

How healthy is your patient data?

Improving Data Quality

CAT Plus and your Patient Records



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Improving Data Quality – CAT Plus and your Patient Records

There are a number of tools and reports available in the Pen CS CAT Plus suite to assist general practice in improving the quality of their patient records.

The 5th Edition of the RACGP Standards for General Practice require 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.

Any activity targeting data quality can be designed as a Quality Improvement (QI) activity. Provided this activity is planned and documented, it will qualify for the PIP QI payment.

This booklet provides all the relevant resources to get you started with data cleansing using CAT Plus.

Our user guides and recipes at <https://help.pencs.com.au/> provide full details on the functionality of our tools, step-by-step guides ([recipes](#)) and [extensive mapping](#) for each compatible clinical system.

General Practice Resources Portal

The [General Practice Resources Portal](#) provides many resources for CAT Plus users in general practice. Here you will find key booklets, videos and a quick start guide for new users.

Introductory Video

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.

The Basics: Clinical Audit Tool (CAT 4)

Archiving patients

There are no national guidelines for when a patient record should be archived, but three years since the last visit is often considered as standard.

Most clinical systems have a bulk archive functionality. Please consult your clinical software support if you are unsure about how to archive all patients who haven't visited in a particular date range.

Archiving will help your clinical system to perform better and will make your reports and recall more accurate and efficient. CAT4 provides filters to remove anyone but active patients (three visits in the last two years), but the archiving has to be done in the clinical system.

This [recipe](#) shows how to identify active patients.

The screenshot shows the 'General' filter settings in CAT4. The 'Activity' section has the 'Active (3x in 2yrs)' checkbox checked. Other visible filters include Gender (Male, Female, Other), DVA (Any Color, non DVA), Health Cover (Medicare No., No), Age (Start Age, End Age, Yrs, Mths, No Age), Date Range (04/10/20 to 04/10/20), Patient Name, Patient Status, Providers, Risk Factors, Health Care Homes, Custom Filters, and Saved Filters. The 'Clear General' button is at the bottom right.

Duplicate records

Duplicate patients are problematic for many reasons and should be regularly checked. If found, duplicate records should be merged following the instructions for your clinical system.

CAT4 provides two different reports under the Data Quality report [to find duplicate records](#).

The screenshot shows the 'Duplicate Name Patient Report' in CAT4. The report date is 02/09/2019 1:34 PM and the practice name is WIN10MD3. The report matches on ALL of: surname, first name initial, gender and DoB. The table below shows two matches for the patient 'James M. Tester' with D.O.B. 21/04/1955.

Surname	First Name	Sex	D.O.B.	Age	Address	City	Postcode	Medicare	HCC No	DVA No	ID
Tester	James	M	21/04/1955	64	Street	Sydney	2001				58
Tester	James	M	21/04/1955	64	Test Street	Parramatta	2150				41

The Basics: Clinical Audit Tool (CAT 4)

Diabetes registry

Diabetes is a chronic condition that has well defined health pathways, 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 doesn't specify the type.

The resources below will help with cleaning up your diabetes register:

[Coding Diabetes \(recipe\)](#)

[PIP QI measures related to diabetes \(video\)](#)

The screenshot shows the 'Conditions' tab in the CAT 4 interface. Under the 'Diabetes' section, the 'Undefined Diabetes' checkbox is checked and highlighted with a red box. Other sections like 'Respiratory', 'Cardiovascular', 'Musculoskeletal', and 'Renal Impairment' are also visible.

Bulk clean-up of free text diagnosis in patients history (MD/BP only)

Medical Director and Best Practice have built in utilities to allow you to clean up past free text entries by mapping the free text entry to the correct coded diagnosis. This might initially be a sizeable task, but once mapped, all future free text entries matching already mapped entries will be recognised and handled automatically.

Further details can be found in these recipes:

[Free text mapping MD users](#)

[Free text mapping BP users](#)

Quality of coding

Sometimes no diagnosis has been recorded in the patient history. To overcome this, there are a number of reports in CAT4 and notifications in Topbar to point out an indicated diagnosis without a coded entry in the patient record: [CAT Plus and Quality of Coding Video](#)

Demographics

Ethnicity

Data Quality

Data Cleansing

Allergies

Smoking

Alcohol

Measures

Pathology

Disease

Screening

Comorbidities

Medications

Chronic Disease Detection and Management

Diabetes SIP Items

CKD

Musculoskeletal

CV Event Risk

CH

Missing Demographics

Missing Clinical/Accreditation Items

Indicated CKD with no diagnosis

Indicated Diabetes with no diagnosis

Indicated Mental Health with no diagnosis

Indicated COPD with no diagnosis

Indicated Osteoporosis with no diagnosis

Medication Review

Indicated

Reviewed

Patient List page 1 of 5 [count = 91]

Save & Remove

Export

Double-click a patient to open it in your clinical system (MD, BP, Zedmed)

Page No. 1Go

Prev Page

Next Page

Likely

Possible

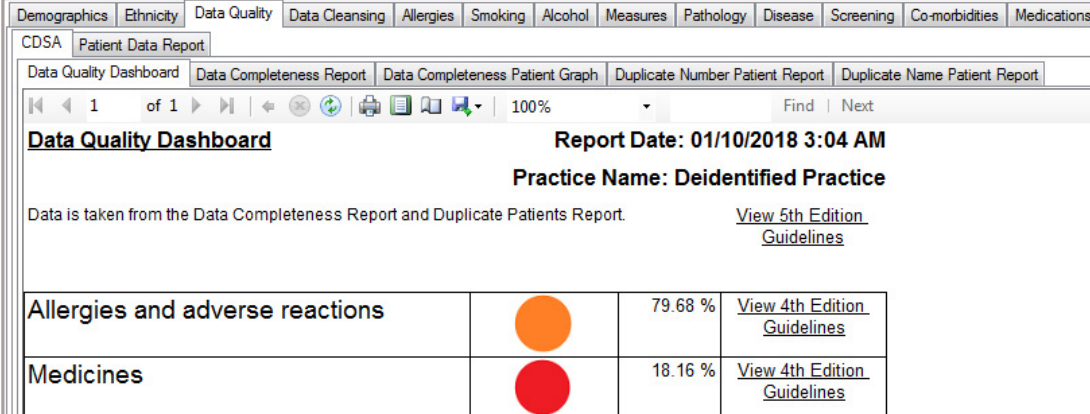
Review



	Surname	Firstname	DOB	Indication Date	Sex	Antidiabetic Medication	HbA1c	FBG	Eye Exam	BMI	BP	Foot Exam	Chol	Trig	HDL	Malb	Smoking	eGFR	Assigned Provider	Confirm Condition Does Not Exist
▶	Surname	Firstname_10004	01/08/1977	23/10/2017	F	Y				45.5	135/85		5.0	1.5	1.70		Ex smoker	116.999	Surname_12	<input type="checkbox"/>
	Surname	Firstname_1045	01/08/1950	28/05/2018	M			7.3			123/85		3.3	2.1	1.12		Never smoked	73	Surname_14	<input type="checkbox"/>
	Surname	Firstname_1169	01/08/1992	04/07/2018	F	Y	8.6			50.4			4.1	1.0	0.88	0	Never smoked	120.798	Surname_5	<input type="checkbox"/>
	Surname	Firstname_1273	01/08/1950	18/12/2017	F		6.1	6.6			145/92		5.1	1.6	1.37		Ex smoker	86	Surname_18	<input type="checkbox"/>
	Surname	Firstname_1331	01/08/1943	22/06/2018	M		7.4	7.7			105/60		4.1	1.9	0.90	14	Never smoked	28	Surname_2	<input type="checkbox"/>

CDSA report

CAT4 provides a report that summarises the data items relevant for accreditation. A simple traffic light system will highlight record compliance/completeness and makes it easy to focus practice activities to ensure patient records are meeting accreditation requirements. There are a number of related reports showing a full breakdown of each category and a bar chart that allows users to produce a list of patients for each category of the report.

Full details can be found in the [CDSA user guide](#).



Data Quality Dashboard			
Report Date: 01/10/2018 3:04 AM			
Practice Name: Deidentified Practice			
Data is taken from the Data Completeness Report and Duplicate Patients Report.			
View 5th Edition Guidelines			
Allergies and adverse reactions		79.68 %	View 4th Edition Guidelines
Medicines		18.16 %	View 4th Edition Guidelines

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 here:



• [Waiting Room App](#)



• [Data Cleansing App](#)

Demographic Items

- Surname
- Address
- First name
- Suburb
- Date of Birth (DOB)
- Postcode
- Sex
- Home Phone, Work Phone and Mobile Phone
- Ethnicity Status
- Next of Kin
- Medicare Number
- Emergency Contact

Clinical Items

- Allergies
- Height
- Weight
- Smoking
- Alcohol
- Family History
- Adverse Drug Reactions
- Immunisations
- Diagnosis Coded
- Physical Activity

Accreditation

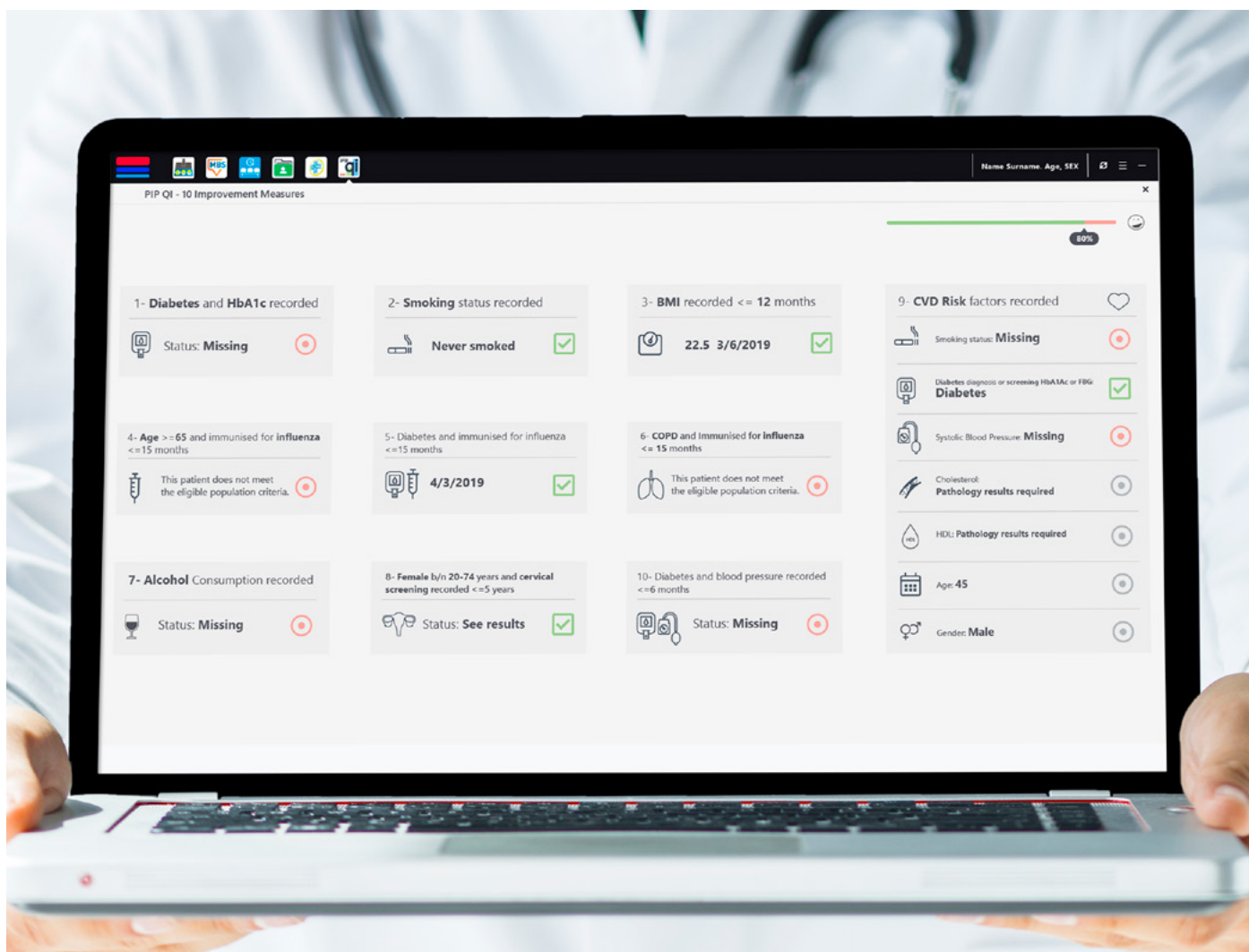
CAT4's cleansing reports show the same items for all patients. The reports in CAT4 can be filtered for active patients only or any other filter criteria, such as new patients in the last six months, those with multiple visits, or with specific conditions. A full guide on the CAT4 Cleansing Report can be found [here](#).

Data Cleansing										
Missing Demographics	Missing Clinical/Accreditation Items	Indicated CKD with no diagnosis	Indicated Diabetes with no diagnosis	Indicated Mental Health with no diagnosis	Indicated COPD with no diagnosis					
Patient List page 1 of 3 [count = 54]										
Double-click a patient to open it in your clinical system (MD,BP,Zedmed)						Page No. 1	Go	Show/Hide Columns	Export	
						Prev Page	Next Page			
	Surname	First name	Date of Birth	Sex	Allergies	Height	Weight	Alcohol	Smoking	Assigned Provider
	Accept	Four	10/10/1994	M						Dr. A. Practitioner
	Accept	One	20/10/1992	M						Dr. A. Practitioner
	Accept	Three	12/06/1985	M		180	110			Dr. A. Practitioner
	Accept	Two	10/09/1989	F						
	Allen	Janella	17/05/1997	F		188	88			Dr. A. Practitioner
	Anderson	David	04/01/1955	M	Recorded	175	85		Smoker	Dr. A. Practitioner
	Andrews	Anna	08/12/1998	F	Recorded	160	80		Never smoked	Dr. A. Practitioner
	Andrews	Fred	23/02/1923	M	NKA	172	82		Never smoked	Dr. A. Practitioner
	Andrews	Graham	22/07/1999	M	Recorded	140	50			Dr. A. Practitioner
	Andrews	Heather	12/05/1963	F	Recorded	165	59		Smoker	Dr. A. Practitioner
	Andrews	Jennifer S.	20/04/1970	F		165	65		Never smoked	Dr. A. Practitioner
	Andrews	Julie	03/03/1956	F	Recorded	165	58		Smoker	Dr. A. Practitioner
	Andrews	Maureen	23/06/1923	F	Recorded	156	85		Smoker	Dr. A. Practitioner
	Andrews	Max	08/02/1975	M	NKA	185	85			Dr. A. Practitioner
	Andrews	Melissa	19/01/1983	F	NKA	165	65		Smoker	Dr. A. Practitioner
	Andrews	Michael	08/05/1954	M	NKA	180	84		Smoker	Dr. A. Practitioner
	Andrews	Sally	12/05/1998	F	Recorded	140	40			Dr. A. Practitioner
	Baker	Stephen	02/05/1957	M	Recorded	180	88		Smoker	Dr. A. Practitioner
	Baker	Stephen	02/05/1957	M	Recorded	180	88		Smoker	Dr. A. Practitioner
	Bauer	Warick	15/06/1950	M		178	85			Dr. A. Practitioner

Pen CS has built the PIP QI Topbar App to give our users a simple and quick way to evaluate each patient in regards to the ten improvement measures. The app shows the ten measures, which ones are relevant for the patient and if the improvement measure requirements are met. Full details are available [here](#).

CAT4 has provided reports on the data items required for the ten improvement measures, and we have created a step-by-step guide (recipe) for each of the ten measures. Full details on the recipes are [here](#).

The PIP QI for new CAT Plus users video is another valuable resource that can be used for [PIP QI](#).





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