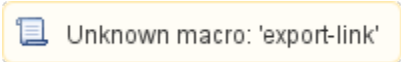


# MT2PENCAT Data Mapping Setup

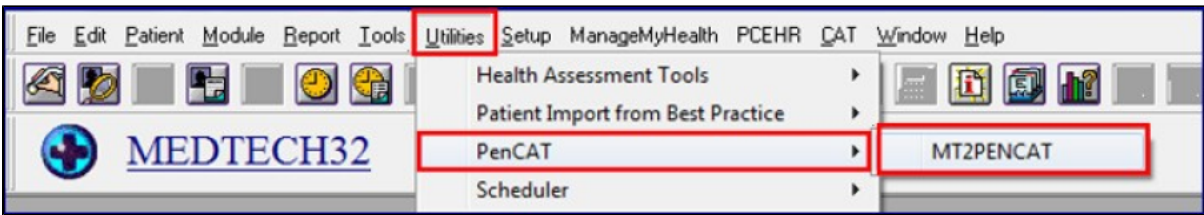


Once the **Medtech32 MT2PENCAT** utility has been successfully installed, it is necessary to configure the data mapping to the **Pen CS Clinical Audit Tool** within your **Medtech32** system.

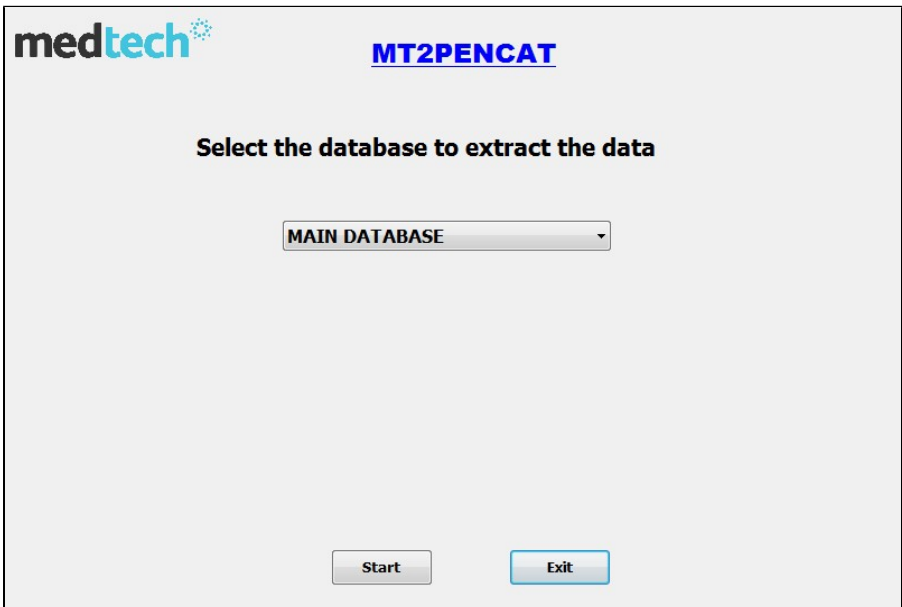
1. Log in to **Medtech32** and select your usual database.



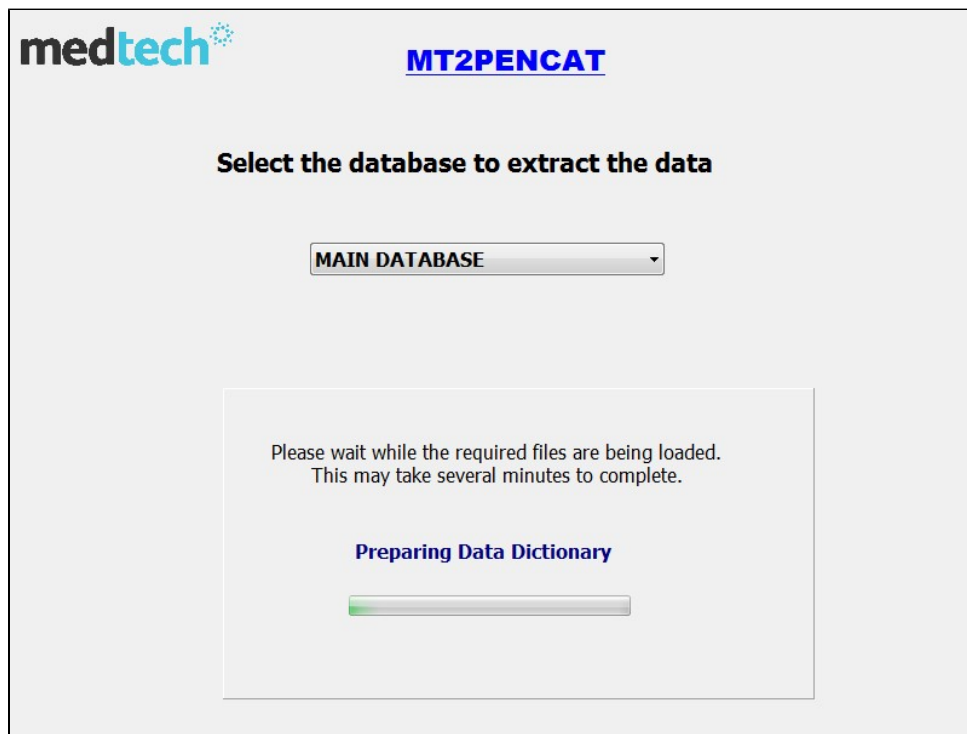
1. A new menu option has been added to your main Medtech menu bar. Click on the **Utilities > CAT4** menu to access the new utility.



1. Click on the **MT2PENCAT** option. Select the respective database to extract from using the drop down list and then click on the **Start** button.



1. On clicking the **Start** button, the screen below will be displayed.



**medtech**

**MT2PENCAT**

**Select the database to extract the data**

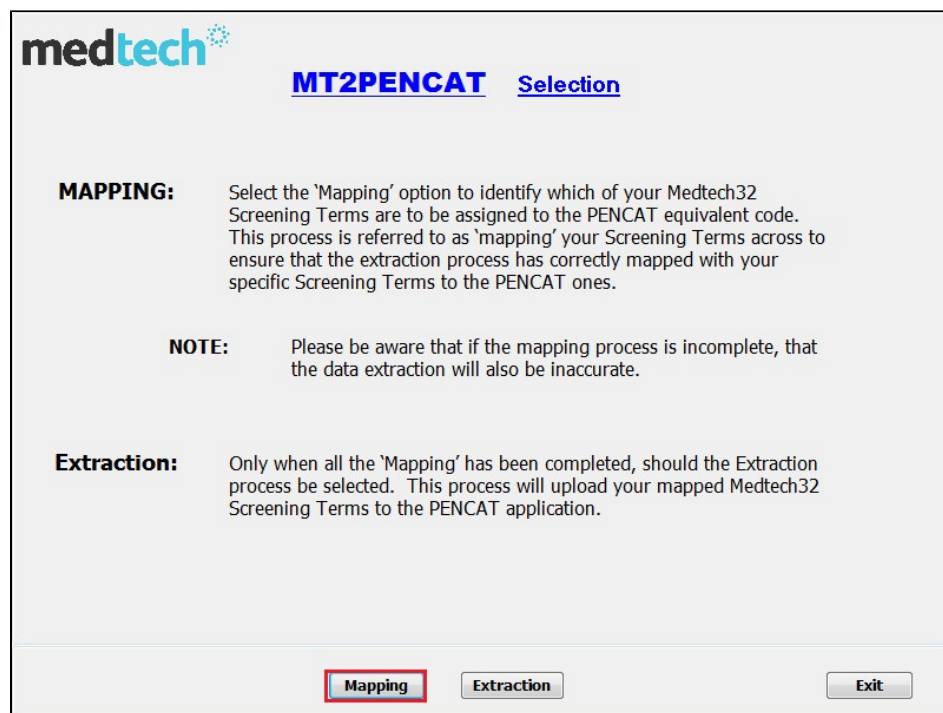
MAIN DATABASE

Please wait while the required files are being loaded.  
This may take several minutes to complete.

**Preparing Data Dictionary**

Progress bar: [A progress bar with a green segment on the left and a grey segment on the right.]

1. Once the required files have been loaded, the screen below will appear. Click on the **Mapping** button to continue.



**medtech**

**MT2PENCAT** Selection

**MAPPING:** Select the 'Mapping' option to identify which of your Medtech32 Screening Terms are to be assigned to the PENCAT equivalent code. This process is referred to as 'mapping' your Screening Terms across to ensure that the extraction process has correctly mapped with your specific Screening Terms to the PENCAT ones.

**NOTE:** Please be aware that if the mapping process is incomplete, that the data extraction will also be inaccurate.

**Extraction:** Only when all the 'Mapping' has been completed, should the Extraction process be selected. This process will upload your mapped Medtech32 Screening Terms to the PENCAT application.

Mapping Extraction Exit

1. The **Mapping** screen will be displayed

**medtech** **MT2PENCAT** **Mapping** MT32 Database MAIN DATABASE

Measurements Immunisations Smoking/Alcohol

**Step1. Select PenCAT Item**

Description	Mapped
BP SYSTOLIC	NO
BP DIASTOLIC	NO
HDL	NO
LDL	NO
CHOLESTEROL	NO
CREATININE	NO
CREATININE URINARY	NO
HBA1C	NO
RANDOM BLOOD GLUCOSE	NO
FASTING BLOOD GLUCOSE	NO
HEIGHT	NO
MICROALBUMIN	NO
MICROALBUMIN CREATININE RATIO	NO
ALBUMIN URINARY EXCRETION	NO
ALBUMIN URINARY EXCRETION 24HR	NO
TRIGLYCERIDES	NO
WAIST	NO
WEIGHT	NO
BIRTH WEIGHT	NO
EYEXAM	NO

**Step2. Select MT32 Screening Term**

Code	Description
ACT	Acuity
ALB	Albumin
ALBUE	Albumin Urinary Excretion
AU24HR	Albumin Urinary Excretion 24Hr
ALC	Alcohol
ALCO	Alcohol Details
AB	Antibodies
AST	Asthma Action Plan
BFOL	B12 and Folate
BP	BP
BILI	Bilirubin
BL	Blood
BMI	Body Mass Index
BSA	Body Surface Area
BRSCR	Breast Screening
CXDATE	CX Date
CA	Calcium
CENZ	Cardiac Enzymes
CSMEAR	Cervical Smear
CX	Cervical Smear

**Step3. Select Measurement**

☐ Dias[1]  
☐ Sys[2]

Save Exit

**Note:** Once the **MT2PENCAT** application is running, you will also see the Medtech32 **MT2PenCAT** extractor icon on your system tray at the bottom of your screen.



If you minimise the **MT2PENCAT** screen, you can click on the icon on the tray to restore it to full screen.

## MT2PENCAT Mapping Screen

Explanations of the Mapping Screen are covered below.

- 1. MT32 Database:** This displays the Medtech32 database that you are logged in to, and for which the mapping is being done from. This is to accommodate those practices with multiple databases.

**Note:** ensure that the **database** displayed here is the correct one to use. If not, then please refer to the section titled '**Multiple Databases**'.

- 1. Measurements, Immunisations, Smoking/Alcohol Tabs:** Mapping values are required to be input by the Practice staff responsible for the Clinical extractions.

**HINT:** You are able to move on to the next stage if you have completed the full Mapping process to your satisfaction. Those fields that have not been mapped will display in the **CAT4** Report, but with empty values.

## MT2PENCAT Mapping Process

The Mapping utility process will do an initial review of your Medtech32 database and then present the results in a Table format for you to work with. The CAT4 Measurements in **Step 1 of the Table** are displayed as per the sample screenshot below.

In **Step 2 of the Table** – this is a direct view of your Screening Terms in your database – their Codes and Descriptions. These are the codes that need to be mapped.

The final **Step 3 of the Table** – will display any measurement values for the relevant Screening Term selected in **Step 2 of the Table**. Based on the first entry in **Step 1** of the Table, select the corresponding Screening Terms in **Step 2** of the Medtech32 Screening Terms and their relevant Measurements in **Step 3 of the Table** for you to 'map together', so that your existing Medtech32 Screening Terms correspond to the CAT4 Item descriptions shown in the first column. An example of how to do the Mapping is shown below, and also highlighted in yellow.

a. Select the	b. Link it to	c. Assign the
<u>CAT4 Item</u>	<u>Medtech Screening Term</u>	<u>Measurement Value</u>
– BP Systolic	• BP – Blood Pressure	• Systolic

The screenshot shows the 'MT2PENCAT Mapping' window with three tabs: 'Measurements', 'Immunisations', and 'Smoking/Alcohol'. The 'Measurements' tab is active, displaying three steps:

- Step1. Select PenCAT Item:** A list of medical terms with a 'Mapped' column. 'BP SYSTOLIC' is highlighted in blue, and its 'Mapped' value is 'NO'.
- Step2. Select MT32 Screening Term:** A list of screening terms. 'BP' (Blood Pressure) is highlighted in blue.
- Step3. Select Measurement:** A list of measurement values. 'Systolic[2]' is highlighted in blue.

At the bottom right, there are 'Save' and 'Exit' buttons.

#### **IMPORTANT NOTE: Appendix A documents**

A summary of the expected CAT4 Codes can be found here: [MT2PENCAT Data Mapping Setup](#). Please ensure that you have reviewed the list of CAT4's required Screening Terms. If they are missing from your Medtech32 system, then please add them in to your Screening Terms if applicable to your Practice.

#### **WARNING: Each Medtech32 Code Value Can Only Be Mapped Once.**

Ensure that you have also reviewed and mapped the screening terms in all of the three Tabs – **Measurements**, **Immunisation** and **Smoking/Alcohol** tabs.

#### **Note:**

It is expected that the first time that this process is run, that there will possibly be several measurements that will require remapping. This process may take some time to do and needs to be attended to by a Clinical staff member to ensure that they are correct for your database.

### **Complete Mapping Screen**

1. Click on the **Save** button to save your current mapping selections if you have completed the Mapping, or wish to return to this screen at a later time to complete the full Mapping process.

**medtech** **MT2PENCAT** **Mapping** MT32 Database MAIN DATABASE

Measurements Immunisations Smoking/Alcohol

**Step1. Select PenCAT Item**

Description	Mapped
BP SYSTOLIC	NO
BP DIASTOLIC	NO
HDL	NO
LDL	NO
CHOLESTEROL	NO
CREATININE	NO
CREATININE URINARY	NO
HBA1C	NO
RANDOM BLOOD GLUCOSE	NO
FASTING BLOOD GLUCOSE	NO
HEIGHT	NO
MICROALBUMIN	NO
MICROALBUMIN CREATININE RATIO	NO
ALBUMIN URINARY EXCRETION	NO
ALBUMIN URINARY EXCRETION 24HR	NO
TRIGLYCERIDES	NO
WAIST	NO
WEIGHT	NO
BIRTH WEIGHT	NO
EYEXAM	NO

**Step2. Select MT32 Screening Term**

Code	Description
ABO/RH	ABO/Rhesus
ACT	Acuity
ALB	Albumin
ALC	Alcohol
AB	Antibodies
AST	Asthma Action Plan
BFOL	B12 and Folate
BLI	Bilirubin
B	Blood
BP	Blood Pressure
BMI	Body Mass Index
BSA	Body Surface Area
CXDATE	CX Date
CA	Calcium
CENZ	Cardiac Enzymes
CSMEAR	Cervical Smear
CX	Cervical Smear
CHOL	Cholesterol
CONT	Continence
CRECLR	Creatinine Clearance

**Step3. Select Measurement**

Measurement
Diastolic(T)
Systolic(T)

**Save** **Exit**

Once the **Save** button has been selected, the **Save** process screen will be initiated. The status of the process will also be displayed onscreen – refer to screenshot sample on the following page.

### Save Mapping Screen

**medtech** **MT2PENCAT** **Save Mapping**

The application is saving your mappings.  
This message will disappear once the  
process is finished. Please wait.

Progress bar: [Green bar indicating progress]

Once the **Save** process has been completed, a **Message Box** will appear onscreen to advise the user.

**medtech** **MT2PENCAT** **Mapping** MT32 Database Main Database

Measurements Immunisations Smoking/Alcohol

**Step 1. Select PenCAT Item**

Description	Mapped
DAILY SMOKER	YES
WEEKLY SMOKER	NO
IRREGULAR SMOKER	NO
EX-SMOKER	YES
NEVER SMOKED	
SMOKING CIGARETTES PER DAY	
SMOKING NUMBER OF YEARS	
SMOKING REVIEW DATE	
SMOKING QUIT DATE	
ALCOHOL DRINKER	
ALCOHOL NON DRINKER	
ALCOHOL CONSUMPTION FREQUENCY	NO
ALCOHOL CONSUMPTION AMOUNT	NO
ALCOHOL REVIEW DATE	NO
ALCOHOL BINGE DRINKS	NO

**Step 2. Select MT32 Screening Term**

Code	Description
ALC	Alcohol
SH	Smoking History

**Step 3. Select Measurement**

units:R1

**Mt2pencat**

Your latest mappings have been saved

OK

Save Exit

1. Click on the **Exit** button to exit this screen entirely.

You will be returned to the 'Welcome to the MT2PENCAT Start up screen'.

**medtech** **MT2PENCAT** **Selection**

**MAPPING:** Select the 'Mapping' option to identify which of your Medtech32 Screening Terms are to be assigned to the PENCAT equivalent code. This process is referred to as 'mapping' your Screening Terms across to ensure that the extraction process has correctly mapped with your specific Screening Terms to the PENCAT ones.

**NOTE:** Please be aware that if the mapping process is incomplete, that the data extraction will also be inaccurate.

**Extraction:** Only when all the 'Mapping' has been completed, should the Extraction process be selected. This process will upload your mapped Medtech32 Screening Terms to the PENCAT application.

Mapping Extraction Exit

1. Click on the **Exit** button to close this screen

OR

Click on the **Extraction** button to access the **MT2PENCAT** Extraction screen.

**Note:** To run the **PENCAT4 Extraction** option at a later stage, go to the **Utilities CAT4 MT2PENCAT Extractions** menu.

**MT2PenCAT Extraction Option**

1. a. From the **MT2PENCAT** screen, selecting the **Extraction** button will display the prerequisites required to be confirmed before the extraction process can be processed.



**medtech** **MT2PENCAT** [Requirements](#)

**MT2PENCAT EXTRACTION PROCESS**  
**Pre-requisites Checklist**

Please confirm that you have read and understood the following pre-requisites prior to running the MT2PENCAT Extraction process, and that these have all been met.

- Ensure all MT32 users on other client computers are LOGGED OFF.
- Ensure that INTERBASE is RUNNING.
- Ensure that the MT32 services are not running.
- Ensure that INTERBASE BACKUP and SERVER BACKUP are NOT RUUNING.
- Ensure that Interbase database files are not being copied or moved.

If you have unmapped measurements, the report will be incomplete.  
Please ensure that you have all the mappings done.!

☐ I confirm that the pre-requisites have been met Next

1. a. Ensure that all the prerequisites have been met, and then click on the *'I confirm that the prerequisites have been met'* checkbox.

**medtech** **MT2PENCAT** [Requirements](#)

**MT2PENCAT EXTRACTION PROCESS**  
**Pre-requisites Checklist**

Please confirm that you have read and understood the following pre-requisites prior to running the MT2PENCAT Extraction process, and that these have all been met.

- Ensure all MT32 users on other client computers are LOGGED OFF.
- Ensure that INTERBASE is RUNNING.
- Ensure that the MT32 services are not running.
- Ensure that INTERBASE BACKUP and SERVER BACKUP are NOT RUUNING.
- Ensure that Interbase database files are not being copied or moved.

If you have unmapped measurements, the report will be incomplete.  
Please ensure that you have all the mappings done.!

☒ I confirm that the pre-requisites have been met Next

1. a. Click on the **Next** button to continue.

The **MT2PENCAT Extraction** screen will display the following information.

- - - **Medtech32 Database** name that you are using
    - The **LoCAT4ion ID** of your database (for those Practices with multiple loCAT4ions).
    - The **Extraction directory** path of where the finished extraction file will be saved.

1. After confirming the details shown in the screen above are correct, click on the **Extract Data** button to extract the data and make it available to the **Pen Computers Systems Clinical Audit Tool** application.

**Note:** The length of time that the process will take to complete is dependent on the size of your Medtech32 database. However, for medium to large Practices, you should factor in at least some hours for the process to complete. Once completed, the details of the **Start** and **End** times will be displayed at the bottom status screen.

1. Once the extraction process message advises that the process has been completed, click on the **Exit** button to exit the screen.



# Technical Enhancement

## Change of Date of Birth Parameter

In the earlier versions of the **MT2PenCAT Extraction Utility**, if a patient within the **Medtech32** database did not have a **Date of Birth** recorded in their **Patient Register** screen, then the utility was transmitting the Age Parameter as '**</age>**' in the extracted '**Data.xml**' file. A change in the parameter for the above scenario has been modified to accommodate the missing information and the **MT2PenCAT Extraction Utility** will now transmit the age parameter as a '**<age>999</age>**' value.

## APPENDIX A - CAT4 Item Descriptions

Listed below is a sample of the **Measurement** codes for the **CAT4 Item Descriptions** that will require mapping in **Medtech32**.

DESCRIPTION	TYPE
Bp_diastolic	Int
Hdl	dec
Idl	dec
Cholesterol	dec
Creatinine	dec
Creatine_urinary	dec
Hba1c	dec
Random_blood_glucose	dec
Fasting_blood_glucose	dec
Height	dec
Microalbumin	dec
Microalbumin_creatinine_ratio	dec
Albumin_urinary_excretion	dec
Albumin_urinary_excretion_24hr	dec
Triglycerides	dec
Waist	dec
weight	dec
Birth_weight	dec
Eye exam	dec
Foot exam	dec
Papsmear	dec
Haemoglobin	dec
Physical_activity	int
Protein_urinary	dec
Protein_creatinine_ratio	dec
Protein_creatinine_ratio_g_per_mmol	dec
Chlamydia_test	dec
Hiv_test	dec
Gonorrhoea_test	dec

Syphilis_test	dec
MMSE	dec
INR	dec
Breastscreen	dec
Glucose_2hr_tolerance_test	dec
Colorectalscreen	dec
Fobt	dec
Egfr	dec
Spirometry_fev1post	dec
Spirometry_fvcpost	dec

Below is a list of the **Immunisation** codes for the **CAT4 Item Descriptions** that will require mapping in **Medtech32**.

DESCRIPTION	MAPPED
Immunisations_fluvax	No
Immunisations_panvax	No
Immunisations_gardasil	No
Immunisations_pertussis	No
Immunisations_pneumovax	No
Immunisations_hebp	No
Immunisations_dtpa	No
Immunisations_hib	No
Immunisations_polio	No
Immunisations_prevarnar	No
Immunisations_rotavirus	No
Immunisations_mmr	No
Immunisations_menccv	No
Immunisations_hepa	No
Immunisations_vzv	No

Listed below is a sample of the **Smoking/Alcohol** codes for the **CAT4 Item Descriptions** that will require mapping in **Medtech32**.

DESCRIPTION	MAPPED
Daily smoker	No
Weekly smoker	No
Irregular smoker	No
Ex-smoker	No
Never smoked	No
Smoking_Cigarettes_per_day	No
Smoking_number_of_years	No
Smoking_quit_date	No
Alcohol Drinker	No

Alcohol Non Drinker	No
Alcohol_consumption_frequency	No
Alcohol_consumption_amount	No
Alcohol_review_date	No
Alcohol_binge_drinks	No

Should you require assistance with the **MT2PenCAT** installation, or have any queries on this, please do not hesitate to contact the **Medtech Support Desk** via Email: [support@medtechglobal.com](mailto:support@medtechglobal.com) or Tel: **1800 148 165**.