



### RESOURCE AND PATIENT MANAGEMENT SYSTEM

# **Prenatal Care Module**

# (BJPN)

# **Addendum to User Manual**

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Office of Information Technology Division of Information Technology

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# Preface

The purpose of this manual is to provide users with the information needed to use the Indian Health Service (IHS) Electronic Health Record (EHR) Prenatal Care Module (PCM) components which have been developed and released under the new BJPN namespace. The PCM is composed of one Windows®-based Graphical User Interface (GUI) component within the EHR. The PCM allows users to manage prenatal problems and issues for a patient during pregnancy. The Pregnancy Issues and Problem List (PIP) component serves to maintain the list of issues and risks associated with both current and all pregnancies for providers to consider the prenatal issues associated with the pregnancy in the context of all similar problems.

# 1.0 Introduction

This manual contains reference information about the PCM views and step-by-step procedures to show users how to perform the activities supported by the component.

### 1.1 Background

The traditional EHR Problem List provides a concise inventory of a patient's medical conditions. The list keeps critical patient problem information "on the surface" where the problems can be reviewed quickly and easily. In addition, the list keeps diagnoses from getting lost in the record and makes it simple to evaluate a single diagnosis within the overall context of a patient's other active medical conditions. This problem list is the focal point of problem-oriented medical record keeping.

Past experience suggests that it is useful to maintain a pregnancy-specific problem list that provides a focused summary of problems associated with a patient's pregnancy. This new pregnancy-specific problem list is referred to as the PIP. With the release of Version 2, users will be able to copy a prenatal problem to the EHR Integrated Problem List (IPL) and problems from the IPL can be copied to the PIP.

Aside from limiting its context to a single pregnancy, the PIP differs from the traditional problem list in two important ways:

- 1. Equal emphasis is given to documenting medical conditions and risk factors
- 2. PIP entries have "scope"; namely, each entry is limited to the current pregnancy or to all pregnancies

## 1.2 Prenatal Care Module

The PCM is intended to allow providers to see a pregnancy-specific problem list that provides a focused summary of problems associated with a single pregnancy.

The PCM can help IHS providers by:

- Providing a pregnancy specific problem list to track problems and issues related to the current pregnancy or all pregnancies.
- Providing the ability for the provider to clarify the issue with provider text to be included with the Systematized Nomenclature of Medicine--Clinical Terms (SNOMED CT®) term associated with the problem.
- Providing the ability to enter care plans, patient goals and visit instructions associated with the prenatal problem.
- Providing the ability to set the problem as today's Purpose of Visit (POV).

- Providing the ability to include the problem list and notes in a progress notes using Text Integration Utility (TIU) objects.
- Providing the ability to include the problem list and notes in a Health Summary (HS) using HS objects.

# 2.0 System Navigation

### 2.1 Using Prenatal Care Module Features

This section provides an overall look at the design and functions of the main screen elements of the PCM.

The core concept of the Prenatal Care Module Version 2.0 is the PIP. The PIP is a list of issues and problems associated with a patient's pregnancy that the user has added by selecting individual problems from the Prenatal Pick List (PPL) or by utilizing the SNOMED CT® lookup utility. The PPL will present the user with a default set of common pregnancy issues and problems. The list is integrated with the Integrated Problem List (IPL) Pick List functionality. Pick lists marked as being Prenatal-related will be displayed in the PPL.

### 2.1.1 Pregnancy Issues and Problems List

The PIP component displays the list of issues and problems associated with a patient's pregnancy. This list is manageable by the user, allowing additions, edits and deletes, as necessary.

Users who hold any of the ORES/ORELSE/PROVIDER keys are viewed as clinical users and have full access privileges to all problem list options. Users with the BGOZ PROBLEM LIST EDIT key can add or edit the problem list. Users with the BGOZ VIEW ONLY key can view information but cannot edit data in this component.

A parameter BJPN DISABLE PRENATAL EDITING was included with the release of the Prenatal Care Module Version 1.0. Users or users subscribed to a User Class entered into this parameter will have view only access to the PCM, regardless of the security keys they hold.

The PIP window (also known as the PIP component) has the following features:

- Radio buttons by the PIP label determines what problem status (Active, Inactive, or All) will be displayed in the (lower) grid.
- A visit or visit context **must** be selected in order to access the edit functionality of the PIP. PIP edit functionality consists of using the Add, Edit, Delete, Set as Today's POV, Pick List and Toggle buttons.
- When in view only mode, *a visit or visit context is not required*; however only the Problem Status Radio buttons, the Expand/Collapse All, Print, as well as the "Notes for All Pregnancies" check box and View Detail option (available by right-clicking on a problem in the PIP) will be accessible. All PIP edit functionality will be disabled when in view only mode.

#### 2.1.1.1 About the PIP

The PIP displays the selected patient's pregnancy status and Definitive Estimated Date of Delivery (EDD) for context at the top of the component. The PIP entries are displayed in a grid format with Priority, PIP Status, Scope, Date of Onset, Modified (Optional), IPL Status, Provider Narrative, Last Goal, Last Care Plan, Last Visit Instruction, POV and ICD columns. Figure 2-1 depicts a sample PIP for a patient.

Prior	IV PIP	Scope	Date of Onset	IPL Status	Provider Narrative	Last Goal	Last Care Plan	Last Visit Instruction	POV	ICD
	Active	Current		Episodic	Acute obtis media. Left I					H66.90
	Active	Current		Routine/Admin	Acute otitis media (				Y	H66.90
	Active	Current Pregnancy		Personal Hx	Acute briateral otrus media I				Y	H66.93



#### 2.1.1.2 Problem Status

Click a radio button next to the Pregnancy Issues and Problems List label to select the appropriate problems by status to display in the PIP grid.

The **All Problems** option will display both active and inactive problems for the current patient. Users can filter the list by selecting **Active Only** or **Inactive Only**; this means, for example, if **Active Only** is selected, only those problems with a status of Active will display in the PIP grid.

The Status field is editable when adding or editing a problem through the dialog or by clicking the **Toggle Status** button on the list for the selected problem(s).

#### 2.1.1.3 Expand/Collapse All

Click the **Expand (Collapse)** All button to expand or collapse the PIP entries in the grid to show or hide the associated notes for the problem. This button changes from **Expand All** to **Collapse All**. This same functionality is available on the right-click menu.

#### 2.1.1.4 Print

Click the **Print** button to print all problems currently listed in the PIP grid.

**Note:** Print only works with local printers. EHR remote printers cannot print the graphics associated with the grid itself, only text.

Follow these steps to print selected problems on the patient's PIP:

1. Click the **Print** button to display the **Print Preview** dialog. The following figures shows a sample of a **Print Preview** dialog:

Q Print Preview	adapted in						
<u>F</u> ile <u>V</u> iew <u>T</u> ools							٦
] <i>P P</i> Z 🖾 🕐 🗉		100 9	%	• 📀	╞╴╝╺	<u>Close</u>	
	🛛 🕙 🛞 💂						
					с	DNFIDENTIAL PROVIDER INFOF Pregnancy Issues and Probl	
	Priority /	PIP Status	Scope	Modified	IPL Status	Provider Narrative	
	×.	Active	All Pregnancie	03/25/2014	Episodic	Sprain of hip   Testing	
	<b>.</b>	Active	All Pregnancie	03/19/2014	Episodic	Antenatal care: recurrent aborter   Testing Testing	
	•	Active	All Pregnancie	03/17/2014	Episodic	Common cold	
	•	Active	Current Pregnancy	03/19/2014	Episodic	Intrinsic asthma with status asthmaticus I otext	
	÷	Active	Current Pregnancy	03/21/2014	Episodic	Asthma with status asthmaticus   ptext 2	
-	٠	Inactive	All Pregnancie	03/17/2014	Episodic	Anemia	-
	1					Þ	
						Page: 1 of 1	÷

Figure 2-2: Print Preview dialog

2. Make any desired adjustments to the page layout and then print by selecting **File** > **Print** in the menu or the Print button with the printer icon.

### 2.1.1.5 Set as Today's POV

For Prenatal 2.0, "Set as Today's POV" button has been updated to use the same form launched by the EHR IPL "POV" button. All the same rules apply.

If the PIP is editable, users can select one or more problems in order to simultaneously update the problem's Set as Today's POV flag. This setting can also be updated via the **Edit Problem** dialog.

Use the **Set as Today's POV** button to associate active problems from the PIP component as the POV for the selected visits in the EHR Visit Diagnosis component. This same functionality is available on the right-click menu.

Follow these steps to set a problem as the POV for a visit:

- To select all active problems, either click the Set as Today's POV button (or select the Set as Today's POV option on the right-click menu) or alternatively, select one problem in the grid and click the Edit button (or select the Edit Problem option on the right-click menu) to display the Set as Today's POV/Update problems dialog for the selected active problems.
- 2. When done editing, click **Save**. Otherwise, click **Cancel** to cancel the update process.

The following figure shows a sample Set as Today's POV display:

ID Sta	tus Prov. Nam	tive POV	Episodicity	Alternate POV Provider Text	Goal Notes	Care Plans	Visit Instructions	Pt Ed	Tx/Regimen/ FU	Tx/Regimen/FU display only
50356 Epi	sodic Acute otitis media, Bila bilateral no	teral 🔽	First episode     New episode     Old episode     Old episode     Ongoing epis     Undefined epi     m	ode isodic	gn ≢1	cp #1	vi #1	DP N EX LA M P L	Treatment/ Regimen	Given a Visit Instruction: vi #1
50371 Rol	atine/- Adult healt examinatio	h V	First episode     New episode     Old episode     Old episode     Ongoing epis     Undefined ep     III	ode isodic				DP N EX LA M P L	Treatment/ Regimen	
Primary PC	W .					# Gener	al Exam POV Finding			
Acute otr	is media, Right   n	ght note		•		Narrative w/o a	on find w/abn find not ex	amined/unk		
E8KM		O New	🖉 Estai	blished		Adult health exami	0 0	0		
Selected	History & Exam	Complexity	Approx Time	CPT Code						
10	Brief	Nurse Visit	5 min	99211						Contra Contra
1	Problem Focused	Straightforwar	d 10 min	99212						Solid Concer
- #3	Expanded	Low	15 min	99213						
	Detailed	Moderate	25 min	99214						
301		the second se		110 TO 12 TO 12						

Figure 2-3: Select POV's/Update problems dialog

### 2.1.1.6 Toggle Status

Click the **Toggle Status** button to toggle the problem status on selected entries in the PIP grid from Active to Inactive or vice versa. The same functionality is available on the right-click menu.

### 2.1.1.7 Toggle Scope

Click the **Toggle Scope** button to toggle status on selected entries in the Pregnancy Issues and Problems grid from Current Pregnancy to All Pregnancies or vice versa. The same functionality is available on the right-click menu.

### 2.1.1.8 Add Problem

The **Add Problem Information** dialog displays when the user clicks the **Add** button on the PIP or when the **Add Problem** is selected from the right-click menu. The dialog allows users to set the attributes for the problem including IPL priority, Use as POV, primary, inpatient, PIP Priority, SNOMED CT® term, IPL status, PIP status, scope, provider text, qualifiers data, asthma data if problem selected is asthma related, Is Injury data, date of onset, goal notes, care plans, visit instructions, care planning activities. If the PIP is editable, problems can be added to the list in a variety of ways. From the PIP, clicking the **Add** button or selecting **Add Problem** from the right-click menu will open the **Add Problem** dialog. Problems can also be added using the **Pick List** button Once the entry is updated and saved, the problem will be added to the PIP and appear in the list.

Add a problem to the PIP if an issue is considered important enough and to document as an ongoing issue.

**Warning**:Notes are saved when the user clicks the **OK** button on the CVG form, not via the Add Problem Save button.

The following figure shows a sample **Add Problem** dialog form:

Ac	dd Problem	-	- Annual and Annual	- 1275	Carle Land	-	
							Cancel
	"SNOMED CT:						Pick list
1	* Required Field						

Figure 2-4: Add Problem Information dialog (before SNOMED CT is selected)

Follow these steps to add a new problem to a patient's PIP:

- 1. Click **Add** (or select the **Add Problem** option on the right-click menu) to display the **Add Problem Information** dialog.
- 2. For the required **SNOMED CT** field, either type in the SNOMED CT® value for the problem (if known) or else click the ellipses "…" button to utilize the **SNOMED CT® Lookup** dialog or the **Pick List** button to select the appropriate entry.

Selecting a problem via SNOMED CT and the Pick List can cause one of the following special case message boxes to be displayed:

a. The problem selected already exists on the PIP and was loaded into an edit screen. This window only displays for five seconds before automatically closing.

Problem exists in IPL and PIP
Problem 'Acute otitis media' already exists on the IPL and PIP and was loaded.
Continue



b. The problem selected already exists in the IPL. User needs to confirm if it is acceptable to add the problem to the PIP. Click **OK** to accept.





c. The selected problem has found one or more possible matches to an existing PIP and/or IPL problem. The user will be presented with a list of options. Add the new problem to the PIP will always be the first option. Up to three matching problems (laterality representing left, right and bilateral) may be displayed with the option to either edit the existing problem or add to PIP if found on the IPL.





d. The selected problem has found an existing problem with the laterality unset (Unspecified). The user will be presented with the option to either add the problem as a new PIP problem or replace the existing problem (with no laterality selected) and edit.

PIP Problem Matching	×
Possible match(es) found for requested the problem. Would you like to:	
Add 'Acute otitis media, Left' as new PIP problem.	
Replace existing IPL/PIP problem 'Acute otitis media   ' with 'Acute otitis media, Left' and edit	
	Cancel

Figure 2-8: Existing problem found, add or replace screen

- 1. If desired, select **IPL Priority** for the problem.
- 2. If desired, check **Use as POV** to mark this as purpose of visit. Once **Use as POV** is checked, **Primary** checkbox becomes an option. Check, if desired.

PL Priority 0 PIP Priority 0	) 🔶 🔲 Use as POV Not Set . O Low O Medium			Save Cancel
*SNOMED CT: *IPL Status *PIP Status *Scope *Required Field	Antenatal care: grand multipart     Chronic Sub-acute     Active Inactive     Current Pregnancy /	y	antenatal Inactive O Personal Hx O Routine/Admin	Pick list
Provider Text Antenatal care	: grand multiparity 009.40			
Date of Oriset				
Qualifiers S	evenity •	Clinical Course		
Qualifiers S	ieverity •	Clinical Course		
Qualifiers S	ieverity •	Clinical Course		

Figure 2-9: Add Problem - POV

d Problem	-	A Design of the local		The state of some of the	
IPL Priority PIP Priority	0 🚖 🛛 Use as F Not Set <mark>◯ Low</mark> ◯	OV 🔲 Primary Medium <mark>🔵 High</mark>			Save Cancel
*SNOMED C *IPL State *PIP State *Scope *Required Fie	CT: Asthma us O Chronic S us Active In O Current Pregna eld	ub-acute C Episodic C active nncy C All Pregnancies	) Social/Environmental 🔘 Inactiv	asthma e	Pick list
Provider Tex Asthma J45	t 5.909				
Date of Onse	t				
Qualifiers	Severity	Clinical Cours	e Epis	odicities •	
Asthma	Classification	•	Control	•	
Injury	◉ First Visit ◯ Re-visi	t	Injury Date 04/20/2016		
Place		-	Associated with	•	
Caused By					
					🗸 Is Injury
Care Plan Info oal Notes		Care Plans	Visit Instruction	Add Visit Instruction s Care Plan	/ Care Plans / Goal Activities
		1	1		

Figure 2-10: Add Problem – Use as POV checked, Is Injury checked

**Note:** If an inpatient visit is selected, **Use as POV** and **Primary** are replaced with **Use for Inpatient** checkbox.

PL Priority IP Priority o	0 😸 🔽 Use for Inpatient Not Set 💿 Low O Medium O High	Save Cancel
* SNOMED C * IPL Statu * PIP Statu * Scope * Required Fie	F:       Antenatal care: grand multiparity       Antenatal         s       C Chronic       Sub-acute       ● Episodic       Social/Environmental       Inactive       Personal Hx       Routine/Admin         is       ● Active       Inactive       ● Inactive       ●       Outpersonal       Current Pregnancy       All Pregnancies         d	Pick list
Provider Text Antenatal ca Date of Onse	e: grand multiparity 009.40	
Qualifiers	Severity Clinical Course	

Figure 2-11: Add Problem – Inpatient Visit

		the second second second						
PL Priority 0	<mark>÷</mark> btSet <mark>◯ Low</mark> ◯ M	edium 💽 High	Use for Inpatient				Save	Cancel
*SNOMED CT: *IPL Status *PIP Status *Scope *Required Field	Antenatal care: grand Chronic Sub Active Inac Current Pregnan	nultiparity -acute	<ul> <li>Social/Environmenta</li> </ul>	I 🔿 Inactive	Antenatal O Personal Hx	Routine/Admin		Pick list
Provider Text Antenatal care:	grand multiparity O0	9.40						
Qualifiers Se	verity	Clinical Co	ourse					
		•						
		•						
are Plan Info		•			Ad	d Visit Instruction /	Care Plans / G	oal Activities

Figure 2-12: Add Problem – Use for Inpatient checked

Checking either **Use as POV** or **Use as Inpatient** will make the Care Plan Info section visible.

- 3. If desired, select **PIP Priority** for the problem.
- 4. Click the appropriate radio button in the **IPL Status** group box, **Episodic** is preselected as the default for a new problem.
- 5. Click the appropriate radio button in the **PIP Status** group box, **Active** is preselected as the default for a new problem.
- 6. Click the appropriate radio button in the **Scope** group box, **Current Pregnancy** is pre-selected as the default for a new problem.
- 7. Problems (with **Use as POV** checked) with laterality information will display a new section called **Laterality** listing values of Left, Right, Bilateral and Unspecified. The problem's laterality radiobutton will be selected. This is display ONLY. If the laterality needs to be changed, the problem will have to be selected from either the SNOMED CT search or the **Pick List** and replaced.

*SNOMED CT:	Acute otitis media	Fick list
⁺ IPL Status ⁺ PIP Status	<ul> <li>○ Chronic ○ Sub-acute</li></ul>	○ Personal Hx ○ Routine/Admin
*Scope *Required Field	O Current Pregnancy ○ All Pregnancies     O	Laterality CLeft Right Bilateral Unspecified

Figure 2-13: Laterality information displayed

A problem with a laterality value of Unspecified causes an additional check when the **Save** button is clicked. Setting the laterality value to Left, Right or Bilateral is desired. If laterality is left as Unspecified, any future editing of this problem will cause the same prompt to be displayed on save.



Figure 2-14: Prompt to set laterality when current problem doesn't have laterality selected (left, right or bilateral)

- 8. If desired, enter a 60 character maximum **Provider Text** field value.
- 9. If desired, the **Date of Onset** can be selected.

Sele	ect Dat	te						×
	4		A	oril, 20	16		Þ	i.e. T-3 days
	Sun 27 3 10 17 24	Mon 28 4 11 18 25	Tue 29 5 12 19	Wed 30 6 13 20	Thu 31 7 14 21	Fri 1 8 15 22	Sat 2 9 16 23	or 10/2013
	24		  Ok	Foday:	4/26/ Can	2016 cel	]	Today .::

Figure 2-15: Imprecise date selection

10. If desired, the **Qualifiers** section can be updated.

a. Certain SNOMED CT terms, such as Adult health examination, require **General Exam POV finding** information to be collected. The **Save** button will be disabled until a finding is selected.

IPL Priority 0 PIP Priority 0 No	♂ Use as POV ✓ Primary lot Set Output	Save Cancel
*SNOMED CT:	Adult health examination adult health exam	Pick list
* IPL Status * PIP Status	<ul> <li>○ Chronic ○ Sub-acute ○ Episodic ○ Social/Environmental ○ Inactive ○ Personal Hx ( <ul> <li>○ Active ○ Inactive</li> </ul> </li> </ul>	Routine/Admin
*Scope *Required Field	Current Pregnancy      All Pregnancies	
Provider Text	amination 777 999	
Date of Onset		
Qualifiers Se	evenity Clinical Course Episodicities	General Exam POV finding     O w/o abn find O w/abn find     O N/A/Not Examined/Unk

Figure 2-16: General Exam POV finding section

- 11. If selected problem is Asthma related, the **Asthma** section will be visible and can be updated.
- 12. If desired, Injury data can be entered by checking the **Is Injury** checkbox. The Injury will be display and can be populated.
- 13. If desired, Care Plan Information can be updated via Add Visit Instruction / Care Plans / Goal Activities button or right click menu options on Goal Notes, Care Plans and Visit Instructions grids. Using the Care Plans/Visit Instruction/Goal Activities (CVG) form, will 1) save the currently selected problem on the Add Problem form and 2) save any data entered on the CVG form.

dd Visit Instructions / Care Plans / Goal Notes / Care Planning Activities						
Visit Instructions	Patient Education provided         Disease Process       Nutrition         Exercise       Lifestyle Adaptation         Medications       Prevention         Literature       Literature					
Goal Notes	Treatment/Regimen/Follow-up Current Visit - Care Planning Activities					
Date 04/26/2016	Treatment/Regimen/Follow-up					
01/20/2010	Education Provided					
Care Plans						
Date						
04/26/2016	OK Cancel					

Figure 2-17: Add Visit Instruction / Care Plans / Goal Activities form

14. When the Add Problem Information dialog is complete, either click **Save** to file the problem information into RPMS or click **Cancel** to quit without saving.

#### 2.1.1.9 Edit Problem

The **Edit Problem** dialog displays when the user clicks the **Edit** button on the PIP or when the menu option is selected from the right-click menu. The dialog allows users to set the attributes for the problem including IPL priority, Use as POV, primary, inpatient, PIP Priority, SNOMED CT® term, IPL status, PIP status, scope, provider text, qualifiers data, asthma data if problem selected is asthma related, Is Injury data, date of onset, goal notes, care plans, visit instructions, care planning activities.

If the PIP is editable, problems can be edited from the list in two ways, either by clicking the **Edit** button on the PIP or by selecting **Edit Problem** from the right-click menu. Each of these options will open the **Edit Problem** dialog. The **Edit Problem** dialog allows current information for problems already located on the PIP to be updated.

**Warning:**Notes are saved when the user clicks on the **OK** button on the CVG form, not via the Edit Problem Save button.

Edit Problem	-	-		-		x
IPL Priority O	Vot Set O Low O Me	/ 🔲 Primary dium 💽 High			Save Cancel	
* SNOMED CT: * IPL Status * PIP Status * Scope * Required Field	Acute otitis media     Chronic Sub-     Active Inact     Current Pregnance	acute	ocial/Environmental 🔿 In	active () Personal Lateralit	I Hx O Routine/Admin Y Left Right O Bilateral Unspecifie	t :d
Provider Text Acute otitis me	bilateral note edia, Bilateral   bilateral	note H66.90				
Date of Onset	1/2015					
Qualifiers S	evenity	Clinical Course	(0 Selected)	Episodicities		
					Is Injury	_
Goal Notes	C	are Plans	VisitInstru	ctions	Add visit instruction / Care Plans / Goal Activities	
U an #1		U cp #1	U vi#1			-

The following figure shows a sample **Edit Problem** Information dialog form:

Figure 2-18: Edit Problem dialog

Follow these steps to modify current information on the PIP:

- 1. Highlight a problem in the PIP grid.
- 2. Click **Edit** (or select the **Edit Problem** option on the right-click menu) to display the **Edit Problem** dialog for the selected problem.
- 3. For the required **SNOMED** field, either type in the SNOMED CT® value for the problem (if known) or else click the ellipses (...) button to utilize the **SNOMED CT® Lookup** dialog or the **Pick List** button to select the appropriate entry.

Selecting a problem via SNOMED CT<sup>®</sup> and the Pick List can cause one of the following special case message boxes to be displayed:

a. The problem selected already exists on the PIP and was loaded into an edit screen. This window only displays for five seconds before automatically closing.

Problem exists in IPL and PIP	
Problem 'Acute otitis media' already exists on the IPL and PIP and was loaded.	
Continue	

Figure 2-19: Problem was found on the PIP and was loaded into the edit screen

b. The problem selected already exists in the IPL. User needs to confirm if it is acceptable to add the problem to the PIP. Click **OK** to accept.



Figure 2-20: Problem was found in the IPL; confirm if acceptable to add to the PIP

c. The selected problem has found possible matches to one or more existing PIP and/or IPL problem. The user will be presented with a list of options. Add the new problem to the PIP will always be the first option. Up to three matching problems (laterality representing left, right and bilateral) may be displayed with the option to either edit the existing problem or add to PIP if found on the IPL.

PI	P Problem Matching
	Possible match(es) found for requested the problem. Would you like to:
	Add 'Acute otitis media' as new PIP problem.
	C Edit existing IPL/PIP problem 'Acute otitis media, Bilateral   bilateral note'
	C Edit existing IPL/PIP problem 'Acute left otitis media   '
	Add 'Acute otitis media, Right   right note' (existing IPL entry) as new PIP problem.
	Cancel

Figure 2-21: Existing problems found, add or edit screen

d. The selected problem has found an existing problem with the laterality unset (Unspecified). The user will be presented with the option to either add the problem as a new PIP problem or replace the existing problem (with no laterality selected) and edit.



Figure 2-22: Existing problem found, add or replace screen

e. A matching problem with equivalent laterality was found on the PIP. This problem already exists on the IPL and PIP and cannot be changed.



Figure 2-23: Existing problem found, can't change screen

- 4. If desired, select **IPL Priority** for a problem.
- 5. If desired, check Use as POV to mark this as purpose of visit.

Once Use as POV is checked, Primary checkbox becomes an option. Check if desired.

If an inpatient visit is selected, **Use as POV** and **Primary** are replaced with **Use for Inpatient** checkbox.

Checking either **Use as POV** or **Use as Inpatient** will make Care Plan Info section visible.

- 6. If desired, select **PIP Priority** for a problem.
- 7. Click the appropriate radio button in the **IPL Status** group box, **Episodic** is preselected as the default for a new problem.
- 8. Click the appropriate radio button in the **PIP Status** group box, **Active** is preselected as the default for a new problem.
- 9. Click the appropriate radio button in the **Scope** group box, **Current Pregnancy** is pre-selected as the default for a new problem.
- 10. If desired, enter a 60 character maximum **Provider Text** field value.
- 11. If desired, the **Date of Onset** can be selected.

Sele	Select Date									
	•		A	pril, 20	16		F	i.e. T-3 days or 2014		
	Sun 27 3 10 17 24	Mon 28 4 11 18 25	Tue 29 5 12 19 26	Wed 30 6 13 20	Thu 31 7 14 21	Fri 1 8 15 22	Sat 2 9 16 23	or 10/2013		
			Ok	Today:	4/26/ Can	2016 cel	]	Today		

Figure 2-24: Imprecise date selection

- 12. If desired, the **Qualifiers** section can be updated.
  - a. Certain SNOMED CT terms, such as Adult health examination, require **General Exam POV finding** information to be collected. The **Save** button will be disabled until a finding is selected.

IPL Priority 0 PIP Priority • N	Use as POV V Primary ot Set O Low O Medium I High	Save Cancel
*SNOMED CT:	Adult health examination adult health exam	Pick list
⁺ IPL Status ⁺ PIP Status	<ul> <li>○ Chronic ○ Sub-acute ○ Episodic ○ Social/Environmental ○ Inactive ○ Personal Hx          <ul> <li>Personal Hx</li> <li>Personal Hx</li> <li>Routine/Admin</li> <li>Active ○ Inactive</li> </ul> </li> </ul>	
*Scope *Required Field	Current Pregnancy      All Pregnancies	
Provider Text Adult health exa	mination ZZZ 999	
Date of Onset		
Qualifiers Se	verity Clinical Course Episodicities *Gener	al Exam POV finding bn find Ow/abn find lot Examined/Unk

Figure 2-25: Imprecise date selection

- 13. If selected problem is Asthma related, the **Asthma** section will be visible and can be updated.
- 14. If desired, Injury data can be entered by checking the **Is Injury** checkbox. The Injury will be display and can be populated.
- 15. If desired, Care Plan Information can be updated via Add Visit Instruction / Care Plans / Goal Activities button or right click menu options on Goal Notes, Care Plans and Visit Instructions grids. Using the Care Plans/Visit Instruction/Goal Activities (CVG) form will save any data entered when the OK button is clicked.
- 16. After correcting any information about the problem (including adding or deleting a note), click **Save** (on the **Edit Problem Information** dialog) to have the corrected information display in the PIP grid or click **Cancel** to quit without saving.

#### 2.1.1.10 Delete Problem

If the PIP is editable, problems can be deleted from the list in two ways. From the PIP, clicking the **Delete** button or selecting **Delete Problem** from the right-click menu will delete the problem from the PIP. Once the entry is deleted, the problem will be removed from the PIP and will no longer appear in the list.

The following figure shows a sample **Delete Reason** dialog:



Figure 2-26: Delete Reason Dialog

Follow these steps to remove a problem on the patient's PIP:

- 1. Highlight the problem in the PIP.
- 2. Click the **Delete** button (or select the **Delete Problem** option on the right-click menu) to display the **Delete Reason** dialog.
- 3. If the problem selected has notes, the **Delete** button will be disabled
- 4. If this is the correct problem, enter a reason for deleting. Click **OK** to delete the problem from the PIP. Otherwise, click **Cancel** to cancel the delete action.

#### 2.1.1.11 Notes for All Pregnancies

By default only the notes for the current pregnancy are displayed on the PIP. To display all notes for all pregnancies, check the **Notes for All Pregnancies** option. Notes are defined as being from the current pregnancy if their date of entry falls between the Definitive EDD minus 280 days and Definitive EDD plus the number of days specified in the BJPN POST DEDD DAYS parameter.

### 2.1.1.12 Right-Click Menu

The Right-Click menu displays when the user clicks the right mouse button on the PIP. This menu allows users to access PIP functionality that is also available from the buttons on the component itself.

The following figure shows the contents of the Right-Click menu:



Figure 2-27: Right-Click Menu

#### 2.1.1.13 Pick List

Click the **Pick List** button to open the Prenatal Pick List form. The same functionality is available on the right-click menu. The Pick List is displayed in a checked list format and displays the SNOMED CT® terms available to add as entries in the PIP. The box on the left displays the available pick lists to choose from while the box on the right displays the SNOMED CT® terms available for each pick list.

Users can display each category as needed and sort by frequency. Additionally, the scroll bars can be used to move up or down in order to view the various items in the category or check Show All to disable the pick list selection and display all SNOMED CT® terms for selection and inclusion in the PIP. The SNOMED CT® terms displayed using this method is the comprehensive list of terms available to prenatal as provided by Subject Matter Experts.

Check problems to add to the PIP. Some problems require a laterality value to be selected (using the drop down list to the left of the checkbox) before the save buttons (**Save as Problem** and **Save as Problem and POV**) will be enabled.

Pick List	And a Table And A And	
Prenatal Pick List		
Susie's Family Practice	GROUP : (213 items)	*
Prenatal Brian's PickList	Acne Acne	Ξ
Mike testing	Acute alcoholic intoxication in alcoholism	
	Acute arthritis	
	Acute congestive heart failure	
	Acute low back pain	
	<ul> <li>Acute renal failure syndrome</li> </ul>	
	Alcohol abuse	
	Alcohol dependence	
	Alcohol withdrawal syndrome	
	Allergic rhinitis	On PIP
	Anemia of chronic disease	
	Anxiety disorder	
	Asthma	
	At risk of diabetes mellitus	
	Atopic dermatitis	
	Athai fibrillation	
	Attention dericit hyperactivity disorder	
Show All	Sort by Frequency Rank Cancel Save as Problem	Save as Problem and POV

Figure 2-28: Pick List dialog

- a. Rows highlighted in blue already have problems on the PIP. Also indicated by "On PIP" in last column.
- b. Additional details provided by hovering over problem. Using the example below, (48) H66.90 Acute otitis media Admin
  - i. (48) number of times this problem has been selected from pick list. Used by "Sort by Frequency Rank"
  - ii. H66.90 ICD value
  - iii. Acute otitis media problem name
  - iv. Admin Default Status as defined by Pick List

Prenatal Pick List							
usie's Family Practice	GROUP : (12	items)					
renatal rian's PickList			Acute bilateral otitis media				
ike testing			Acute left otitis media				
			Acute otitis media	On PIP			
			Ac (48) H66.90 Acute otitis media Admin Asthma				
			Congenital glaucoma	On PIP			
			H/O: asthma				
			Mild intermittent asthma				
			Stress fracture of clavicle				
			Stress fracture of femur				
			Stress fracture of hand				
			Yellow fever vaccination				
	GROUP : Hear	rt Related (	ated (3 items)				
			Acute heart failure	On PIP			
			Acute left-sided heart failure				
			Acute right heart failure				
			Pears right not tanke				

Figure 2-29: Additional details provided by hovering over problem

**Save as Problem** button will launch a PIP Add/Edit form for each checked problem. See Add and Edit Problem sections for details.

If a similar problem is already found in the IPL or PIP, the user will be prompted to clarify if the new problem should be added or use an existing problem. A similar prompt is used in the IPL.



Default status. Some problems will prompt for a clarification on which status to use. A similar prompt is used in the IPL.

F	Problem Status	x
	The Default Status for Alcohol abuse is Episodic, the current Status is Chronic	Yes
	Do you want to use the Default Status?	No

Figure 2-30: Default status confirmation prompt

**Save as Problem and POV** button will attempt to add the checked problems to the PIP and then launch the POV form. See Set as Today's POV section for additional information.

If a similar problem is already found in the IPL or PIP, the user will be prompted to clarify if the new problem should be added or use an existing problem. A similar prompt is used in the IPL.



Figure 2-31: Sample POV form

#### 2.1.1.14 View Detail

This option displays full details for the selected problem and includes a history of all changes.

Follow these steps to View Detail for a problem on the PIP:

1. On the Right-Click Menu, click **View Detail** to display the **Problem Detail** dialog (adjusting the font size as desired).



Figure 2-32: Problem Detail dialog

- 2. To print, click **Print** or click **Close** to exit.
- 3. Set the desired number of Copies to print by selecting the appropriate value in the **Copies** field.
- 4. Check the **Save as your default printer** box to set the selected printer as the default printer.
- 5. Print the detail by either selecting a local printer by clicking once on a printer name to select it and then click **OK** or else print by double-clicking on a printer name.

The following figure shows the **Printer Selection** dialog box:

Printer Selection
Local Printers
Send To OneNote 2010
Fax
EPSON Stylus Photo RX580 Series Adobe PDF
Remote Printers
CODING <ptcode></ptcode>
CODING <ptcode></ptcode>
GREEN <ptopatg></ptopatg>
JVN PRINTER
LABDATA-IM-TCP
LABO <ptlabrpt></ptlabrpt>
Copies: 1
Save as your default printer
OK Cancel

Figure 2-33: Printer Selection dialog

6. Make any desired adjustments to the page layout and then print utilizing the **File** and **Print** menu option or the **print** icon.

The following figure shows the **Print Preview** dialog box:



Figure 2-34: Print Preview dialog

- 7. Print the detail by either selecting a remote printer by clicking once on a printer name to select it and then click **OK** or else print by double-clicking on a printer name.
- 8. Click **Close** on the **Print Preview** dialog to finish.

#### 2.1.1.15 Change Onset Date

**Change Onset Date** is available on the right click menu only. Updates a single problem with a new Date of Onset using imprecise date selection as described in Add/Edit Problem.

(	Sele	ect Dat	te						×
		4		A	oril, 20	16		+	i.e. T-3 days or 2014
		Sun 27	Mon 28	Tue 29	Wed 30	Thu 31	Fri 1	Sat	or 10/2013
		3 10	4 11	5 12	6 13	7 14	8 15	9 16	
		17 24	18 25	19 26	20	21	22	23	
			C		Today:	4/26/	2016		Today
				Ok		Can	cel	]	.:

Figure 2-35: Imprecise date selection

### 2.1.1.16 Change IPL Statuses

**Change IPL Statuses** is available on the right click menu only. Has the same behavior as IPL Change Statuses right click menu option. Multiple problems will be updated to the selected IPL status.



Figure 2-36: Change IPL Statuses

### 2.2 Using Prenatal TIU Objects

The following TIU objects have been created and are available to include in progress notes to document prenatal patient issues.

### 2.2.1 PIP Expanded-Current Pregnancy

The first TIU object displays all problems contained on the *current display* of the PIP and the associated Provider Narrative (date added), Notes in reverse chronological order for each item in list with date of entry.

Format:

1) Provider Narrative (date added), Author of note, Date of note: Note content

Author of note, Date of note: Note content

2) Provider Narrative (date added), Author of note, Date of note: Note content

Author of note, Date of note: Note content

### 2.2.2 PIP Expanded-Current Encounter

The second TIU object displays all problems contained on the *current display* of the PIP ("All Pregnancies" and "Current Pregnancy" problems) with the associated Provider Narrative (date added), Notes entered this visit.

Format:

1) Provider Narrative (date added), Author of note, Date of note: Note content

Author of note, Date of note: Note content

2) Provider Narrative (date added), Author of note, Date of note: Note content

Author of note, Date of note: Note content

### 2.2.3 PIP Expanded-Most recent note

The third TIU object displays all problems contained on the *current display* of the PIP with the associated Provider Narrative (date added), most recent Note for each problem for current pregnancy ("All Pregnancies" and "Current Pregnancy" problems).

Format:

1) Provider Narrative (date added), Author of note, Date of note: Note content

Author of note, Date of note: Note content

2) Provider Narrative (date added), Author of note, Date of note: Note content

Author of note, Date of note: Note content

### 2.3 Using Prenatal Health Summary Objects

The following Health Summary objects have been created and are available to include in Health Summaries to document prenatal patient issues.

### 2.3.1 PIP Expanded-Pregnancy

The first Health Summary object displays all problems contained on the *current display* of the Pregnancy Issues and Problem List with the associated Provider Narrative (date added), Notes in reverse chronological order for each item in list with date of entry

Format:

1) Provider Narrative (date added), Author of note, Date of note: Note content

Author of note, Date of note: Note content

2) Provider Narrative (date added), Author of note, Date of note: Note content

Author of note, Date of note: Note content

Author of note, Date of note: Note content

### 2.3.2 PIP Expanded-Current Encounter

The second Health Summary object displays all problems contained on the *current display* of the PIP with associated Provider Narrative (date added), Notes entered today's encounter

Format:

1) Provider Narrative (date added), Author of note, Date of note: Note content

Author of note, Date of note: Note content

2) Provider Narrative (date added), Author of note, Date of note: Note content

Author of note, Date of note: Note content

# 3.0 Package Management

The Prenatal Version 2.0 package requires minimal package management primarily related to access and package parameters.

### 3.1 Security Keys

The following security keys have been implemented with Prenatal Version 2.0 package which can be managed from the standard RPMS menu options.

Key Name	Description
ORES, ORELSE, BGOZ PROBLEM LIST EDIT, PROVIDER	Users holding one or more of these keys will be granted full edit privileges to the PCM.
BGOZ VIEW ONLY	This key should be assigned to the person who has VIEW ONLY permission to the PCM. This overrules any other edit security key.

### 3.2 Parameters

There are two XPAR parameters delivered with the Prenatal Version 2.0 package which can be managed from the standard RPMS menu options.

Parameter	Value Type	Precedence	Description
BJPN DISABLE PRENATAL EDITING	Boolean	User, Class	Users or users assigned to User Classes entered in this parameter will be excluded from using the PCM, regardless of their assigned security keys.
BJPN POST DEDD DAYS	Numeric	System	The number of days after a patient's definitive estimated date of delivery in which they can still make changes to their prenatal problem list.

# 4.0 Package Operation

### 4.1 Installation

Please refer to the installation manual for installation of the package. This is Prenatal Care Module Version 2.0 (BJPN). The software is intended to bring the features of the Prenatal Care Module to the EHR.

### 4.2 Giving Users Access to the PCM Components

In order for a user to be able to access the PCM components, their user definition must be modified. Any user desiring access to the PCM components must be assigned both the "BMXRPC" and "BJPNRPC" options as secondary menu options in their RPMS user profile. Failure to do so will result in a screen similar to the following figure when attempting to access the prenatal components.



Figure 4-1: Screen which appears if the user is not set up properly to access the PCM

# 4.3 Adding Prenatal Care Module Component to EHR

After installing the Prenatal Module Version 2.0 build there were two objects available in the EHR object repository. However, with Version 2.0 Patch 7, one of the original Prenatal Pick List component has been deactivated. The remaining component can be added to the EHR framework like any other object.

The only prenatal object as of Version 2.0 Patch 7 is:

• Pregnancy Issues and Problems List

It is recommended, but not required, that a new tab be added to EHR which contains the prenatal component. While not required, it might also be convenient to add the Reproductive Factors component to the new tab as well. Since the Reproductive Factors information is so closely tied to the Prenatal information, it might be helpful to have quick access across each of the components.

The following figure shows a new tab configured to display the Prenatal component, as well as, the existing Reproductive Factors component:

iresh Data	Tools Hel	eSia Clear (	Clear and Lock	Community Alerts Desing Calculator	Ry Print Settings Imaging			-	
it in the to	DATI	ENTCHART	DES		DibEC	TWahlfall			
l One n-1980 (3	5) F	CHI CI DAII		DEMO CLINIC ACORD ABLIS	21-Apr-20	16 10:11 Primary Care Tec	ım Unassigned		
Postings		b Pharm Re	efill "Q" • ders: 0	Problem List Advs React Medication		Asthma Action Plan Rec	eRx Reviewed/ Receipt Updated	Visit Summar	ry 🗌
wer Shee	t Triage	Wellness P	roblem Mngt	Prenotal Medications Labs	Orders Notes Con	sults/Referrals Superbill	D/C Summary Suicide Fo	om: F	Reports
Issues an	d Problem	R	epro Hx/Measu	arements					
May 3 sues and	i Problems	All Problem ggle Scope     Pick I	ns () Active Only Jist Add (E	Inactive Only Expand All Idit Delete Notes for All Pregr	Print				
PIP Status	Scope	Date of Onset	IPL Status	Provider Narrative	Last Goal	Last Care Plan	Last Visit Instruction	POV	ICD
Active	Current Pregnancy	4/20/2016	Episodic	Antenatal care: 2nd pregnancy I ORIGINAL PTEXT NEW			Visit instruction 3/25 visit Modified by: EVERETT, BRIAN 03/28/2016 20:01		ZZZ 999
Active	Current	1/1/2015	Episodic	Inability to cope [					Z73.89
Active	Current Pregnancy	1/2015	Episodic	Acute otitis media, Bilateral   bilateral note	gn #1 Modified by: WETZEL,MIKE 04/26/2016	cp #1 Modified by: WETZEL,MIKE 04/26/2016	vi #1 Modified by: WETZEL,MIKE 04/26/2016 11:02	Y	H66.90
			100						
Active	Current Pregnancy	2015	Chronic	Antepartum hemorrhage 1					046.90
Active Inactive	Current Pregnancy Current Pregnancy	2015	Episodic	High risk pregnancy (			note here Modified by: EVERETT.BRIAN 07/17/2014 07:14		O46.90 O09.90
	Onu 1980 (3 Posting) A ver Shee Issues an US Sates tha May 3 Ues and / Toggle PIP Status Active	Cont Cont 1980 (36) F Costing F Ver Sheet Triege Issues and Problem US Listes that this patient May 31, 2016 Lues and Problems V Togele Status Tog PP Score Reference Active Current Propring	PATIENT CHART United Status Particular Status Patient's patient's pregnancy May 31, 2016 Uses and Problem Use States that this patient's pregnancy May 31, 2016 Uses and Problem Use States that this patient's pregnancy May 31, 2016 Uses and Problem Use States that this patient's definition Use States that that that that that that that tha	PATIENT CHART         PES           One 1980 (38)         F         Pharm         Refill "O"           Table (38)         F         Pharm         Refill "O"           Ver Sheet         Trage         Wallness         Problem Mngt           Issues and Problem         Repro-tbc/Measu         Sates: that this patient's pregnancy status is:         A           May 31, 2016         Wallness         Problems         Active Only           Uroget Status         Togete Scope         Pick List         Active Only           Poget         Scope         Date of Onest         Pic Status           Active         Current         4/202016         Episodic           Active         Current         4/202016         Episodic	PATIENT CHART         PESOLACCS         POIS           Ome 1980 (38)         F         DEMO CLINIC ACORDARIUS         DEMO CLINIC ACORDARIUS         DEMO CLINIC ACORDARIUS           Table (38)         F         Orders:0         Freedom List         Advance         Medications           Ver Sheat         Trage         Wellness         Problem Mingt         Prenatal         Medications         Labs           Issues and Problem         Repro Hx/Measurements         States that this patient's pregnancy status is:         Active           May 31, 2016         Uses and Problems         All Problems         Active Only         Inscrive         Notes for All Prep Prepandy           V         Togele Status         Togele Scoce         Date of Onset V         IP. Status         Provider Narrative           Active         Current         420/2016         Execode         Arestrationers/ Active Current         1/2015         Episodic         Inability to cope I	PATENT CHART         PESOLPCES         PCIS         DEFC           Ome 1980 (38) F         Pethol CLINIC         21-Apr24         In           Table (38) F         Pethol CLINIC         21-Apr24         In           Table (38) F         Pethol CLINIC         21-Apr24         In           Torders: 0         Problem Mag         Pethol CLINIC         21-Apr24           Ver Sheet         Triage         Wellness         Problem Mag         Premotel         Medications         CIC         CIC           States that this patient's pregnancy status is:         Active         Mag 31, 2016         Uses for All Problems         Print           V Togale Status         Togale Scope         Date of Orset: © IPL Status         Provider Narrative         Last Goal           Active         Current         420/2016         Enscole         Antendad care: 2nd pergrammy 1           Active         Current         420/2016         Enscole         Antendad care: 2nd pergrammy 1           Active         Current         420/2015         Episodic         Inshinty to cope 1	PATIENT CHART         PESOLICS         PCIS         DIRECT WebMell           Ome 1980 (8) F         DEMO CLINIC         21-Apr 2016 1011 In Hospital         Primary Care Tec In Hospital           Pattern Faill (**) Press         * Problem List Adva Read: Medications         201 Apr 2016 1011 In Hospital         Primary Care Tec In Hospital           Ver Sheat         Titlege         Wellness         Problem Mingt         * Prestal         Medications         201 Apr 2016 Fill         Consults/Referrals         Superbill           Issues and Problem         Repro Hot/Measurements         Subs that this patient's pregnancy status is:         Active         Mag 31, 2016         Uses for All Problems         Print           V Togole Status         Togole Score         Det of Onset         V IP. Status         Provider Narrative         Last Goal         Last Care Plan           Active         Active         Advalue Freended Gree Ziver         Notes for All Preparatives         Plan           Plan         Cose         Date of Onset         V IP. Status         Provider Narrative         Last Goal         Last Care Plan           Active         Current         V2015         Episodic         Inselful Care Ziver         OfICIAL FTECH HEV	PATENT CHART         RESOLUCIS         POIS         DIAFCOT Weshkel           Ome 1980 (8) F         DEMOCINIC         21-Apr-2016 1011 In Hospital         Primary Care Team Unassigned In Hospital           Ver Sheat         Title Philing         Primary Care Team Unassigned In Hospital         Primary Care Team Unassigned In Hospital         Primary Care Team Unassigned In Hospital           Ver Sheat         Title Philing         Problem Ist Adv React         Medications         Ext In Hospital         Primary Care Team Unassigned In Hospital           Ver Sheat         Title Philing         Problem Mingt         Prenotel         Medications         Ext In Hospital         Primary Care Team Unassigned In Hospital           Ver Sheat         Title Phil         Wellness         Problem Mingt         Prenotel         Medications         Labs         Orders         Notes         Consult//Referrats         Superbill         D/C Summary         Suicide Fr           Usates that this patient's pregnancy status is:         Advine         Freme         Kerner         Notes for All Problems         Ver Status         Advine Mingt         Previder Norrative         Last Care Plan         Last Visit Instruction         Model Care Plan         Last Visit Instruction 3/20 mingt           V         Togole Status         Advine Medications in an origit pregnamery 1         Verider Norrative         La	PATENT CHART         PERCURCES         DISC         DIRECT WebMail           Ome 1980 (8) F         DEMO CLINIC         21-Apr/2016 1011         Inflograd           1980 (8) F         File         Percent Press         21-Apr/2016 1011         Primary Care Team Unassigned Inflograd         Primary Care Team Unassigned           1980 (8) F         File         Primary Care Team Unassigned         Primary Care Team Unassigned         Visit           Ver Sheet         File         Primary Care Team Unassigned         Visit         Primary Care Team Unassigned         Visit           Ver Sheet         File         Primary Care Team Unassigned         Visit         Primary Care Team Unassigned         Visit           Ver Sheet         File         Primary Care Team Unassigned         Visit         Primary Care Team Unassigned         Visit           Ver Sheet         File         Problem Mingt         Prendtal         Medications         Labs         Orders         Notes         Consults/Referrate         Superbill         D/C Summary         Suicide Form         F           Issues and Problem         Repro Hv/Messumments         Substant Till         Provider Narrative         Notes for All Pregnancies         Visit         Visit Instruction         POV           Vogel State         Coreet         Additions

Figure 4-2: Sample Prenatal Tab Layout

### 4.3.1 Accessing Design Mode

The following steps describe how to add the prenatal components to EHR:

- 1. Start the EHR application.
- 2. Right-Click on the top window bar to display a contextual menu, and select **Design Mode**.

The following figure shows the contents of the Right-Click menu:

IHS EHR						
User Patient To	D.	Restore				
Patient not selec		Move Size				
( V	_	Minimize				
Review/Overview Notifications Tria		Maximize				
	x	Close	Alt+F4			
		Design Mode	Ctrl+Alt+D			

Figure 4-3: Location of Design Mode in EHR

3. After selecting Design Mode, the **Design** menu becomes available.

The following figure shows the available menu options:



Figure 4-4: Design menu options

### 4.3.2 Layout Manager

Select the **Layout Manager** option in the **Design** menu to edit from one location. Determine where to put the Prenatal Components.

The following figure shows the EHR Layout Manager:



Figure 4-5: EHR Layout Manager Window

4. Click on the **Properties** option to access the properties for the Tabbed Notebook.

The following figure displays the **Properties for the Tabbed Notebook** entry:

Properties for Tabbed Notebook						
Property	Value					
ТОР	77					
LEFT	0					
HEIGHT	482					
WIDTH	1276					
ALIGN	All					
ANCHORS	🔽 Top; Left; Right; Bottom 🗸					
FIXEDWIDTH	False					
MULTILINE	False					
REVERSETABS	False					
TABPOSITION	Тор 👻					
TABSTYLE	Round Corners 🗸					
Tab Editor	+-~~// 🗰 🗐 🔒 🔍					
ОК						

Figure 4-6: Sample Properties of Tabbed Notebook Display

5. Click the + icon on the Properties of Tabbed Notebook dialog to access the Add an Object dialog.

The following figure displays the **Add and Object** dialog:

🔾 Add an Object	
Objects 	Legend Application Template Object Stock Object Template User Configuration Disabled Add Cancel

Figure 4-7: Add an Object dialog

6. Click on the **Name Folder** to expand it and display a listing of the objects.

The following figure displays the expanded list of objects:



Figure 4-8: Expanded list of Objects

- 7. From the list, select the **Pregnancy Issues and Problems List** object and click **Add**.
- 8. When complete, save the template and log out of the EHR and then log back into EHR.

The following figure shows a sample PCM layout:

🕘 RPMS	EHR WET	ZEL, MIKE	** MUPrepHo	st Precert **								x
Liser Design Batient Befresh Data Tools Help s5ig Clear Clear and Lock Community Alerts Doging Calculator Rg Print Settings [maging												
[	PRIVACY PATIENT CHART RESOURCES RCIS DIRECT WebMail											
Auditin 343456	i <b>g,Patie</b> i 01-J	nt One an-1980 (3	36) F			DEMO CLINIC ACORD,ARLIS	21-Apr-2 li	016 10:11 Primary Care Te Hospital	am Unassigned			
2	Ø	Posting:	M Li Fri	ab trv Ed	s Renew	Problem List Advs React Medication R Nds Rvwd Nds Rvw		Asthma PWH Med Action Plan Rec	eRx Reviewed/ Receipt Updated	Visit Summa	ry 🖸 🖸	a ]
Notifiat	tions C	over She	et Triage	Wellness P	roblem Mngt	Prenatal Medications Labs	Orders Notes Co	nsults/Referrals Superbill	D/C Summary Suicide F	orm F	Reports	
	Pregnac	/lssues a	nd Problem	R	epro Hx/Measi	urements						
Pregn	ancy Sta	atus										
The re	ecord inc	icates th	at this patie	nt's pregnancy	status is: A	ctive						
Defini	itive EDI	D: May	31, 2016									
Pregr	nancy is	sues an	d Problems	<ul> <li>All Problem</li> </ul>	s 💿 Active Only	/ O Inactive Only Expand All	Print					
Set as	Today's P		le Status To	aale Scope Pick L	ist Add E	Edit Delete Notes for All Preg	nancies					
	Priority	Status	Scope	Date of Onset 🛛 🗸	IPL Status	Provider Narrative	Last Goal	Last Care Plan	Last Visit Instruction	POV	ICD	- Ê
	Low	Active	Current Pregnancy	4/20/2016	Episodic	Antenatal care: 2nd pregnancy I ORIGINAL PTEXT NEW			Visit instruction 3/25 visit Modified by: EVERETT, BRIAN 03/28/2016 20:01		ZZZ.999	Ξ
		Active	Current Pregnancy	1/7/2015	Chronic	Stress fracture of femur, Left					ZZZ.999	
÷-		Active	Current	1/1/2015	Episodic	Inability to cope					Z73.89	
œ-		Active	Current Pregnancy	1/2015	Episodic	Acute otitis media, Bilateral   bilateral note	gn #1 Modified by: WETZEL,MIKE 04/26/2016	cp #1 Modified by: WETZEL,MIKE 04/26/2016	vi #1 Modified by: WETZEL,MIKE 04/26/2016 11:02	Y	H66.90	
⊕-		Active	Current Pregnancy	2015	Chronic	Antepartum hemorrhage					O46.90	
œ-		Active	Current Pregnancy	2/4/2014	Episodic	Stress fracture of clavicle, Left					ZZZ.999	
œ-		Inactive	Current Pregnancy	1/5/2014	Episodic	High risk pregnancy			note here Modified by: EVERETT,BRIAN 07/17/2014 07:14		O09.90	
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Figure 4-9: Sample Layout for Prenatal Tab

# **Appendix A: Rules of Behavior**

The Resource and Patient Management (RPMS) system is a United States Department of Health and Human Services (HHS), Indian Health Service (IHS) information system that is *FOR OFFICIAL USE ONLY*. The RPMS system is subject to monitoring; therefore, no expectation of privacy shall be assumed. Individuals found performing unauthorized activities are subject to disciplinary action including criminal prosecution.

All users (Contractors and IHS Employees) of RPMS will be provided a copy of the Rules of Behavior (RoB) and must acknowledge that they have received and read them prior to being granted access to a RPMS system, in accordance IHS policy.

- For a listing of general ROB for all users, see the most recent edition of *IHS General User Security Handbook* (SOP 06-11a).
- For a listing of system administrators/managers rules, see the most recent edition of the *IHS Technical and Managerial Handbook* (SOP 06-11b).

Both documents are available at this IHS Web site: <u>http://security.ihs.gov/</u>.

The ROB listed in the following sections are specific to RPMS.

## A.1 All RPMS Users

In addition to these rules, each application may include additional RoBs that may be defined within the documentation of that application (e.g., Dental, Pharmacy).

### A.1.1 Access

RPMS users shall

- Only use data for which you have been granted authorization.
- Only give information to personnel who have access authority and have a need to know.
- Always verify a caller's identification and job purpose with your supervisor or the entity provided as employer before providing any type of information system access, sensitive information, or nonpublic agency information.
- Be aware that personal use of information resources is authorized on a limited basis within the provisions *Indian Health Manual* Part 8, "Information Resources Management," Chapter 6, "Limited Personal Use of Information Technology Resources."

RPMS users shall not

• Retrieve information for someone who does not have authority to access the information.

- Access, research, or change any user account, file, directory, table, or record not required to perform their *official* duties.
- Store sensitive files on a PC hard drive, or portable devices or media, if access to the PC or files cannot be physically or technically limited.
- Exceed their authorized access limits in RPMS by changing information or searching databases beyond the responsibilities of their jobs or by divulging information to anyone not authorized to know that information.

### A.1.2 Information Accessibility

RPMS shall restrict access to information based on the type and identity of the user. However, regardless of the type of user, access shall be restricted to the minimum level necessary to perform the job.

RPMS users shall

- Access only those documents they created and those other documents to which they have a valid need-to-know and to which they have specifically granted access through an RPMS application based on their menus (job roles), keys, and FileMan access codes. Some users may be afforded additional privileges based on the functions they perform, such as system administrator or application administrator.
- Acquire a written preauthorization in accordance with IHS policies and procedures prior to interconnection to or transferring data from RPMS.

### A.1.3 Accountability

RPMS users shall

- Behave in an ethical, technically proficient, informed, and trustworthy manner.
- Log out of the system whenever they leave the vicinity of their personal computers (PCs).
- Be alert to threats and vulnerabilities in the security of the system.
- Report all security incidents to their local Information System Security Officer (ISSO).
- Differentiate tasks and functions to ensure that no one person has sole access to or control over important resources.
- Protect all sensitive data entrusted to them as part of their government employment.
- Abide by all Department and Agency policies and procedures and guidelines related to ethics, conduct, behavior, and information technology (IT) information processes.

### A.1.4 Confidentiality

RPMS users shall

- Be aware of the sensitivity of electronic and hard copy information, and protect it accordingly.
- Store hard copy reports/storage media containing confidential information in a locked room or cabinet.
- Erase sensitive data on storage media prior to reusing or disposing of the media.
- Protect all RPMS terminals from public viewing at all times.
- Abide by all Health Insurance Portability and Accountability Act (HIPAA) regulations to ensure patient confidentiality.

RPMS users shall not

- Allow confidential information to remain on the PC screen when someone who is not authorized to that data is in the vicinity.
- Store sensitive files on a portable device or media without encrypting.

### A.1.5 Integrity

RPMS users shall

- Protect their systems against viruses and similar malicious programs.
- Observe all software license agreements.
- Follow industry standard procedures for maintaining and managing RPMS hardware, operating system software, application software, and/or database software and database tables.
- Comply with all copyright regulations and license agreements associated with RPMS software.

RPMS users shall not

- Violate federal copyright laws.
- Install or use unauthorized software within the system libraries or folders.
- Use freeware, shareware, or public domain software on/with the system without their manager's written permission and without scanning it for viruses first.

### A.1.6 System Logon

RPMS users shall

- Have a unique User Identification/Account name and password.
- Be granted access based on authenticating the account name and password entered.

• Be locked out of an account after five successive failed login attempts within a specified time period (e.g., one hour).

### A.1.7 Passwords

RPMS users shall

- Change passwords a minimum of every 90 days.
- Create passwords with a minimum of eight characters.
- If the system allows, use a combination of alpha-numeric characters for passwords, with at least one uppercase letter, one lower case letter, and one number. It is recommended, if possible, that a special character also be used in the password.
- Change vendor-supplied passwords immediately.
- Protect passwords by committing them to memory or store them in a safe place (do not store passwords in login scripts or batch files).
- Change passwords immediately if password has been seen, guessed, or otherwise compromised, and report the compromise or suspected compromise to their ISSO.
- Keep user identifications (IDs) and passwords confidential.

RPMS users shall not

- Use common words found in any dictionary as a password.
- Use obvious readable passwords or passwords that incorporate personal data elements (e.g., user's name, date of birth, address, telephone number, or social security number; names of children or spouses; favorite band, sports team, or automobile; or other personal attributes).
- Share passwords/IDs with anyone or accept the use of another's password/ID, even if offered.
- Reuse passwords. A new password must contain no more than five characters per eight characters from the previous password.
- Post passwords.
- Keep a password list in an obvious place, such as under keyboards, in desk drawers, or in any other location where it might be disclosed.
- Give a password out over the phone.

### A.1.8 Backups

RPMS users shall

- Plan for contingencies such as physical disasters, loss of processing, and disclosure of information by preparing alternate work strategies and system recovery mechanisms.
- Make backups of systems and files on a regular, defined basis.
- If possible, store backups away from the system in a secure environment.

### A.1.9 Reporting

RPMS users shall

- Contact and inform their ISSO that they have identified an IT security incident and begin the reporting process by providing an IT Incident Reporting Form regarding this incident.
- Report security incidents as detailed in the *IHS Incident Handling Guide* (SOP 05-03).

RPMS users shall not

• Assume that someone else has already reported an incident. The risk of an incident going unreported far outweighs the possibility that an incident gets reported more than once.

### A.1.10 Session Timeouts

RPMS system implements system-based timeouts that back users out of a prompt after no more than 5 minutes of inactivity.

RPMS users shall

• Utilize a screen saver with password protection set to suspend operations at no greater than 10 minutes of inactivity. This will prevent inappropriate access and viewing of any material displayed on the screen after some period of inactivity.

### A.1.11 Hardware

RPMS users shall

- Avoid placing system equipment near obvious environmental hazards (e.g., water pipes).
- Keep an inventory of all system equipment.
- Keep records of maintenance/repairs performed on system equipment.

RPMS users shall not

• Eat or drink near system equipment.

### A.1.12 Awareness

RPMS users shall

- Participate in organization-wide security training as required.
- Read and adhere to security information pertaining to system hardware and software.
- Take the annual information security awareness.
- Read all applicable RPMS manuals for the applications used in their jobs.

### A.1.13 Remote Access

Each subscriber organization establishes its own policies for determining which employees may work at home or in other remote workplace locations. Any remote work arrangement should include policies that

- Are in writing.
- Provide authentication of the remote user through the use of ID and password or other acceptable technical means.
- Outline the work requirements and the security safeguards and procedures the employee is expected to follow.
- Ensure adequate storage of files, removal, and nonrecovery of temporary files created in processing sensitive data, virus protection, and intrusion detection, and provide physical security for government equipment and sensitive data.
- Establish mechanisms to back up data created and/or stored at alternate work locations.

Remote RPMS users shall

• Remotely access RPMS through a virtual private network (VPN) whenever possible. Use of direct dial in access must be justified and approved in writing and its use secured in accordance with industry best practices or government procedures.

Remote RPMS users shall not

• Disable any encryption established for network, internet, and Web browser communications.

### A.2 RPMS Developers

RPMS developers shall

• Always be mindful of protecting the confidentiality, availability, and integrity of RPMS when writing or revising code.

- Always follow the IHS RPMS Programming Standards and Conventions (SAC) when developing for RPMS.
- Only access information or code within the namespaces for which they have been assigned as part of their duties.
- Remember that all RPMS code is the property of the U.S. Government, not the developer.
- Not access live production systems without obtaining appropriate written access, and shall only retain that access for the shortest period possible to accomplish the task that requires the access.
- Observe separation of duties policies and procedures to the fullest extent possible.
- Document or comment all changes to any RPMS software at the time the change or update is made. Documentation shall include the programmer's initials, date of change, and reason for the change.
- Use checksums or other integrity mechanism when releasing their certified applications to assure the integrity of the routines within their RPMS applications.
- Follow industry best standards for systems they are assigned to develop or maintain, and abide by all Department and Agency policies and procedures.
- Document and implement security processes whenever available.

RPMS developers shall not

- Write any code that adversely impacts RPMS, such as backdoor access, "Easter eggs," time bombs, or any other malicious code or make inappropriate comments within the code, manuals, or help frames.
- Grant any user or system administrator access to RPMS unless proper documentation is provided.
- Release any sensitive agency or patient information.

### A.3 Privileged Users

Personnel who have significant access to processes and data in RPMS, such as, system security administrators, systems administrators, and database administrators, have added responsibilities to ensure the secure operation of RPMS.

Privileged RPMS users shall

- Verify that any user requesting access to any RPMS system has completed the appropriate access request forms.
- Ensure that government personnel and contractor personnel understand and comply with license requirements. End users, supervisors, and functional managers are ultimately responsible for this compliance.
- Advise the system owner on matters concerning information technology security.

- Assist the system owner in developing security plans, risk assessments, and supporting documentation for the certification and accreditation process.
- Ensure that any changes to RPMS that affect contingency and disaster recovery plans are conveyed to the person responsible for maintaining continuity of operations plans.
- Ensure that adequate physical and administrative safeguards are operational within their areas of responsibility and that access to information and data is restricted to authorized personnel on a need-to-know basis.
- Verify that users have received appropriate security training before allowing access to RPMS.
- Implement applicable security access procedures and mechanisms, incorporate appropriate levels of system auditing, and review audit logs.
- Document and investigate known or suspected security incidents or violations and report them to the ISSO, Chief Information Security Officer (CISO), and systems owner.
- Protect the supervisor, superuser, or system administrator passwords.
- Avoid instances where the same individual has responsibility for several functions (i.e., transaction entry and transaction approval).
- Watch for unscheduled, unusual, and unauthorized programs.
- Help train system users on the appropriate use and security of the system.
- Establish protective controls to ensure the accountability, integrity, confidentiality, and availability of the system.
- Replace passwords when a compromise is suspected. Delete user accounts as quickly as possible from the time that the user is no longer authorized system. Passwords forgotten by their owner should be replaced, not reissued.
- Terminate user accounts when a user transfers or has been terminated. If the user has authority to grant authorizations to others, review these other authorizations. Retrieve any devices used to gain access to the system or equipment. Cancel logon IDs and passwords, and delete or reassign related active and backup files.
- Use a suspend program to prevent an unauthorized user from logging on with the current user's ID if the system is left on and unattended.
- Verify the identity of the user when resetting passwords. This can be done either in person or having the user answer a question that can be compared to one in the administrator's database.
- Shall follow industry best standards for systems they are assigned to, and abide by all Department and Agency policies and procedures.

Privileged RPMS users shall not

- Access any files, records, systems, etc., that are not explicitly needed to perform their duties.
- Grant any user or system administrator access to RPMS unless proper documentation is provided.
- Release any sensitive agency or patient information.

# Glossary

### Pregnancy Issues and Problems List (PIP)

New functionality created in the BJPN namespace to implement pregnancy problem tracking for SNOMED CT® terms.

### Prenatal Problems Pick List (PPL)

New functionality created in the BJPN namespace to implement pregnancy problem tracking for SNOMED CT® terms. This form enables user selection of SNOMED CT® terms to add to the PIP module and is integrated with the EHR IPL Pick List functionality

### Electronic Health Record (EHR)

An application used by medical organizations to track patient medical records and care.

### ICD Codes

One of several code sets used by the healthcare industry to standardize data. The International Classification of Disease (ICD) codes are an international diagnostic coding scheme. In addition to diseases, ICD also includes several families of terms for medical-specialty diagnoses, health status, disablements, procedures, and reasons for contact with HCPs. IHS currently uses ICD-9 for coding.

### Microsoft® (MS)

Software company that develops and distributes the Visual Studio® (VS) tool used to develop the Prenatal application.

### Office of Information Technology (OIT)

The organization within IHS that is responsible for developing and maintaining RPMS and related IT functions.

### Purpose of Visit (POV)

In RPMS, ICD codes and narrative describing the patient's purpose of visit (POV) are documented in PCC V POV.

### **Resource and Patient Management System (RPMS)**

A series of integrated software components that includes clinical, administrative, and financial functions.

### **RPMS Patient Care Component (PCC)**

Refers to functions within RPMS as a clinical data repository, storing visit-related data about a patient.

### Software Quality Assurance (SQA)

The office within OIT responsible for ensuring that the system conforms to RPMS Programming Standards and Conventions (SAC).

#### **Text Integration Utility (TIU)**

Refers to functions within RPMS used to store long blocks of text in the medical record.

#### Visual Studio® (VS)

Microsoft software development tool and integrated development environment (IDE) used to develop the Prenatal application.

# Acronym List

Acronym	Term Definintion
APCD	PCC Data Entry
API	Application Programmer Interface
BJPC	IHS PCC Suite
BJPN	Namespace for Prenatal files and routines
ВМХ	BMXNET
DI	VA FileMan
DLL	Dynamic Link Library
EHR	Electronic Health Record
GUI	Graphical User Interface
HS	Health Summary
IEN	Internal Entry Number
IHS	Indian Health Service
KIDS	Kernel Installation and Distribution System
MS	Microsoft®
OIT	Office of the Information and Technology
OS	Operating System
PC	Personal Computer
РСМ	Prenatal Care Module
PIP	Pregnancy Issues and Problems
PPL	Prenatal Pick List
POV	Purpose of Visit
RPC	Remote Procedure Call
RPMS	Resource and Patient Management System
SAC	Standards and Conventions
SNOMED CT®	Systematized Nomenclature of Medicine—Clinical Terms
TIU	Text Integration Utility
UI	User Interface
VA	Veteran's Administration
VS	Visual Studio
ХВ	IHS/VA Utilities
XU	VA KERNEL

# **Contact Information**

If you have any questions or comments regarding this distribution, please contact the OIT Help Desk (IHS).

Phone: (888) 830-7280 (toll free)

Web: https://www.ihs.gov/helpdesk/

Email: <a href="mailto:support@ihs.gov">support@ihs.gov</a>