OIT Office Hours
EHRp19 ~ BJPNp7 ~ BSTSp7
TIUp1016 ~ BHSp13
DRAFT

May 2016
EHRp19

• Usability focused on decluttering problem display, ease management of problems, improve POV management

• Further extension of mapping to include prompting for laterality
Key Improvements

New tabular design

Landing tab “Core Problems”

• Approximates the previous “Chronic Problem List”
• Default to Chronic & Subacute, and includes any problems of any status used as POV for the current visit.
• Default sort to Priority, Chronic, Sub-acute and problems marked as POV (alphabetical in each).
• **User can configure** this landing tab with whatever statuses, include/exclude Personal History, POV, Inpatient, Remove/Add columns and set as their default (so user could choose to sort by priority).
Key Improvements (cont.)

Additional Tabs - The following are displayed on separate tabs:
• Chronic
• Subacute
• Personal History
• Episodic
• Social/Environmental
• Routine/Admin
• Inactive
• Inpatient
• Eye related problems
Display Improvements and Clutter Management

• Tabular display with user defined landing page
• Add Routine/Admin status
• New/edit problems do not move to top
New Patient with No Problems

- The IPL will consist of two tabs – “Core” and “Inactive” which will be blank until problems are added.
IPL Populated

• As problems are added and assigned statuses, tabs appear.
User Defined IPL Core Tab

• Right click on the Core Problem top tab.

• The user may change which groups of problems appear on their “Core” IPL list then “save settings”.

• This allows each clinician to have a default display that meets their needs.
User Defined IPL Columns

• Right click on the header row.
• The user may want to expose or hide rows then click “save settings”.
Display Improvements and Clutter Management (cont.)

Default status inherited from DTS (SNOMED search database) when defined.

Example: Essential Hypertension would default to status of “chronic”

*** This will be an ongoing project. We will welcome field input on curating these definitions over time.***
Utilities to Assist CAC with IPL Reorganization
Reorganization of IPL Content

Clean up options:

**Step 1**: PLST Update Problem Status Based on SNOMED Default
- Reassigns statuses based on default in DTS
- Site determines if runs
- Recommend Chronic, Routine/Admin – Social/Environmental optional

**Step 2**: APCD EPISODI CLEANUP (do not recommend unless step 1 is done)
- Inactivates problems as “Episodic” if the problem has not been used as POV in site defined timeframe
- Site set parameter for look back timeframe
- Site schedules recurring task
# PLST Update Problem Status

- Prerequisites: BSTSp7; BSTS CODESET 36 version __

In PCC Data Entry SUPERVISOR Options and Utilities

**PLST Update Problem Status based on SNOMED Default**

<table>
<thead>
<tr>
<th>Update all Chronic</th>
<th>Update all Social/Environmental</th>
<th>Update all Routine/Admin</th>
</tr>
</thead>
</table>
| • This will loop through the problems on the IPL and for any problem whose Concept ID is defaulted to Chronic in DTS, change to Chronic on IPL.  
• Problems on the IPL with a status of inactive will be skipped and the status will not be changed. | • This will loop through the problems on the IPL and for any problem whose Concept ID is defaulted to Chronic in DTS, change to Chronic on IPL.  
• Problems on the IPL with a status of inactive will be skipped and the status will not be changed. | • Will loop through the problems on the IPL and for any problem whose Concept ID is defaulted to Routine/Admin in DTS, change to Routine/Admin on IPL.  
• Problems on the IPL with a status of Inactive will be skipped and the status will not be changed. |
APCD EPISODIC CLEANUP

This should only be set up AFTER problem lists have been updated either manually or via the PLST Update Problem Status utilities.

1. Set parameter BGO IPL INACTIVATE TIMEFRAME

Select PARAMETER DEFINITION NAME: BGO IPL INACTIVATE TIMEFRAME  Lookback for APCD EPISODIC CLEANUP task
- Setting BGO IPL INACTIVATE TIMEFRAME  for System: 2011 DEMO-HO.ABQ.IHS.GOV -
  Value: ??

Enter number of days to look back for episodic problems used as POV. This look back is used to determine how long before episodic problems that have not been used as a POV will be changed over to inactive status.

Example: an entry of 90 indicates that any problems with episodic status that have not been used as POV in past 90 days will change to inactive status.
APCD EPISODIC CLEANUP (cont.)

2. Schedule the ACPD EPISODIC CLEAN UP

Select Taskman Management <TEST ACCOUNT> Option: schedule/Unschedule Options

Select OPTION to schedule or reschedule: **APCD EPISODIC CLEANUP** Inactivate episodic Problems not used as POV

<table>
<thead>
<tr>
<th>BGO IPL INACTIVATE TIMEFRAME</th>
<th>APCD EPISODIC CLEAN UP suggested schedule frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>90D</td>
<td>14D-30D</td>
</tr>
<tr>
<td>180D</td>
<td>30D</td>
</tr>
<tr>
<td>270D</td>
<td>30D</td>
</tr>
<tr>
<td>365D</td>
<td>30D-90D</td>
</tr>
</tbody>
</table>
Picklist – Update with Default Statuses

• To update pick list with defaulted statuses (helpful for those with routine/admin/screening terms), click default statuses in Manage Quick Picks dialog.
POV Management
POV Management

• Add **Edit Today’s POVs** button on IPL and Visit Diagnosis component brings up **POV** dialog.
POV Management

• Expose “Asthma Control” prompt on POV dialog if Asthma diagnosis selected as POV.
Problem Update Improvements

• Select multiple problems and change status of selected
• Right click to add comments, Right click set/change priority
• Search and selection of problems
  • If SNOMED selected is on problem list, system will bring up edit dialog instead of just notifying user is on problem list
• Laterality is used in conditional maps
Right Click Option – Change Status >1 Problem
Right Click Option - Add Comment
Calendar Controls on IPL

• Now allows entry of T-DAYS and MM/DD/YYYY format
Right Click Option – Add/Update Date of Onset
Laterality

When a user selects a SNOMED term for which laterality is appropriate, a selection dialog is presented. Both the Problem SNOMED and the Laterality SNOMED are stored and are displayed as:

Problem, Laterality|Provider text

Acute Otitis Media, right|test text
Laterality Picklists

- Similar to the SNOMED search tool, if you select a term for which laterality is appropriate, you must select laterality (or unspecified) before saving.
What are Equivalence Rules and How are the Rules Invoked?
Pre-coordination vs Post-coordination

Pre-coordinated expression: single code represents a clinical expression
  Expression: acute left otitis media
  Code(s): 194288009

Post-coordinated expression: \( \geq 2 \) codes to represent a clinical expression
  Expression: acute otitis media + laterality + left
  Codes(s): 3110003:272741003=7771000

These mean the same thing. More importantly, the computer can recognize these as the same because of the coding.
Laterality Equivalence Rules

<table>
<thead>
<tr>
<th>Selected SNOMED term (coded data)</th>
<th>Selected laterality (coded data)</th>
<th>Provider text (free text)</th>
<th>Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute right otitis media</td>
<td>Test</td>
<td></td>
<td>Acute right otitis media</td>
</tr>
<tr>
<td>Acute otitis media</td>
<td>Right</td>
<td>Test</td>
<td>Acute otitis media, right</td>
</tr>
<tr>
<td>This is not equivalent to the computer</td>
<td>The laterality is free text, not code</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute otitis media</td>
<td>Right Test</td>
<td></td>
<td>Acute otitis media</td>
</tr>
</tbody>
</table>

- Everything to the left of the “|” is coded.
- Everything to the right of the “|” is free text.
- *The computer can use coded data to determine duplicates*

Acute right otitis media = Acute otitis media, right ≠ Acute otitis media | Right
Search and Select Equivalent Term

Problem entry: “Acute otitis media” + “right”

Search and select: “Acute right otitis media”

• The two are equivalent and your original problem is brought up for edit
• An informational dialog displays and disappears after a few seconds
De-duplication and Semi-automated Update

<table>
<thead>
<tr>
<th>Scenario</th>
<th>IPL problem(s)</th>
<th>Search and select</th>
<th>EHR Dialog</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add problem - search and select equivalent term</td>
<td>Acute otitis media, right</td>
<td>Acute right otitis media</td>
<td><img src="image" alt="De-Duplicate Problem" /></td>
</tr>
<tr>
<td>Add problem – search and select “unspecified” AND specific terms exist on IPL</td>
<td>Acute otitis media, right Acute otitis media, bilateral</td>
<td>Acute otitis media, unspecified Add = new IPL entry Edit = select existing IPL entry, no change to IPL entry</td>
<td><img src="image" alt="De-Duplicate Problem" /></td>
</tr>
<tr>
<td>Add problem – search and select specific term AND unspecified term exist on IPL</td>
<td>Acute otitis media</td>
<td>text</td>
<td>Acute otitis media, right Add = new IPL entry Replace = replace existing IPL entry with selected term</td>
</tr>
</tbody>
</table>
De-duplication and Semi-automated Update

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</tr>
</thead>
<tbody>
<tr>
<td>Add problem – search and select specific term, new to IPL</td>
<td>Acute Acute otitis media, right</td>
<td>Acute right otitis media OR Acute otitis media, right</td>
<td>Adds problem</td>
</tr>
<tr>
<td>Add problem – search and select unspecified term, new to IPL</td>
<td>Acute otitis media, unspecified</td>
<td>Acute otitis media, unspecified</td>
<td>Adds problem</td>
</tr>
<tr>
<td>Set as POV from IPL – set unspecified as POV</td>
<td>Acute otitis media</td>
<td>text</td>
<td>Highlight existing - Set as POV will follow rules for equivalency and de-duplication and offer the choice of the selected non-specific term or selection of one with laterality</td>
</tr>
</tbody>
</table>
What About my Existing Problems ....

• As you find them, you can update (clinically or for coding)
• Update as you encounter opportunities– we have designed in opportunities to semi-automatically update within clinical workflow
Select “unspecified” Term

You have an IPL entry: “Acute otitis media” + “right”

“Acute otitis media” + “bilateral”

Search and select: “Acute otitis media” + “unspecified”

*Presenting the users with existing laterality specific problems already on the problem list reduces unnecessary clutter being added to the problem list.*

- The will be presented as a choice to select existing specified term or add new unspecified term.
Select “specified” Term
You have an IPL entry: “Acute otitis media” with provider text “right”
Search and select: “Acute otitis media” + “right”

Presenting the users the option of updating an existing problem entry that does not have laterality specified (encoded – left of “|”) helps to imbed the updates in the workflow and reduce clutter.

• To update existing “Acute otitis media|right” with the fully coded “Acute otitis media, right”, choose “replace”.
Questions?