### **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:

-		Macro Properties			
2 🕨 🖉					
Code:	IHPIPQI	Timeout: 999999	Available to: Everyone		
Type:		-			
Description:	Generate PIPQI Reports				
1 // I	ntraHealth assembly -	CSharp			
// #reference= C:\Intrahealth\Australian 8.5\MedicalMicrodataInterface.dl					
- // #	<u>reference= C:\Intrahea</u>	alth\Australian 8.5\	MedicalMicrodata.dll		
· // #	reference=System.Windo	ows.Forms.dll			

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:

Term <zrw>: HbA1c</zrw>	×
🕸 🔲 🗏 🔀 🚱 C 🛛 📭	
H @ Administration	
E · · · <u>Clinical</u>	
🕀 🏾 Education and Training	
🗄 🏾 🖉 Financial	
⊕ @ Forensic	
Forms and Certificates (Canada)	<b>•</b>
2 Terms Found:	Parent Concept <concept_code></concept_code>
HbA1c	֎ HbA1c <zrv> ✔</zrv>
HbA1C	
intraHealth 🗸 💌 Count: Search: hba1c	✓
All items 🔻 1 Voption: Is exact	y 🗸 👻 Search
	OK Cancel

- 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

1		Sea	rch	for 1	Ferms							×
Base concept:	HbA10	: (IH:zRV)										
Search for:	HbA10	DA1c										
Option:	Starts	; with	Ŧ		Case s	ensitive						_
Termset:	(All te	rmsets)	+							Sea	rch	-
	V 42			J						200		
lew Cross-Refere	nces	Existing Cross-Ref	ieren	ces								
These are the items i are already cross-rel	found. Ference	Check those you wish cd, they will not be add	to ad led tv	ld to wice,	cross re	ferenci	es for t	he Base (	Concept	t above.	It iten	ns
Termset		Term									$\checkmark$	_
intraHealth		HbA1C										1
intraHealth		HbA1C										
intraHealth		A1C										
MELBHLTH		HbA1c (Bendo) Ew										
MELBHLTH		HbA1c										
AUSTNHSP		HbA1C(DCCT)										
MELBHLTH		HbA1c										
AUSTNHSP		HbA1c(IFCC)										
ALFRED PATHO	LO	HbA1c (mmol/mol)										
ALFRED PATHO	LO	HbA1c (%)										
AUSTRALIAN CI	.IN	HbA1c										
ICPC-2 PLUS		HBA1c test										
ST VINCENT'S P	AT	HbA1c										
ST VINCENT'S P	AT	HbA1c(IFCC)										Ŧ
Colorital		Declarkell						ch - du tur				_
Select all		Deselect all						Uneck Usa	age		Add	
+												
									OK		ancel	

- 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:

-	Term Cross References – 🗖 🗙
Reference Termset: 🗋	🗙 💠 🖹 🔁
Termset	Term
intraHealth	HbA1c
intraHealth	HbA1C
intraHealth	A1C
MELBHLTH	HbA1c (Bendo) Ew
MELBHLTH	HbA1c
AUSTNHSP	HbA1C(DCCT)
MELBHLTH	HbA1c
Cross-Referenced Termset	s: 🗅 🖻 🗙
Termset	Term
intraHealth	HbA1c
intraHealth	HbA1C
intraHealth	AIC
MELBHLTH	HbA1c (Bendo) Ew
MELBHLTH	HbA1c
AUSTNHSP	HbA1C(DCCT)
MELBHLTH	HbA1c
ALICTNICO	

### **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.
- 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	Coad.coad_active
		Pulmonary Disease	
Type 1	Т89	Diabetes, Insulin	<pre>type1Diab.diabetes_type1_active</pre>
Diabetes	T89-001	Dependent	
Diabetes	T89-002	Insulin Dependent	
	Т89-003	Diabetes	
	T89-005	Type 1 Diabetes	
	Т89-006	Juvenile Onset of	
		Diabetes	
		Diabetic Coma	
		Diabetic	
		Hyperglycaemia	
Type 2	Т90	Diabetes, Non-Insulin	<pre>type2Diab.diabetes_type2_active</pre>
Diabetes		Dependent	
Diddetes	T90-002	Diabetes Mellitus	
	Т90-005	Non Insulin Dependent	
		Diabetes	
	Т90-007	Adult Onset Diabetes	
	Т90-009	Type 2 Diabetes	
	T90-016	Type 2 Diabetes treated	
		with Insulin	
	T90-017	Latent Autoimmune	
		Diabetes Mellitus	
	T90-018	Complicated Diabetes	

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

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.

-	Short Co	odes	-		×
Туре: 🔂 🥒 💼 🔂 🕣 🔍	Short Code: 🛞 🔂 🥒 💼 🕢 😨				
Туре 🔺	PIPQI Diagnosis Codes:				
Payer Plan	Code 🔺 Description				
POS Setting	COPD	R95,R95-001,R95-002,R95-004			
Pregnancy Nature	DIABETESTYPE1	T89,T89-001,T89-002,T89-003,T89-005,T89-006			
Prescription Dose Type	DIABETESTYPE2	T90,T90-002,T90-005,T90-007,T90-009,T90-016,T90-017,T90-018			
Prescription Refill Action	HEARTDISEASE	DISEASE K73,K75,K76,K77,K84,K90,K92,K76-013			
Procedure Groups	HYSTERECTOMY	X52-018,X52-009,X52-010,X52-011			

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:

i	<b>-</b>	Disease Codes –						
	Lookup 🔅 New	de						
	Search: stroke		Group: All	-	Search			
	Code 🔺	Group	Name	Keywords	Termset			
1	DC0105		stroke	Stroke				
d	DU0178		Stroke L Side					
1	DU0999		Stroke R Side					

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

-	Edit Disease Code stroke (DC0105)		-		×
C <u>o</u> de:	DC0105	Grou <u>p</u> :			-
Disease					
Description:	stroke				-
					-
Kauwardau	Strake				
Keywords:	Stroke			📋 Pret	erred
<u>U</u> RL:				📄 🔿 🕞	)
Termset					
Add <u>T</u> err	n			Cle	ar
Formulary					
Add Iten				Cle	ar
Add Itel				CIC	CH I
			<u>0</u> K	<u>C</u> an	cel

- 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)

Term <k90>: STROKE/CEREBROVASCULAR ACCIDENT</k90>					
🏚 🔲 🗗 🔁 🗘 C 🔂					
⊞-   Blood, Blood form Organs & Immune Mechanism		-			
🗄 🔍 <u>Cardiovascular</u>					
⊕ Oigestive					
⊕ ear					
Endocrine, Metabolic and Nutritional					
⊕ © Eye		Ŧ			
10 Terms Found:	Parent Concept <concept_code></concept_code>				
poststroke/CVA paralysis	STROKE/CEREBROVASCULAR ACCIDENT <k90></k90>				
poststroke/CVA paresis					
stroke					
STROKE/CEREBROVASCULAR ACCIDENT					
sunstroke 🔻					
ICPC-2 PLUS Count:	Search: stroke				
All items v 1 v	Option: Contains 💌 Sea	irch			
	OK Car	ncel			

- 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, <u>all patients</u> 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	Hysterectomy	hpvNode.hpv_test_status
hysterectomy	X52-009	Subtotal Abdominal	
X52-010 Hysterectomy			
		Total Abdominal	
	X52-011	Hysterectomy	
		Vaginal hysterectomy	
Heart Disease	К73	Congenital Anomaly	
		Cardiovascular	
	К75	Acute Myocardial Infarction	
K76 Ischaemic Heart Disease			
		Without Angina	
	K77	Heart Failure	
	К84	Heart Disease, Other	
		Stroke/Cerebrovascular	
	К90	Accident	
		Stroke	
	К90-017	Atherosclerosis/Peripheral	
	К92	Vascular Disease	
		Coronary Heart Disease	
	K76-013		

#### **Clinical Measures**

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

Clinical Measure	Termset	Code	XML tags
hba1c	ІН	"zRV"	hba1cNode.hba1c_value
Diastolic BP	ІН	"zE.E4"	bpNode.bp_diastolic
Systolic BP	IH	"zE.E2"	bpNode.bp_systolic
Height	ІН	"z2S	heightNode.height_value

Weight	IH	"z2T"	<pre>weightNode.weight_value</pre>
HDL	IH	"zE.J7"	hdlNode.hdl_value
Total Cholesterol	IH	"zE.J3"	<pre>cholesterolNode.cholesterol_value</pre>
Fasting Glucose	IH	"zE.JU"	<pre>fastingGlucNode.fasting_blood_glucose_done</pre>