

PCS Clinical Audit Tool – User Guide

Version 2.11
APPENDICES E

ZEDMED DATA MAPPINGS

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INTRODUCTION

Clinical Audit Tool (CAT)

The Clinical Audit Tool (CAT) analyses clinical information from GP Clinical Desktop Systems. It translates data into real statistical and graphical information that is easy to understand and action. This allows practitioners to assess and improve the quality and completeness of patient information. The benefit to the practice is to assist with its ongoing accreditation and provide opportunities to grow practice income. The emphasis of the tool is to help practice staff to take specific action to improve patient coverage in chronic disease management and prevention.

User Guide

The purpose of the User Guide is to provide instructions on how to install and use the functionality provided by the CAT.

The User Guide is split into 2 parts:

Part 1: Installation and Configuration including how to collect data sets

Part 2: Functionality

The Appendices for each Clinical Desktop System's Data Mappings are provided separately.

This full User Guide is available from

<http://help.pencs.com.au/cat.htm>

The Appendices contained in this document are for the Zedmed clinical system.

Pathology Results

Pathology Results must be received in atomised HL7 format in order for the results to be picked up by the CAT extractor. 'Atomised' format means that the HL7 results contain the data in predefined coded segments. The test name and LOINC (Logical Observation Identifiers Names & Codes) code are the important bits of data the extraction tool looks for.

Pathology results received in HL7 format will be viewable from the Zedmed Summary Views panel Measurements tab.

APPENDIX E – ZEDMED DATA CATEGORY MAPPINGS

APPENDIX E-1 – CONDITIONS DATA CATEGORY MAPPINGS (ZEDMED)

The data collection process collects conditions that are found on the Summary Views > Problems tab. Chronic conditions are flagged as existing for a patient if they are listed under **either current or resolved**.

In the list of conditions below only Asthma and Depression are regarded as being recoverable. These are flagged as existing if they are listed under **current only**.

CAT Category	Zedmed Mapping – ICP Code
Diabetes	
Type II	
	T90 001 diabetes, non-insulin dependant T90 002 diabetes mellitus T90 003 diabetes, non-insulin dependant T90 004 diabetes, non-insulin dependant T90 005 non insulin dependant diabetes T90 006 diabetes, non-insulin dependant T90 007 adult onset diabetes T90 008 diabetes, non-insulin dependant T90 009 type 2 diabetes T90 016 type 2 diabetes treated with insulin
Type I	
	T89 001 insulin dependant diabetes T89 002 type 1 diabetes T89 003 juvenile onset diabetes T89 004 complicated diabetes T89 005 diabetic coma T89 006 diabetic hyperglycaemia T89 007 diabetic ulcer
Undefined diabetic	
	T99 011 diabetes insipidus

Respiratory	
Asthma	
[Active only conditions are collected]	R96 001 Asthma R96 002 Bronchial Asthma R96 005 Status Asthmaticus R96 007 Wheezy Bronchitis
COPD	
	R95 001 Chronic Obstructive Airway Disease R95 002 Chronic Obstructive Pulmonary Disease R95 008 Chronic airways limitation R79 003 chronic bronchitis

Cardiovascular	
CHD	
	K41 005 Angiography; coronary K53 003 Angioplasty; artery; coronary K53 009 Stent(s); coronary K54 007 Graft; coronary Artery Bypass K74 001 Angina Pectoris K74 002 Pain; angina K74 003 Spasm; artery; coronary K74 004 Angina; unstable K74 006 Insufficiency; coronary K74 007 IHD with Angina K75 002 Infarction; myocardial; acute K75 004 Occlusion; coronary K75 013 Infarction; myocardial K75 014 Heart Attack K76 003 Coronary Artery Disease K76 005 Disease; atherosclerotic; heart K76 011 Disease; ischaem Heart; subacute K76 013 Coronary Heart Disease K76 014 Disease; ischaemic Heart K76 015 Disease; ischaem Heart; chronic K76 018 IHD Without Angina K84 009 Disease; heart
Myocardial Infarction	
	K75 002 Infarction; myocardial; acute K75 013 Infarction; myocardial

Hypertension	
	D97 009 Hypertension; portal K85 001 Elevated Blood Pressure K85 004 High Blood Pressure K85 007 Raised Blood Pressure K86 001 Hypertension; essential K86 004 Hypertension; uncomplicated K86 005 Hypertension K85 008 Hypertension; labile K85 009 Hypertension ; white Coat K87 002 Hypertension; renal Disease K87 004 Hypertension; malignant K87 010 Hypertension; complicated
Heart Failure	
	K77 001 Oedema; pulmonary; acute K77 002 Failure; congestive Cardiac K77 004 Failure; cardiac K77 008 Failure; ventricular; left K77 011 Failure; heart K77 013 Oedema; pulmonary K77 014 Failure; ventricular; right K82 003 Cor Pulmonale
Stroke	
	K90 002 Cerebrovascular Accident K90 006 Haemorrhage; cerebral K90 017 Stoke

Mental Health	
Depression	
[Active only conditions are collected]	P76 001 Depression P76 002 Depression; postnatal P76 010 Depression; reactive P76 016 Depression; endogenous P76 017 Melancholia P76 018 Anxiety with Depression
Anxiety	
	P01 002 Feeling; anxious P01 003 Anxiety P01 010 Feeling; tense P01 018 Tense P74 001 Anxious State P74 002 Feeling' anxious P74 004 Anxiety Neurosis P76 018 Anxiety with Depression P79 009 Phobia
Schizophrenia	
	P72 002 Schizophrenia; paranoid P72 011 Schizophrenia

Bone Disease	
Osteoporosis	
	L95 001 Osteoporosis L95 002 Osteopenia L95 003 Fracture; osteoporotic
Osteoarthritis	
	L84 001 Spondylosis L84 004 Osteoarthritis; spine L89 001 Osteoarthritis; hip L90 001 Osteoarthritis; knee L91 003 Osteoarthritis L92 007 Osteoarthritis; shoulder

Renal	
Renal Impairment	
	U59 001 Dialysis; kidney (renal)
	U59 008 Haemodialysis
	U99 005 Failure; renal; acute
	U99 016 Uraemia
	U99 022 Insufficiency; renal
	U99 023 Failure; renal; chronic
	U99 028 Stenosis; artery; renal
	U99 030 Failure; renal; NOS
	U99 031 Disease; renal
	U99 032 Impairment; renal
	U99 034 Disease; kidney; chronic
	U99 035 Disease; kidney; chronic stage 1
	U99 036 Disease; kidney; chronic stage 2
	U99 037 Disease; kidney; chronic stage 3
	U99 038 Disease; kidney; chronic stage 4
	U99 039 Disease; kidney; chronic stage 5

Other	
Hyperlipidaemia	
	T93 001 Hypercholesterolaemia
	T93 006 High Cholesterol
	T93 008 Hyperlipidaemia
	T93 015 Dyslipidaemia

Appendix E-1-i - Pregnancy

Pregnancy is true if the Patient Details screen Pregnancy check box is ticked or a Pregnancy record has been created from an encounter.

APPENDIX E-2 – MEDICATIONS DATA CATEGORY MAPPINGS (ZEDMED)

The data collection process collects current medications that are found on the Summary Views > Medications tab > Current Medications. It does not make any decisions about whether a medication should actually have been moved to the Non-current Medications. The GP is responsible for making sure the list of medications is accurate.

Medications - Heart

CAT Category	Zedmed Mapping – MIMS
ARB	Class: Angiotension II Antagonists
ACE Inhibitors	Class: ACE Inhibitors
Aspirin	Brand/Generic: Aspirin
Warfarin	Brand/Generic: Warfarin
Clopidogrel	Brand/Generic: Clopidogrel
Beta Blockers - Antihypertensive	Brand/Generic: Atenolol Betaxolol Hydrochloride Carvedilol Labetalol Hydrochloride Metoprolol Succinate Oxeprenolol Hydrochloride Pindolol Propranolol
Beta Blockers – Chronic heart failure	Brand/Generic: Bisoprolol Bisoprolol Fumarate Toprol-XL Toprol-XL Titration Pack

Beta Blockers - Myocardial Infarction	Brand/Generic: Atenolol Betaxolol Hydrochloride Bisoprolol Fumarate Carvedilol Esmolol Hydrochloride Labetalol Hydrochloride Metoprolol Succinate Oxeprenolol Hydrochloride Pindolol Propranolol Sotalol Sotalol Hydrochloride
Calcium Antagonists	Class: Calcium Antagonist
Diuretics	Class: Diuretics
Lipid M/fying - Statins	Brand/Generic: Atorvastatin Fluvastatin Pravastatin Simvastatin Rosuvastatin
Lipid M/fying - Other	Brand/Generic: Cholestyramine Clofibrate Colestipol Ezetimibe Fenofibrate Gemfibrozil Cerivastatin Probucol Nicotinic Acid Polocosanol

Medications Other

Antidiabetics	
H/glycaemics – Insulin	Class: Hyponatraemia
H/glycaemics – Oral	Class: Hypoglycaemic Agents
Metformin	Brand/Generic: Metformin
Mental Health	
Antipsychotics	Class: Antipsychotic Agents
Corticosteroids	
Glucocorticoids	Class: Adrenal steroid hormones
Pain Relief	
NSAIDS	Brand/Generic: Diclofenac Ibuprofen Ibuprofen Lysine Ibuprofen/Codeine Ibuprofen/Codeine Phosphate Ibuprofen/Pseudoephedrine Hydrochloride Indomethacine Ketorolac Ketoprofen Ketorolac Trometamol Mefenamic Acid Naproxen Piroxicam Sulindac Tiaprofenic Acid Class: Selective COX-2 inhibitor COX-2 inhibitor (selective)
COX2	Class: Selective COX-2 inhibitor COX-2 inhibitor (selective)

Respiratory	
Asthma - Inhaled	Brand/Generic: Budesonide Class: Steroid, inhalation
COPD	Brand/Generic: Tiotropium

Appendix E-2-1 Immunisations

Immunisations are collected if they have been entered in the Summary Views > Immunisations tab.
 The values collected for each type of immunisation are:

Influenza	Pneumococcal	HPV	Pertussis
Fluvarix Fluvarix pediatric Fluvax pediatric Fluvax Fluvirin Influvac Vaxigrip Vaxigrip pediatric	Pneumonococcal (Brand Unknown) Pneumovax 23 Prevenar	Cervarix Gardasil	Adacel Adacel Polio Boostrix Boostrix-IPV Infanrix Infanrix Hep B Infanrix Hexa Infanrix IPV Infanrix Penta Influvac Tripacel Triple Antigen

APPENDIX E-3 – GENERAL DATA CATEGORY MAPPINGS (ZEDMED)

Demographic	Zedmed Mapping
Gender	Patient Details screen > Gender
Ethnicity	Patient Details screen > Tick box for Aboriginal or TSI
DVA	Patient Details Screen > <ul style="list-style-type: none"> • the Pension Status set to 'Full DVA' or 'Limited DVA' • or the Veteran field has a value
Age	Patient Details screen > DOB
Last Visit	Patient History View > Most recent encounter date
Postcode	Patient Details screen > Postcode

Allergy	Zedmed Mapping
	Allergies screen
Allergy Recorded	An Allergy Item is present
No Known Allergies	The 'No Known Allergies' check box is checked
Nothing Recorded	No Allergy Items are present and the 'No Known Allergies' check box is unchecked

Smoking	Zedmed Mapping Patient Details > Smoking tab
Daily Smoker	Smoker = Smoker is selected and frequency is daily
Irregular Smoker	Smoker = Smoker is selected and frequency is not daily
Ex Smoker	Smoker = Ex-Smoker is selected
Never Smoked	Smoker = Non Smoker is selected
Nothing Recorded	Smoker = Unknown is selected OR Smoker has nothing selected

Alcohol	Zedmed Mapping Patient Details > Alcohol tab Frequency = days a week patient usually drinks alcohol
Drinker	Frequency = any except Never
Non Drinker	Frequency = Never
Nothing Recorded	Alcohol tab has nothing selected

Measurements	Zedmed Mapping From the Summary Views panel > Measurements tab
BMI	Measurements > Physical > BMI
Waist	Measurements > Physical > Waist
BSLF	Measurements > Pathology > BSLF
Cholesterol	Measurements > Pathology > Cholesterol
HDL	Measurements > Pathology > HDL
LDL	Measurements > Pathology > LDL
Triglycerides	Measurements > Pathology > TRIG
Creatinine	Measurements > Pathology > Creatinine
Microalbumin	Measurements > Pathology > MALB
HbA1c	Measurements > Pathology > HBA1C
BP	Measurements > Physical > BP Sitting
Respiratory – Spirometry	Measurements > Respiratory > FEV1, FVC

NOTE: Pathology results received in HL7 format will be viewable from the Summary Views panel Measurements tab and will be extracted for CAT.

Diseases	Zedmed Mapping
Condition	Summary Views > Problems, where Problems are selected from a coded list. Refer to the Appendix E-1 for a list of conditions mapping to each CAT condition.

Pap Smear *	Zedmed Mapping
	<p>1. Female Patient Record > Summary Views > Measurements tab</p> <p>Measurements > Pap Smear</p>
Recorded	A value is recorded in any of Result, Endocervical Cells Present, HPV or Comment
Done Date	Date of most recent entry
<p>NOTE: Pap Smear Pathology results received in HL7 format are not automatically updated to the Measurements tab > Pap Smears list. From the Results Inbox the GP must right-click the Pap Smear result listing and choose 'Create Pap Smear'. This will create an entry in the Pap Smears list.</p>	
	2. Completed Recalls
Recorded	<p>A recall has been created with text matching any of the following:</p> <ul style="list-style-type: none"> • Starts with the string 'pap ' • Contains 'cervical' • Contains 'smear' <p>Text is case insensitive.</p>
Done Date	Date recall completed

* Patients that are excluded from requiring a pap smear eg. Hysterectomy are not accounted for due to the fact that procedures are entered as free text rather than coded values.

Medications	Zedmed Mapping
Medication	<p>Summary Views > Medications > Current Medications, where Drugs are selected from a coded list.</p> <p>Refer to the Appendix E-2 for a list of medications mapping to each CAT medication.</p>
HMR	Summary Views > Medications > Current Medications > Counts All Drugs listed as current medications

APPENDIX E-4 – DIABETES SIP DATA CATEGORY MAPPINGS (ZEDMED)

Diabetes SIP Item	Zedmed Mapping
HbA1c	Measurements > Pathology > HBA1C
Eye Exam	Measurements > Other > Eye Exam Complete
BMI	Measurements > Physical > BMI
BP	Measurements > Physical > BP Sitting
Foot Exam	Measurements > Other > Foot Exam Complete
Cholesterol	Measurements > Pathology > Cholesterol
Triglycerides	Measurements > Pathology > TRIG
HDL	Measurements > Pathology > HDL
Microalbumin	Measurements > Pathology > TRIG
Smoking	Patient Details > Smoking tab

NOTE: Pathology results received in HL7 format will be viewable from the Summary Views panel Measurements tab and will be extracted for CAT.

APPENDIX E-5 – ASSIGNED PROVIDERS (ZEDMED)

Assigned Provider Mapping in Zedmed

The patient provider is picked up from the Patient Demographics screen > Usual Provider field. This field is currently not widely used by practices and feedback has been that this is not a useful way of filtering by provider.

Zedmed Version 14 provides a utility, within the Zedmed application, that allows the practice to populate the Usual Provider field for all patients. The practice is able to decide its own rules for assignment. The default setting is for a patient to be assigned to the provider seen most frequently in the last 18 months. Once this utility has been run the assigned providers will be picked up by the CAT extractor and the CAT Provider filter will be able to be used effectively.