PIP QI Reporting

Date: 01-July-20

Version: 1.0

This Release note provides instructions required to implement Practice Incentive Program Quality Improvement Incentive (PIP QI) reporting in Profile.

Pre-requisites

Profile 8.4 or higher

PEN CAT application

For more information about the CAT application, refer to Profile Integration with CAT4.pdf provided with this release.

Configuration Steps

To install and use this new functionality, follow the instructions below. Alternatively, you can call Intrahealth support to assist you.

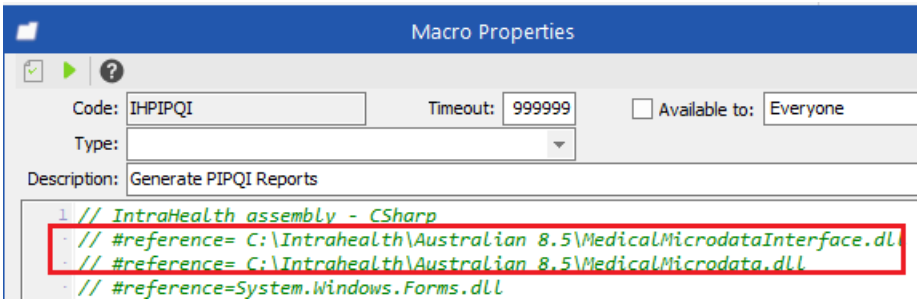
1. Go to **`Organisation/Import and Export/Import Jaffa File`**.
2. Select and import the Jaffa files:

- IHPIPQI v2.9.jfa
- PIPQI Diagnosis Short Codes.jfa
- IH_PIPQI_INIT Read Parameters V2.0.jfa
- INIFILEREAD Reads a value from an INI file V1.0.jfa

3. Create new Folder "PIPQI" in the Profile bin folder
    - Copy the Self executing **IHPIPQI.jfa** file into the PIPQI folder
    - Copy the executable **ProfileDataExtractionTool.exe** file into the PIPQI folder
    - Copy the batch file **TestExtractTool.bat** into the PIPQI folder
4. Copy the following DLL's to the Profile bin folder:
    - MedicalMicrodata.dll
    - MedicalMicrodataInterface.dll
5. Update the IHPIPQI macro

5.1. Go to **`Maintain/Templates/Macros`** to update the **`IHPIPQI`** macro:

5.2. Update the 2 lines highlighted below to reference the new location of the DLL's you copied in Step 4 above:



5.3. For example, if Profile is installed in the c:\Program Files(x86)\Intrahealth folder, then replace the two lines with the following:

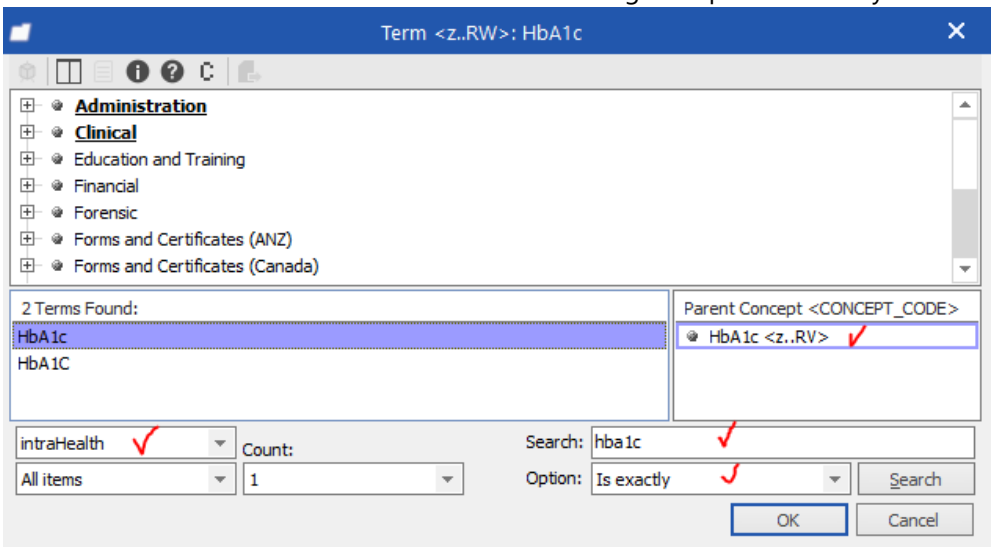
```
// #reference=C:\Program Files (x86)\Intrahealth\Profile\MedicalMicrodataInterface.dll
// #reference=C:\Program Files (x86)\Intrahealth\Profile\MedicalMicrodata.dll
```

5.4. Add Term Cross Reference for HbA1c

The PIPQI report looks for HbA1c results for each patient. These values may have been recorded historically in different ways, including as part of lab results, via a clinical assessment form, or by using clinical measures. Each entry may be coded differently, so the Term Cross reference is used to find these entries and map them to a single Intrahealth concept which is then used for reporting

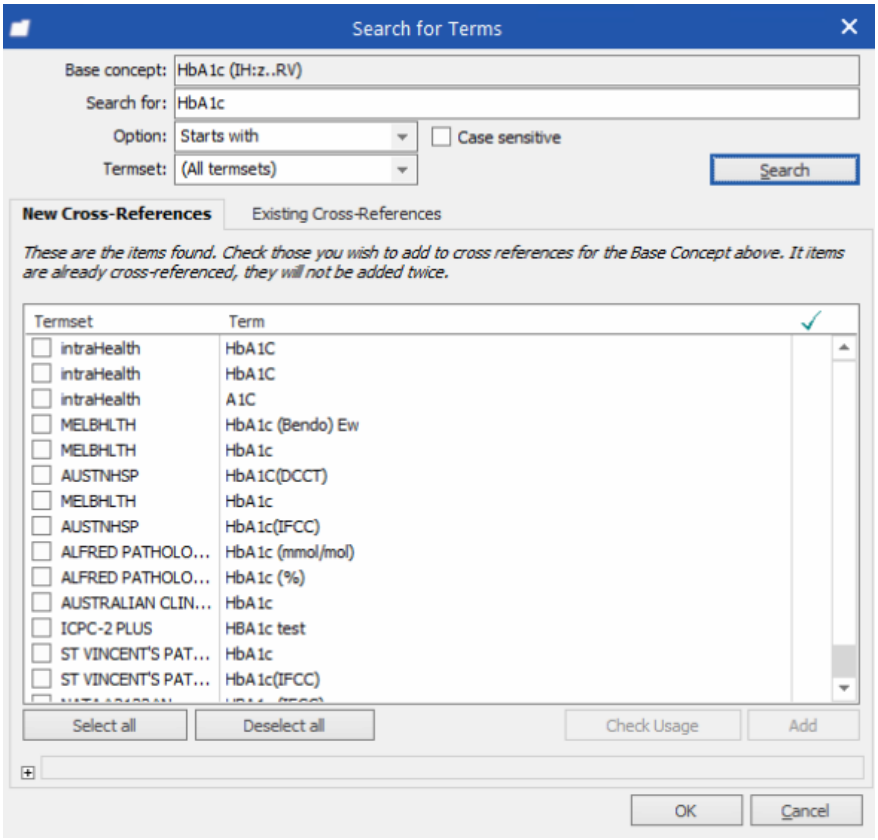
5.4.1. Go to Maintain > Term Cross Reference

5.4.2. Select Intrahealth Termset and search for HbA1c using the option Is exactly:



5.4.3. Select the parent Concept with code <z..RV> as shown above.

5.4.4. In the Search for terms window click Search

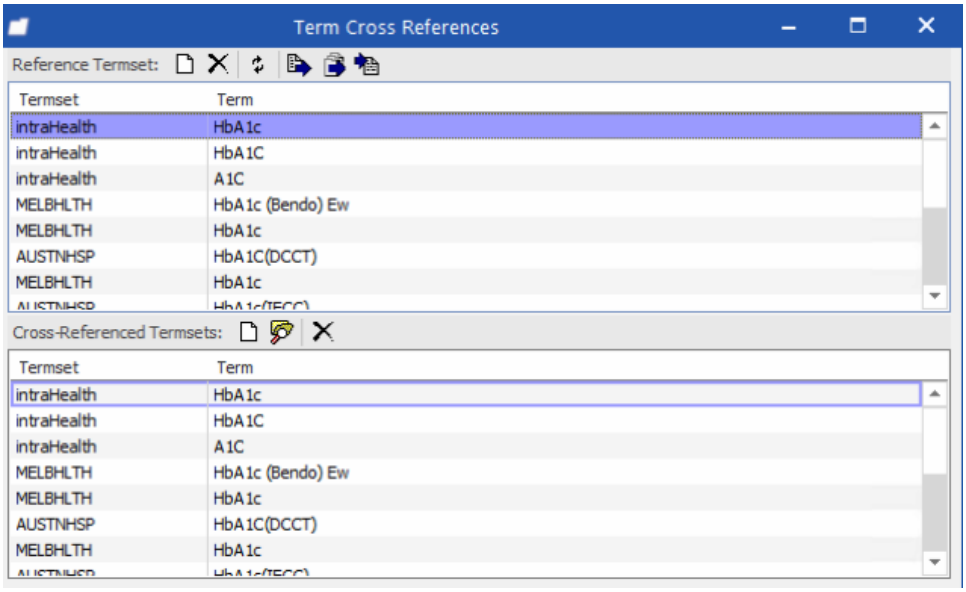


5.4.5. Click the Select All button

5.4.6. Click Add

5.4.7. Click OK

5.4.8. The selected items should now appear in the bottom panel of the Term Cross References window:



End-to-End Process

1. CAT4 initiates the process by calling the standalone executable “ProfileDataExtractionTool.exe” with parameters.
2. ProfileDataExtractionTool copies a file (PIPQI.jfa) containing a self-executing macro into Profile’s auto-import folder. It also creates a file (Params.ini) to record the parameter details which are used by Profile to determine the XML file name to be used in the report (step 6 below).
3. Profile scans this folder every minute and will process the file when it detects it.
4. The self-extracting macro initiates the report macro.
5. The report macro is C# code which uses Profile COM API to retrieve data from the Profile database. Note: There is no direct interaction with the database – it’s all processed programmatically using Profiles type library.
6. The data extraction process iterates through all eligible patients and writes output in the appropriate format to the XML files. Depending on the database this process could take anywhere from 3-4 hours (or even longer)

Test the installation

Stand-alone test:

Edit the batch file **TestExtractTool.bat**

Change the Path references to the local locations

ProfileDataExtractionTool.exe 1234 ProfileTestPractice "<Profile bin folder>\PIPQI\Output" T F "<Profile bin folder>\PIPQI"

Report Data elements

This section describes how you should code the PIP QI data elements to ensure that they are included in Profile's PIP QI reports.

Patient Data

Only patients who have had 3 or more appointments in the last 2 years are included in the PIPQI report.

Only Appointments that are Closed, Invoiced or Seen are counted.

Diagnosis & Procedure Codes

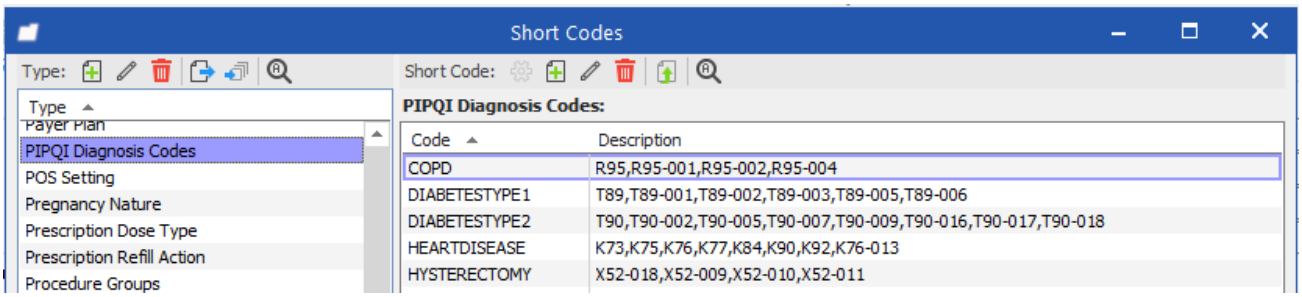
When generating the PIPQI report, Profile searches each patient's Problem list to look for problems coded using the ICPC-2 PLUS diagnosis codes listed below:

Diagnosis Description	ICPC2+Code	Termset Description	XML tags
COPD	R95	Chronic Obstructive Pulmonary Disease	`Coad.coad_active`
Type 1 Diabetes	T89 T89-001 T89-002 T89-003 T89-005 T89-006	Diabetes, Insulin Dependent Insulin Dependent Diabetes Type 1 Diabetes Juvenile Onset of Diabetes Diabetic Coma Diabetic Hyperglycaemia	`type1Diab.diabetes_type1_active`
Type 2 Diabetes	T90 T90-002 T90-005 T90-007 T90-009 T90-016 T90-017 T90-018	Diabetes, Non-Insulin Dependent Diabetes Mellitus Non Insulin Dependent Diabetes Adult Onset Diabetes Type 2 Diabetes Type 2 Diabetes treated with Insulin Latent Autoimmune Diabetes Mellitus Complicated Diabetes	`type2Diab.diabetes_type2_active`

Diabetes Undefined		If patient does not have a diagnosis code for Type 1 or Type 2 Diabetes, then any Disease Code containing the word "Diabetes" is counted as "Diabetes Undefined"	`UndefinedDiab.diabetes_undefined_active`

The list of recognized Diagnosis codes is defined using the **PIPQI Diagnosis Codes** short-code.

It provides a list of comma-delimited ICPC-2 PLUS diagnosis codes for each disease.



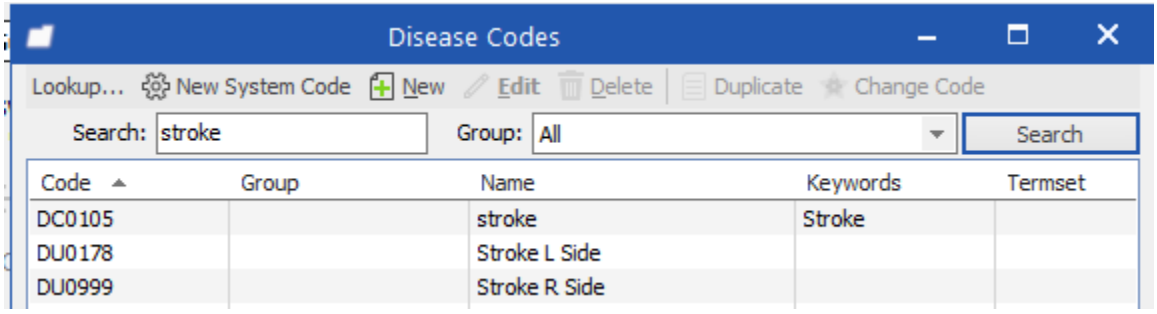
The list can be modified to include other diagnosis codes that a Practice may have used to record relevant diagnoses.

Linking Diagnoses to ICPC2-PLUS codes:

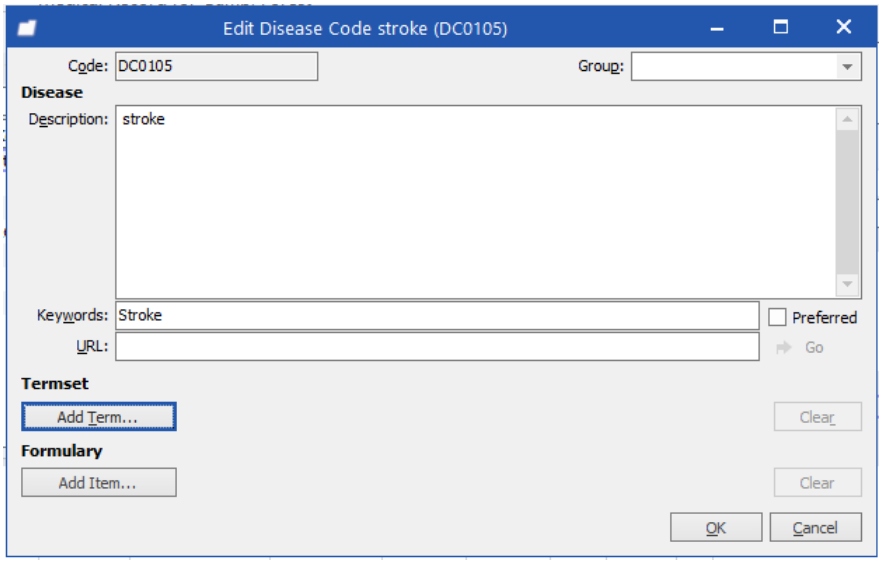
To ensure diagnoses are coded correctly, you should review the diagnosis codes in use at your practice and link them to the appropriate ICPC-2 PLUS codes for each of the 4 main categories: COPD, Type-1 Diabetes, Type-2 Diabetes and Heart Disease as well as for the procedure codes for Hysterectomy.

Example: Find and link all Disease Codes relating to "Heart Disease" and link them to the appropriate ICPC2-PLUS concept code.

1. Go to Maintain > Disease Codes
2. Search for Stroke:



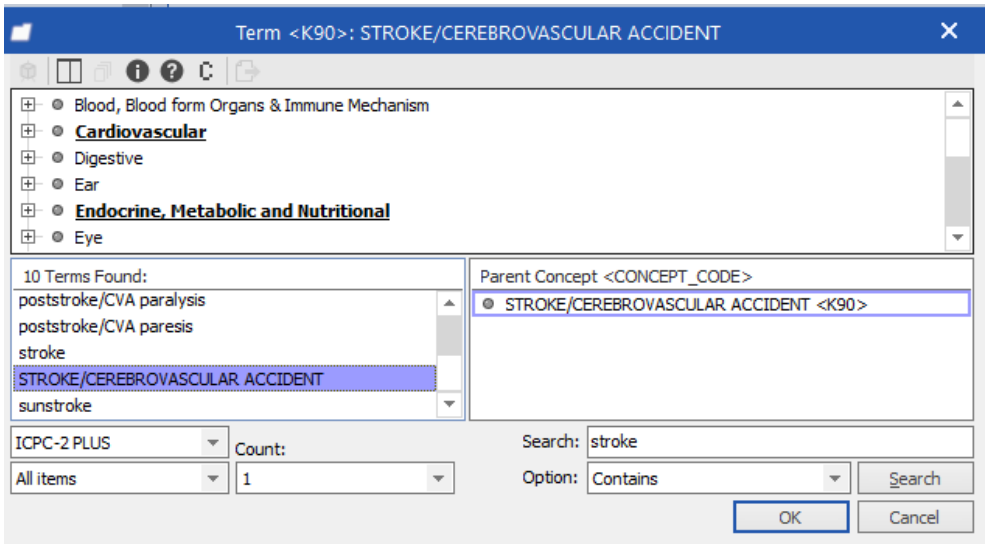
3. Select each item from the list and double click to Edit:



4. Now link this Disease Code to the ICPC2-PLUS concept code:

   4.1. Click Add Term

   4.2. Search for "Stroke" in the Termset (you may change search option from "Is Exactly" to "Contains" to increase the scope of the search)



5. Click OK

6. The Disease Code "Stroke" is now linked to the ICPC2-PLUS concept for "Stroke" which has code K90. Since K90appears in the list of PIPQI reporting codes for Heart Disease, all patients with this Disease Code in their problem list will now be included in the report for Heart Disease.

Procedure Description	ICPC2+Code	Termset Description	XML tags
Hysterectomy	X52-018 X52-009 X52-010 X52-011	Hysterectomy Subtotal Abdominal Hysterectomy Total Abdominal Hysterectomy Vaginal hysterectomy	hpvNode.hpv_test_status
Heart Disease	K73 K75 K76 K77 K84 K90 K90-017 K92 K76-013	Congenital Anomaly Cardiovascular Acute Myocardial Infarction Ischaemic Heart Disease Without Angina Heart Failure Heart Disease, Other Stroke/Cerebrovascular Accident Stroke Atherosclerosis/Peripheral Vascular Disease Coronary Heart Disease	

Clinical Measures

Profile searches for each patient's Medical Record for the Clinical Measures

Clinical Measure	Termset	Code	XML tags
hba1c	IH	"z..RV"	hba1cNode.hba1c_value
Diastolic BP	IH	"zE.E4"	bpNode.bp_diastolic
Systolic BP	IH	"zE.E2"	bpNode.bp_systolic
Height	IH	"z..2S	heightNode.height_value

Weight	IH	"z..2T"	weightNode.weight_value
HDL	IH	"zE.J7"	hdlNode.hdl_value
Total Cholesterol	IH	"zE.J3"	cholesterolNode.cholesterol_value
Fasting Glucose	IH	"zE.JU"	fastingGlucNode.fasting_blood_glucose_done