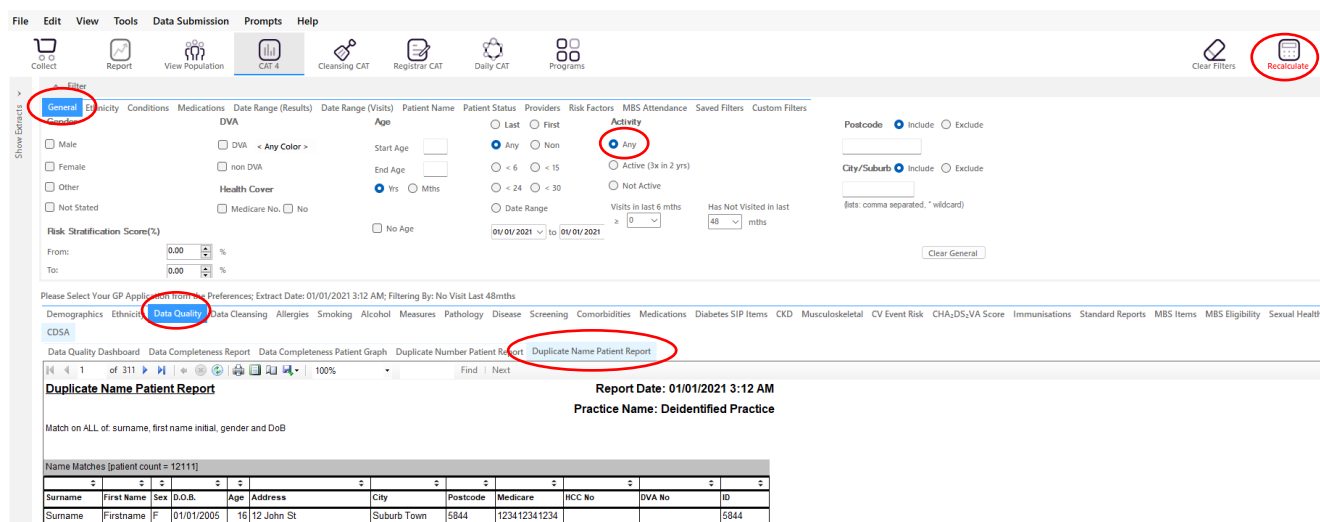
The list of patients can be exported and archived in your clinical software (BP or MD). Use BP or MD software guide to deactivate inactive patients.



Identifying and merging duplicate patient records

Duplicate patient report, by name: This report will enable you to view, print and/or save a list of patients with matching demographic information. You can also use the 'Duplicate Number Patient Report' to view patients with matching Medicare number, HCC numbers or DVA number.

- In the report section of the screen, select the 'Data Quality' tab
- Select the 'Duplicate Name Patient Report' sub-tab



*CAT4 provides two different reports under the Data Quality report to find duplicate records.

Online resource: <https://www.youtube.com/watch?v=GfJVJLWOU3A>

Accreditation

Patients with missing accreditation items (no allergy, smoking, height, weight, and alcohol status recorded)

- Click on the 'Clear Filters' button from the menu bar before starting a new search
- From the filters panel under the 'General' tab select the 'Active (3x in 2yrs)' box
- Click on the 'Recalculate' button from the menu bar
- In the report pane, click on 'Data Cleansing' tab and
- Click on 'Missing Accreditation items'

The screenshot shows the software's filter panel with the following settings:

- General:** Active (3x in 2yrs) selected.
- Data Cleansing:** Missing Clinical/Accreditation Items selected.
- Export:** Button highlighted in red.

Surname	First name	Date of Birth	Sex	Allergies	Height	Weight	Alcohol	Smoking	Assigned Provider
Surname	Firstname_0	01/01/2005	F	NKA	157	50	Non-Drinker	Never smoked	Surname_0
Surname	Firstname_1	01/01/1944	F	Recorded	169	93.8	Drinker	Ex smoker	Surname_2
Surname	Firstname_10	01/01/1995	F						
Surname	Firstname_100	01/01/1997	F	NKA			Non-Drinker	Never smoked	Surname_5
Surname	Firstname_1000	01/01/1969	M	NKA	189	112	Drinker	Ex smoker	Surname_0
Surname	Firstname_10000	01/01/1989	F	NKA			Drinker	Never smoked	Surname_22
Surname	Firstname_10001	01/01/1989	F	NKA					
Surname	Firstname_10002	01/01/1955	F	NKA		59		Never smoked	
Surname	Firstname_10003	01/01/1990	F	NKA			Non-Drinker	Never smoked	Surname_10

- Click on the "EXPORT" tab, and this will show a list of all Patients (as per below) with no allergy status, height, weight, alcohol and smoking status.
- You can set a Topbar Prompt (as per below) if you choose - Using Topbar Prompts in Recipes

The screenshot shows the 'Reidentify Report' with the following data:

Surname	First Name	Sex	DOB	Mobile Number
Surname	Firstname_0	F	01/01/2005	1234999999
Surname	Firstname_1	F	01/01/1944	1234999999
Surname	Firstname_3	F	01/01/1976	1234999999
Surname	Firstname_6	F	01/01/1955	1234999999
Surname	Firstname_8	F	01/01/2007	1234999999
Surname	Firstname_10	F	01/01/1995	1234999999
Surname	Firstname_14	F	01/01/1999	1234999999
Surname	Firstname_15	F	01/01/1959	1234999999

The topbar includes a 'Topbar Prompt' button highlighted in red.

Data cleansing reports/data cleansing app

Both Topbar and CAT4 provide reports showing lists of patients with missing clinical and demographic items.

Topbar will notify users at reception (Waiting Room App) for these missing items for all patients in the waiting room. It will also prompt clinicians in the consult room for the patient currently open in the clinical system (Data Cleansing App).

Full guides for the Waiting Room and Data Cleansing App can be found below:



[Waiting Room App - USER GUIDES TOPBAR](#)



[Data Cleansing App - USER GUIDES TOPBAR](#)

Demographic item	Clinical items
Address	Allergies
First name	Height
Suburb	Weight
Date of birth (DOB)	Smoking
Postcode	Alcohol
Sex	Family history
Home phone, work phone and mobile phone	Adverse drug reactions
Ethnicity status	Immunisations
Next of Kin	Diagnosis coded
Medicare number	Physical activity
Emergency contact	

Diabetes registry

Diabetes is a chronic condition that has well defined HealthPathways, but without a properly coded patient history, many of the existing tools will not work. PIP QI includes diabetes in three of the ten improvement measures. The definition of these measures only looks at diabetes type I or type II. Many patient records have a coded entry for diabetes, but the diagnosis does not specify the type. The resources below will help with cleaning up your diabetes register:

- [Patients with incorrect Diabetes coding - CAT GUIDES - PenCS Help](#)
- [PIP QI Quality Improvement Measures Diabetes on Vimeo](#)

The screenshot shows the CAT4 software interface. The 'Conditions' filter menu is open, and 'Undefined Diabetes' is selected. Below the menu, a 'Demographic Breakdown by Age' bar chart is displayed for a population of 5733. The chart shows the distribution of patients across different age groups, with the largest group being 85-89 years old.

Age Group	Count
10+	10
15-19	10
20-24	10
25-29	10
30-34	10
35-39	10
40-44	10
45-49	10
50-54	10
55-59	10
60-64	10
65-69	10
70-74	10
75-79	10
80-84	10
85-89	10
90-94	10
95-99	10
100+	10

Cleaning up free text diagnosis

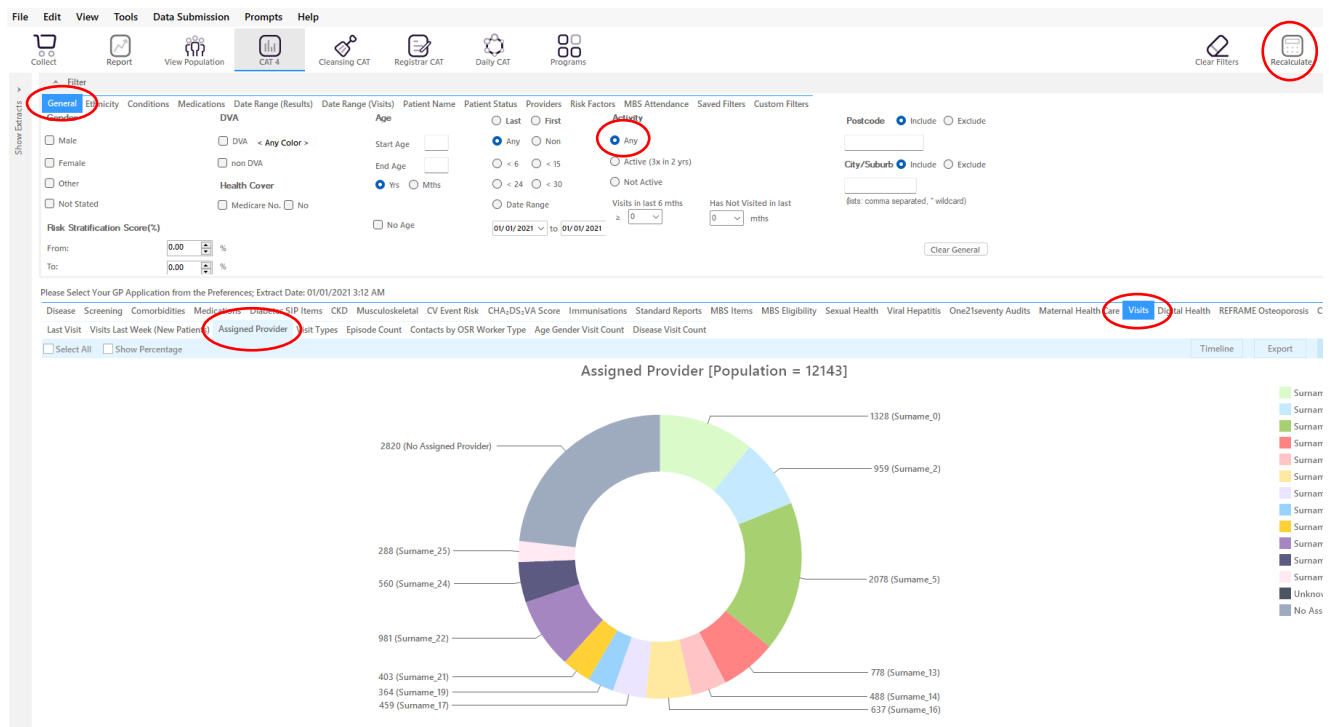
When cleaning up your data you might find that there are many entries in the 'past history' where one or more diagnosis has been entered as free text. Rather than cleaning up every single free text entry individually, this can be done in bulk for users of **Best Practice** or **Medical Director**. This guide will show you how to change the same free text entry into a properly coded diagnosis.

- [Bulk clean up of free text diagnosis - MD3 users - CAT Recipes - PenCS Help](#)
- [Bulk clean up of free text diagnosis - BP users - CAT Recipes - PenCS Help](#)

Assigning providers

Assigning a provider

- Click on the 'Clear Filters' button from the menu bar before starting a new search
- From the 'Reports' pane select 'Visits' tab



This report shows a pie chart for patients by their assigned provider. This is the provider who they most frequently see based on the last 18 months (for exceptions please check the mapping for your clinical system). You can double click on any portion of the pie chart to export as a report for review. The portion of patients with 'No Assigned Provider' can be reviewed in collaboration with GPs to determine who the assigned provider will be.

Please note that the different clinical systems have their own way of allocating the usual doctor/assigned provider. The details are available in the mapping sections. Please the below link for further information.

- [Assigned Provider - CAT GUIDES - PenCS Help](#)

Contact details

For more information, please contact your Quality Improvement Consultant directly or email gpsupport@murrayphn.org.au