



RESOURCE AND PATIENT MANAGEMENT SYSTEM

SNOMED CT® and the Integrated Problem List (IPL) FAQ's

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1.0 SNOMED CT®

1.1 What is SNOMED CT®?

- SNOMED CT® is the Systematized Nomenclature of Medicine Clinical Terms.
- SNOMED CT® is a comprehensive, international, multilingual, clinical terminology that provides clinical content and expressivity for clinical documentation.
- SNOMED CT® is a controlled vocabulary. Each term is carefully defined by international terminologists so information can be exchanged without losing meaning.
- SNOMED CT® is required for Meaningful Use 2014 and is used to document problems, encounter diagnoses, clinical indications, and family history conditions.
- SNOMED CT®, and its mapping tools, will help IHS in the ICD-10 transition.

1.2 Why SNOMED CT®?

Interoperability and information exchange is the primary driving force in requiring a standard clinical vocabulary (rather than using ICD, a vocabulary designed for billing and utilization) for documenting problems.

SNOMED CT® is a better vocabulary for defining problems. SNOMED CT® includes terms to describe clinical symptoms, findings, assessments, impressions, and diagnoses from a variety of health care disciplines. SNOMED terms are defined and organized in a way that allows for improved development of decision support. It is robust and dynamic – requests for additional terms are submitted internationally, defined and released every six months. ICD is generally physician centric and designed to capture encounter related data for billing and utilization. It is based on documentation for the entire episode of care.

2014 Certified EHR requires:

- SNOMED CT® for problem list
- Longitudinal problem-focused documentation including goals, care plans, and visit instructions
- Support for multidisciplinary problem documentation
- SNOMED CT® for much of the data used in Clinical Quality Measures

Transition to ICD-10:

- Meaningful Use 2014 introduces a new process for documenting problems and encounter diagnoses that incorporates SNOMED CT® and maps to ICD.

- Providers will already be accustomed to the new Integrated Problem List, making ICD-10 transition relatively transparent.
- Documentation improvement will reduce queries from coding for clarification.

2.0 Integrated Problem List Overview

2.1 What is the Integrated Problem List (IPL)?

The Integrated Problem List is a **multidisciplinary longitudinal list of issues** that are being, or have been, addressed for the patient. This change supports the requirements defined in Meaningful Use 2014. The IPL collects and associates problem and visit-related information about the problem and aggregates this information. Information aggregated for a problem includes SNOMED term (with mapped ICD-code), provider text, qualifiers, comments, goals, care plans, visit instructions, patient education, treatment/regimen, referrals, and POV's.

This is a significant paradigm shift from our previous problem list which only displayed chronic problems and was generally managed by providers.

Goals, care plan and visit instruction notes are displayed in the Patient Health Record (PHR) and the Clinical Summary documents providing greater transparency to our patients.

2.2 How will SNOMED CT® be used in EHR and RPMS?

- SNOMED CT® terms (human-readable descriptions) are selected and used in the Problem List, Encounter Diagnoses, Clinical Indications, and Family History.
- SNOMED CT® is also stored in the background for many types of RPMS data entered during visits such as Health Factors, Exams, Education, Allergies, etc. The user is not aware of these changes.
- A concept ID and description ID (computer-readable codes) are stored and used for health information exchange.
- The terms are combined with any optional “provider text” to create the displayed Provider Narrative for problems, Purpose of Visits (POVs), and Clinical Indications.

Previous provider narrative:

Osteoarthritis right knee

New Provider narrative:

Format: SNOMED term| provider text

Example: Osteoarthritis of knee| right

Status	Onset Date	Priority	Provider Narrative
[-] Episodic			Decubitus ulcer of sacrum Stage 3
[-] Episodic			Osteoarthritis of knee right

Figure 2-1: IPL provider narrative display

ICD-9 and ICD-10 codes will be automatically mapped when appropriate, and when they cannot be mapped automatically the coder will assign an ICD code. **Just because there is not an automatic map to ICD does not mean there is not an ICD code to represent the selected SNOMED term. IF a term is not mapped, is not appropriate for the computer to select it –it either has not yet been mapped or assigning the ICD code requires review of additional encounter information.*

- It is important for providers to understand what to document to support ICD-9 and ICD-10 coding of encounters.
- This can be done in several ways in EHR.

2.3 Will I lose all of my old problems? Will I be able to use them?

- All of your existing problems, as well as notes, will migrate to the Integrated Problem List (IPL).
- Active problems will have the status of “Chronic” after migration. Inactive will remain “Inactive”. If a problem was flagged as “Personal History” it will retain that flag.
- The provider narrative will have a leading asterisk (*) indicating it has not yet been updated to SNOMED CT®. You must update these problems before using them as a POV or documenting care planning.

2.4 Some of my problems are uncoded – does Data Entry need to code these?

No. See Section 15.2.

2.5 What are all the statuses and how should I use them?

- Chronic – Generally used for ongoing chronic issues and recurrent issues
 - Chronic: Diabetes, hypertension, hypothyroidism, etc.
 - Recurring: Seasonal allergies, migraines, etc.
- Sub-acute – Generally used for issues that requires monitoring for resolution over a period of time OR need a work up to diagnose.
 - Monitoring for resolution: ankle fracture, cellulitis, etc.
 - Working up to diagnose: breast mass, fatigue, etc.

- Nursing diagnoses for inpatients: impaired skin integrity
- Episodic – Generally used for commonly occurring issues and illnesses that are dispositioned “follow up PRN” but are likely to occur again OR admin/screening type issues (the latter will have their own status in EHRp15; you can consider using “inactive status” for these). This may also include nursing diagnoses managed on inpatient. Most of these would be inactivated upon discharge.
 - Examples of common occurring issues: common cold, pediculosis, diaper rash, vaginitis, etc.
 - Examples of admin/screening issues: renewal of prescription, well child exam, etc.
 - Examples of nursing diagnoses: at risk for impaired skin integrity
- Inactive – Generally issues that have resolved and are unlikely to recur. Consider defaulting admin/screening type codes to inactive until EHRp15 when an Admin/Routine status will be introduced.
 - Examples: Cellulitis in otherwise healthy person, wrist sprain, appendicitis
- Personal history – Inactive problems that are not an active issue, but are important to note history.
 - Examples: Chicken pox, MRSA infection, etc.

3.0 Transitioning to the new IPL

3.1 How can I prepare for the new IPL?

The single most important activity is to **clean up existing problem lists** before the transition to the IPL.

- Remove redundant entries.
- Remove inappropriate problems.
- Inactivate resolved problems.
- Move lengthy provider narratives to “Notes” AFTER cleaning up the problems; ask Data Entry staff to assist in coding the problems. This will help in the transition because users can take better advantage of the “Get SCT” tool to reverse map the existing problems.

3.2 How do I transition my existing problems to SNOMED CT®?

Problems will need to be converted to SNOMED CT® from the ICD based problem list. Problems requiring an update to SNOMED CT® will have a leading asterisk (*) in the narrative.

Status	Onset Date	Provider Narrative	Comments	PHx	PIP	IP	ICD
Chronic	08/02/2004	*PTSD					309.81
Chronic		*ALLG RHINITIS					477.9
Chronic		*L NASAL POLP					471.9
Chronic		*H PYLORI POSITIVE					041.86
Chronic		*IRREGULAR MENSES					626.4
Chronic		*LOOSE STOOLS W/ URGENCY POSS LACTOSE OR GLUTEN INTOL R/O INFECTION					558.9
Chronic		*NOCTURIA					788.43
Chronic		*HIGH FAM H/O DM (PATERNA ONLY)					V18.0

Figure 3-1: IPL main display

Approaches to update problems:

1. **“Get SCT” from the Main Screen:** Best used for problems that are straightforward with simple narratives and an ICD code. These may be updated quickly by highlighting the problem and clicking **Get SCT**. You select the term you want to use and store. This replaces the existing provider narrative and encodes the problem in SNOMED CT®.
2. **“Edit”** is best used for problems that you wish to add provider text or move some of the data to comments. From “Edit” you may use “Get SCT” or pick lists, or search for a SNOMED CT® to update the problem.

3.3 Who can assist with updating problems to SNOMED CT®?

We recommend that clinicians update the problems. Coders should never be asked to assign a SNOMED CT® problem based on “translating chart notes”. Coders are trained to assign ICD and CPT codes based on encounter documentation not SNOMED CT®. SNOMED CT® is designed for clinicians to use to describe what they see, feel, hear, and conclude about the patient and his/her symptoms and clinical findings.

It will ultimately be up to clinic leadership to delegate problem updates and train staff appropriately.

Nursing and pharmacy staff can certainly participate in updating problem lists with SNOMED CT®. We recommend clinic leadership provide clear guidance around how and when staff will assist and ideally insert updates into existing workflows.

Some examples of leadership guidance:

- Providers and nursing staff will update (edit) the chronic problems being addressed at each encounter with SNOMED CT®.
- Problems should be updated, not duplicated in SNOMED CT®. Updating of problems where the provider narrative and SNOMED CT® are identical may be done by nursing assistants and/or pharmacy technicians.

Some examples of workflow interventions:

- Nursing staff updating problems prior to ordering standing order labs for chronic problems such as diabetes.
- Pharmacy staff updating problems when refilling medications for chronic conditions
- Pharmacy or nursing staff updating relevant problems when queuing renewal requests for providers.
- Nursing case managers updating problems during “pre-triage” for upcoming appointments.
- Providers updating problems for issues being addressed at current encounter.

4.0 Problem Management

4.1 How do I optimize using statuses to display problems as the problem list grows?

Grouping your problem list by statuses is crucial. Your Pre-EHRp13 “Active” problems will update to “Chronic” problems when EHRp13 is installed. Your “Inactive” will remain inactive and any marked “Personal History” will remain marked as such.

So how do you approach the rest of the problems that are added to the problem list?

1. Understand how each status is defined.

Current	Examples
Chronic	Chronic or recurrent conditions Examples: Diabetes, Hypertension, Asthma, Seasonal Allergies, Recurrent HSV infections
Inactive - Personal History	Inactive problems that are important to note: Examples: History of Chicken Pox, History of Hep A infection
Inactive	Problems that are resolved and are unlikely to recur, or recur infrequently such as injuries, some illnesses. Examples: Ankle sprain, buckle fracture, contact dermatitis
Sub-acute	A condition you are working up or needs short-term follow up. Examples: Breast mass, ankle injury, certain rashes, pneumonia, UTI in male
Episodic	Disposition straightforward “follow up PRN or if not improving” and likely to occur. Think of this as a patient specific “sick visit” pick list. Examples: For children it may include Upper Respiratory Infection, Otitis Media, Diaper Rash. For adults: Cold, Upper Respiratory Infection, Gastroenteritis
Social/ Environmental	Conditions that represent social/environmental context. Examples: Homeless, lack of running water, alcoholic in home, difficulty opening and closing containers

2. Assign statuses when you add problems.
 - a. Your CAC can assign a default status to problems in pick lists.
3. Change statuses when disposition changes.
 - a. When ankle injury resolves, change status to “inactive”.

- b. When “wheezing” is diagnosed and problem changed to “Mild Persistent Asthma”, change to “chronic”.
 - c. Consider engaging nursing staff in “inactivating” problems that have resolved (provider policy and procedures/guidance) during triage process. (EHRp15 will address automatic inactivation of episodic problems that have not been used recently).
 - d. You can select Inactive problems as POV. Do not feel compelled to move an inactive problem to another status UNLESS you need to monitor it for follow up (change to Sub-acute) or it is likely to recur with some frequency (change to Episodic).
4. When nurses are entering policy orders, particularly symptom driven orders, they should select Clinical Indication by choosing “other” and searching for the appropriate SNOMED CT® term. Avoid adding symptoms to the problem list solely for the purpose of using it as a clinical indication.
- a. Unless your workflow benefits from nursing entering symptom as a problem, and provider EDITS that problem when a diagnosis is made during the visit before setting as POV.

Future enhancements related to statuses:

- EHRp14: Additional status of “Admin/Routine” to set for screening, chart review, med refill-type problem entries.
- EHRp14 (tentative): Episodic problems not used as POV in previous six months [site configurable timeframe] will change to a status of Inactive to help decrease clutter.

4.2 I have diagnosis now for a symptomatic problem I worked up and marked as Sub-acute – how do I update my problem?

You can simply change the status and update the SNOMED CT® term (and provider text, if needed). The system captures the date/time of change and who made the change.

Example:

Patient presents for intermittent bloody diarrhea x a few months. You’re working SNOMED CT® problem is “Bloody diarrhea” and your status is “Subacute” so you don’t lose track of the issue.

After work up, you make the diagnosis of “Ulcerative colitis”.

You simply edit the problem, change the SNOMED CT® from “Bloody diarrhea” to “Ulcerative colitis” and change the status to “Chronic”. ***RPMS captures the time/date stamps so the problem details reflect the evolution of the problem; what changed and who changed the problem data?***

4.3 How specific should my SNOMED CT® problems be?

Specificity is at the discretion of the clinician based on how best to manage the problem and plan of care. In general, chronic problems are best a bit more generic (Type 2 diabetes, Diabetic Renal Disease, Endometriosis) and sub-acute problems more specific (closed fracture of base of neck of femur). Episodic will be a mix of specificity. Most patients will have “upper respiratory infection” on their episodic list.

Now you CAN use a very specific SNOMED CT® for chronic problems, however; if the problem changes slightly, then the provider has to change the SNOMED CT® term each visit on the problem list. So the more specific SNOMED CT® terms are best for episodic, and perhaps, sub-acute issues such as fractures that are likely short term or unlikely to recur. Less specific terms may be preferable for chronic problems (see example below). This format allows us to use the controlled vocabulary (SNOMED CT®) to have some consistency in problems and some automatic mapping of ICD, but provides flexibility for providers in managing problems and documenting assessments.

Example:

Woman has endometriosis. She has it in her pelvis, ovaries, ureters, and bowel. Now as a provider do I want four problems cluttering my problem list? Probably not. I want **Endometriosis|pelvis, ovaries, ureters, bowel** so I use the SNOMED term “endometriosis” and in provider narrative note the locations “pelvis, ovaries, ureters, bowel.”

Format: **SNOMED term|provider text**

Example: **Endometriosis|pelvis, ovaries, ureters, bowel**

When I select this as a POV, the coder can actually assign at least 4 ICD codes for this encounter. On a subsequent visit, the patient presents for an endometrioma (endometriosis on the ovary) so I use alternate provider text (on POV dialog) to reflect Endometriosis| left ovary which was the only issue I addressed today. This may only result in 1 POV for this encounter.

For a fracture, I may choose a highly specific term **Closed fracture calcaneus, extra-articular|bilateral hematoma from fall off roof.**

Format: **SNOMED term| provider text**

Example: **Closed fracture calcaneus, extra-articular** | *bilateral hematoma from fall off roof.*

This makes more sense to be granular. However, particularly with ICD-10, the ICD code assigned for the encounter will change based on first or subsequent encounters, resolution of sequelae, and how the fracture is healing. So it would be unwise to assign an ICD to the problem.

5.0 Approach to uncluttered problem list

5.1 IPL – Chronic/Sub-acute:

Former problem list – chronic medical problem focused

- “Active” problems
 - Chronic problems and other problems requiring follow up before disposition, i.e., breast mass

IPL equivalent:

- Chronic and Sub-acute problems (marked by status)

Consider delineating areas of “ownership” of the problem list. Write guidance, policies and procedures, so that providers (MD/DO/NP/PA/CMN... medical staff? This often includes OD, DPM, PT, and Clinical Pharmacy Specialists) primarily manage Chronic and Sub-acute problems.

- Pros – providers feel they have regained ownership of the chronic problem list.
- Cons - if not implemented thoughtfully by engaging site clinicians in the development of policies and procedures around management, could be problematic.
 - Important to write language in your policies and procedures for nursing, pharmacy and other clinical staff to manage problems to prevent additional workload for providers and potentially leaving gaps in the problem list.

Mitigation

Point of clarification: Adding a problem in and of itself is NOT making a diagnosis. Of course a nurse or pharmacist cannot make a diagnosis of hypertension or UTI – this is out of their scope of practice. But adding an existing problem from provider documentation, discharge summaries or patient history is not “diagnosing a patient.” Providers routinely add existing problems to the problem list. Providers do not “re-diagnose” the patient who presents with pre-existing problems unless the diagnosis is in question. Of course providers should routinely review the problem list for accuracy –as should patients by reviewing their PHR and/or clinical summary.

Recommendation: Develop policies and procedure around management of the problem list. Include who may add (by role) and what may be added to Chronic and Sub-acute -

- Patient history?
- From incoming clinical documents?
- Caregivers?

and what else should be documented (add source of info to comments, Consider including in policy and procedures:

- *Assistance in converting problems:* Properly trained, there is no reason that educated clinical staff cannot assist in this process.
- *Adding problems when identified:* through chart reviews, taking history from patient, for these types of scenarios:

Example 1: New patient presents and has established problems: hyperlipidemia, type 2 diabetes, CAD.

- Nurses populating the Chronic problems on IPL, perhaps documenting “per patient, Dx 2005 by former PCP” would save the provider significant time in discussing problems rather than entering data.

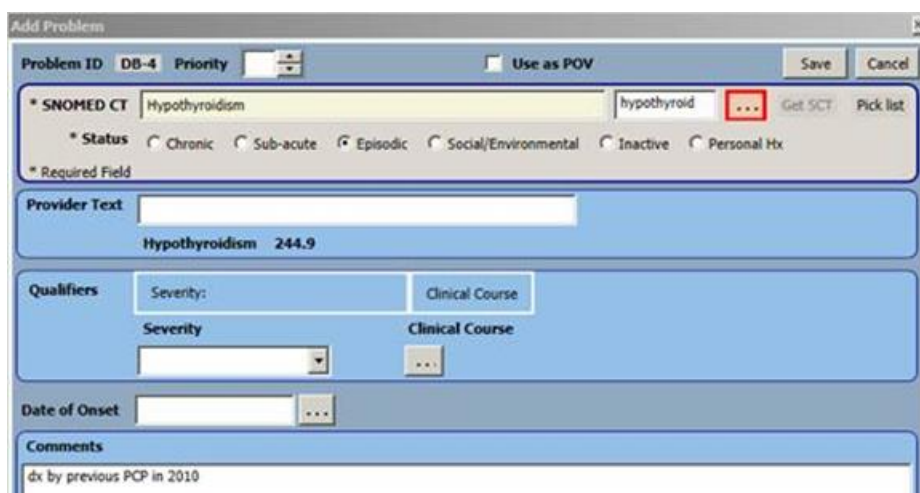


Figure 5-1: Add problem dialog

Example 2: Existing patient presents for routine exam. Reports new diagnoses from outside provider: Hypothyroid, started on Levothyroxine that she received from Happy Go Lucky pharmacy.

- Nurses adding the chronic problem to the IPL would save time for provider during encounter.

Example 3: Existing patient presents to pharmacy for discharge medications from inpatient stay for Pneumonia.

- Pharmacist adds Sub-acute problem, perhaps with comment “dx on admission 6/1/14”, would alert the next provider to evaluate for needed follow up or document resolution.

Chronic	Hypothyroidism	Dx by previous PCP in 2005 per patient :
Sub-acute	Pneumonia	Dx on 6/13/14 admission at TCH per DC summary :
Chronic	Asthma	per patient, dx by previous primary care provider :

Figure 5-2: IPL problem display with comments

6.0 IPL - Episodic:

This status is used for a variety of problems by multiple clinical disciplines.

Examples:

- Urgent care/sick visit problems
- Routine health maintenance, administrative codes, med refills (this will have its own status in EHRp15)
- Inpatient hospital issues (that are not existing chronic or sub-acute problems). Policies & Procedures (P&P), and provider practice, determines who would flag issues requiring follow up or new chronic issues – may be done by inpatient attending OR primary provider on discharge.
- Depending on P&P, nursing problems to monitor on inpatient stay

7.0 IPL - Social/Environmental

This status should be used by multiple disciplines identifying social and environmental issues important to the care of the patient.

Examples:

- Provider identifies “alcoholic in home”
- Pharmacist identifies “difficulty opening and closing containers” driving need for non-safety cap bottles
- PHN identifies “transport unavailable” and “inadequate social support” might help determine disposition of patient – home vs observation in hospital for infection

Tips for reducing/minimizing clutter:

- Using statuses
 - Search/Store problem defaults to “episodic” so user needs to pay attention to that if entering chronic or sub-acute problem
 - Pick Lists can default statuses which can assure stored problems are filtered correctly
 - Change statuses when problems resolve or become chronic
- Search for Clinical indication instead of adding problem when appropriate

Scenario 1: Patient presents for “dysuria” and nurse orders triage standing order for UA before seeing provider.

- Use existing problems for POVs whenever possible. Think about why you are seeing the patient. This is very important for nursing visits.

Scenario 1: Patient presents for Depo-Provera injection. There is a problem on the problem list “Contraception” already. You are seeing the patient for surveillance of their contraception. You assess per protocol and document that you administered the depo. This is captured in the CPT code.

- Use existing “contraception” problem as POV. You can add provider text when you click the **POV** button to note “depo provera given today” if you want. The CPT captures that you administered the depo provera (and, of course, it is documented in the note).

Scenario 2: Patient presents for pregnancy test. The patient has a problem of “Polycystic Ovarian Syndrome|trying to conceive” on the problem list. She confirms she is still trying to conceive.

- Use existing “Polycystic Ovarian Syndrome|trying to conceive” problem as POV. You could add “pregnancy test neg” to the provider narrative after selecting and clicking POV. Avoid adding problem of “pregnancy test negative” – this is just clutter to the list. Coding can actually pick that up, if needed, in the coding queue.
- Be judicious when adding problems for nursing visits.
Scenario 1: Patient presents for blood sugar check. She states she is just worried because there is a lot of diabetes in her family.
- Consider existing problems. Does she already have an indication for blood sugar screening (based on policies and procedures) such as obesity, PCOS, etc? If so, use this as the POV and note “blood sugar screening performed” in the provider text or in your chart note. If not, consider a generic entry of “diabetes screening” IPL Search Tools.
 - All of the search tools are available when adding or editing a problem. The Pick List and “Get SCT” are available from the main display, as well.

8.0 Get SCT

The “Get SCT” tool allows for quick conversion from ICD-9-encoded problem to SNOMED CT®. The mappings are from the ICD-9 code to SNOMED CT® terms. This tool returns ICD9 to SNOMED CT® matches for ICD-9 codes that are “reverse mapped”. This also returns the **parent** (less specific) and children (more specific) of the matches from which clinicians can choose. *This does not return any choices for un-coded diagnoses, which is why problem list cleanup is essential.*

The tool is limited to searching by ICD code, not text.

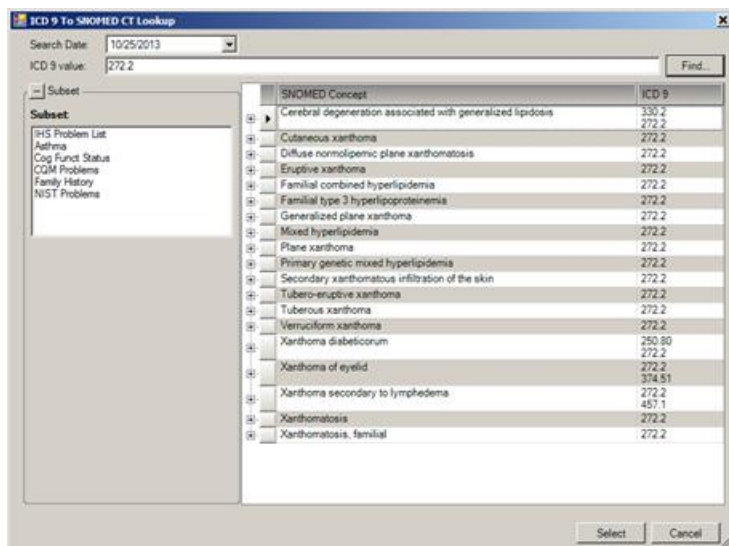


Figure 8-1: Get SCT results display

Note the “Parent” (less specific term) and “Child” (more specific term) to choose from if the user expands the returned SNOMED CT® term.

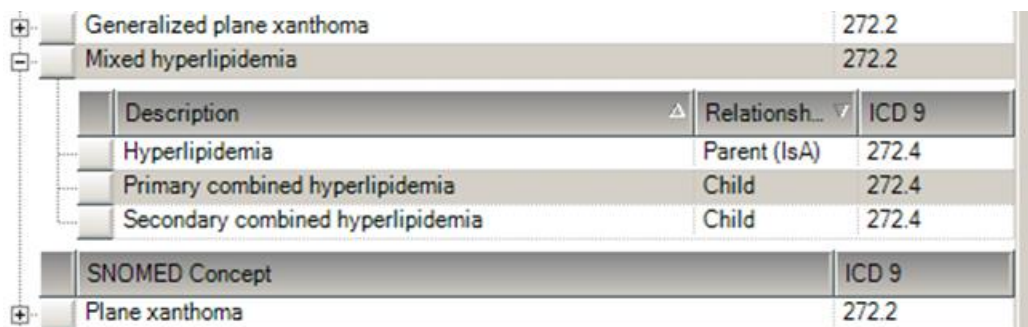


Figure 8-2: Get SCT detail display

If you do not return any term, or a suitable term, you may perform a text search by entering a leading question mark (?) before the search string. Here I searched using “?pelvic pain”.

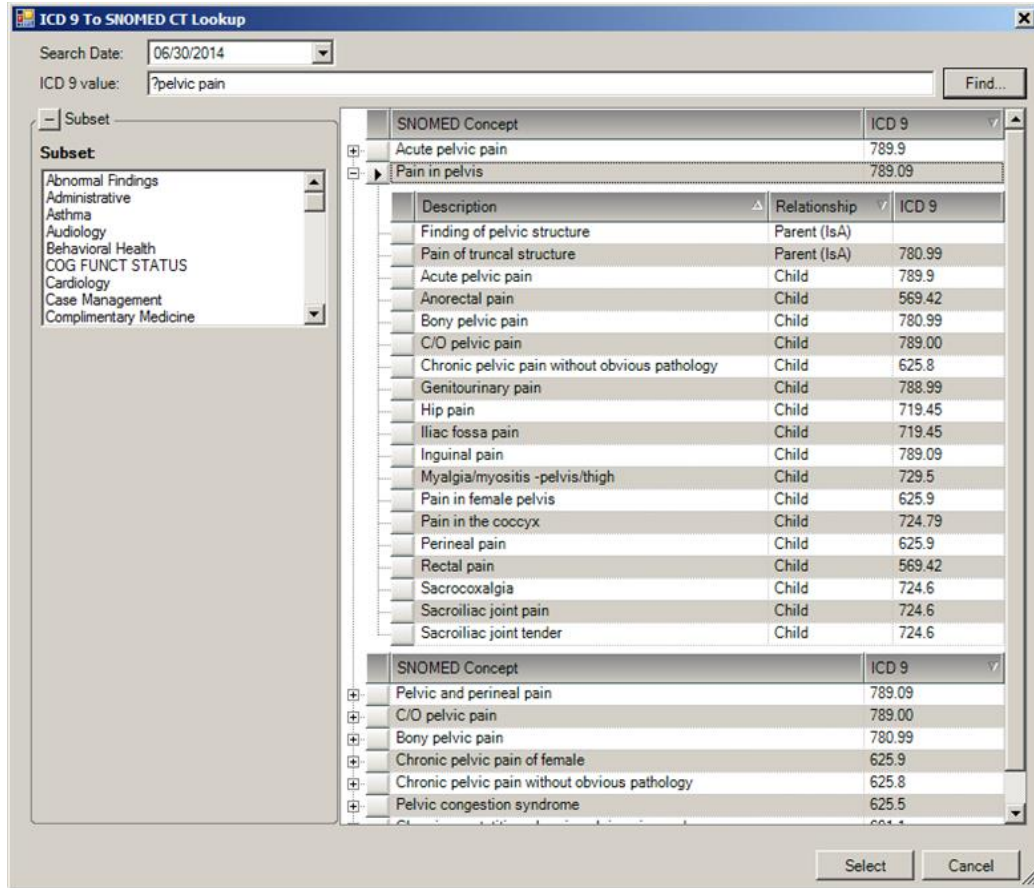


Figure 8-3: Get SCT text search display

9.0 SNOMED CT® Definitions

Fully Specified Name (FSN) – the unique name for a concept, includes the hierarchy

Preferred Term – the most commonly used synonym for the FSN

Synonym – optional terms

IHS SNOMED – the group of concepts that is initially searched. When you install the Meaningful Use 2014 patches, you will install the terminology services patch (BSTS). This loads the commonly used content onto your RPMS system for quick searching.

ALL SNOMED – if you cannot locate the term you want, then the system searches the Distributed Terminology Services (DTS) “All SNOMED” for the term. This is a broader search, but because it is external to RPMS, it is a little slower.

10.0 SNOMED CT® Search

When you search for a diagnosis or condition, you will encounter the SNOMED search tool. How many items return, and how the data is displayed, is determined by the Diagnosis Look up, Maximum Results, Search filed and whether you hit return (which searches IHS SNOMED) or click “ALL SNOMED”.

Default search:

Searches by Fully Specified Name

Searches in IHS SNOMED

Returns first 25 results

Need more results?

Change **Maximum Results radio button** and press <enter> to search IHS SNOMED again OR ALL SNOMED to search broader set of terms (takes a bit longer to return).

Need fewer results?

Click on one or more Subset(s) on the left to narrow search. This filters the existing display. So if you selected max results of 25, it will filter those 25. If you selected all results it will filter those. *Subset does not affect the search, only the display.*

Want to search and return the list by synonym?

Click **Diagnosis Look up to “Synonym”** and press <enter> to search IHS SNOMED or click ALL SNOMED

10.1 Diagnosis Lookup: Fully Specified Name

When **Diagnosis Look up is set to “Fully specified name”**, you may select the returned FSN or you may click the plus sign (+) and select any of the synonyms. In this example, a user may select “Coronary artery disease”.

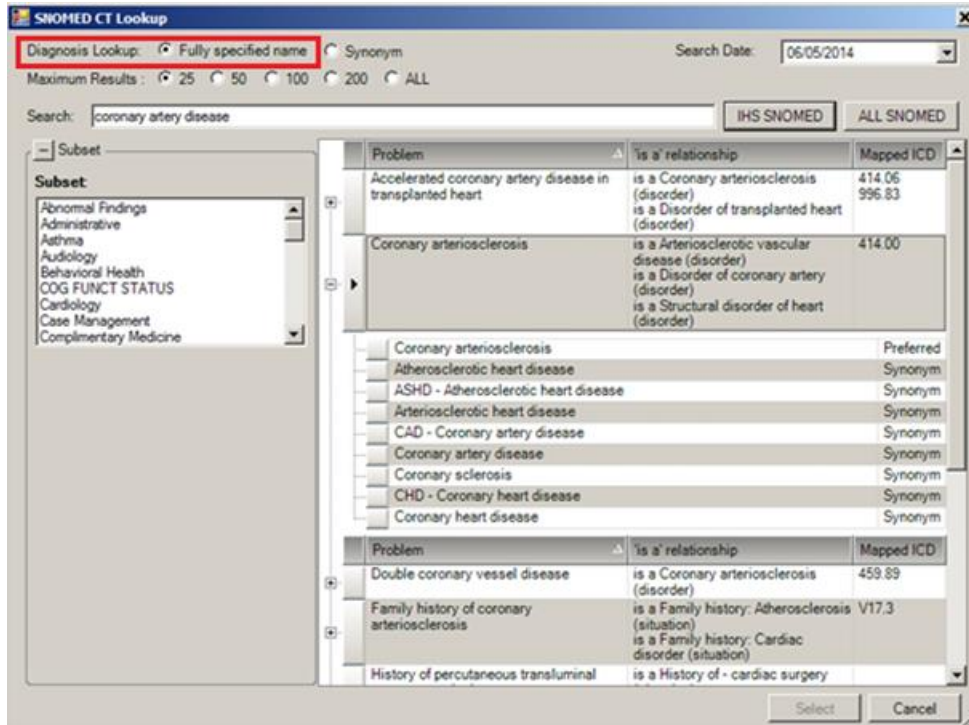


Figure 10-1: SNOMED CT look up display FSN

10.2 Diagnosis Lookup: Synonym

When **Diagnosis Look up** is set to **“Synonym”** before searching, you will see the choices displayed by synonym. The relationship and FSN is displayed in the **“is a”** relationship column. Because synonyms are more abundant, this will generally return a larger list.

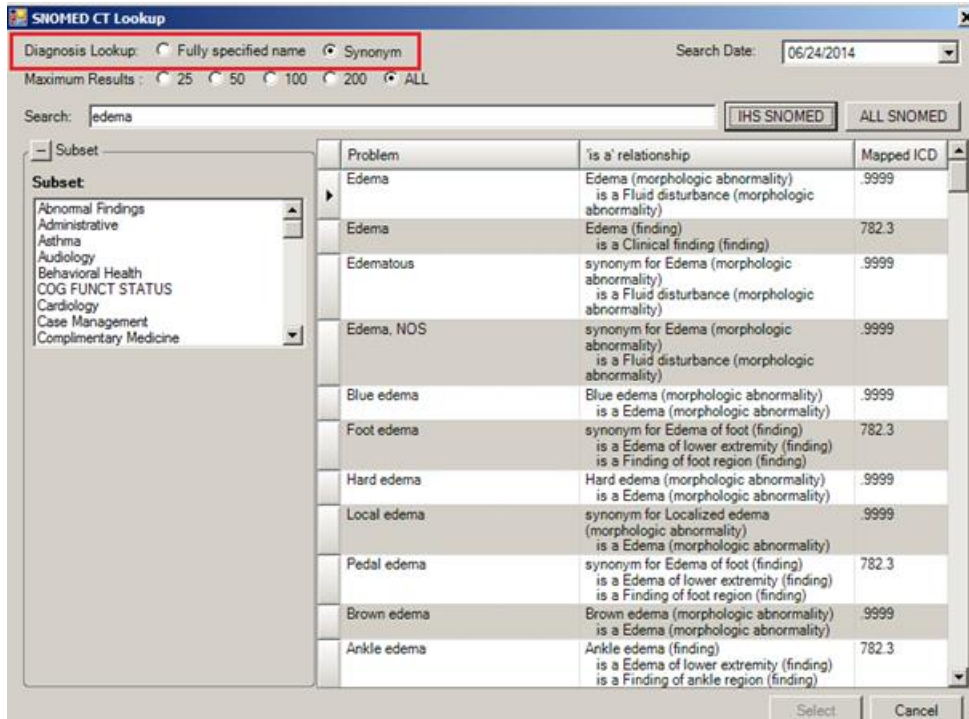


Figure 10-2: SNOMED CT look up display synonym

10.3 Subset filter

You may click on one or more subsets and then search OR you may filter what is returned on a general search. This is best used when you return a large number of items. It filters what was already retrieved from the most recent search.

Here the maximum results are set to “ALL” and searched for “edema.” It returned a large number of items.

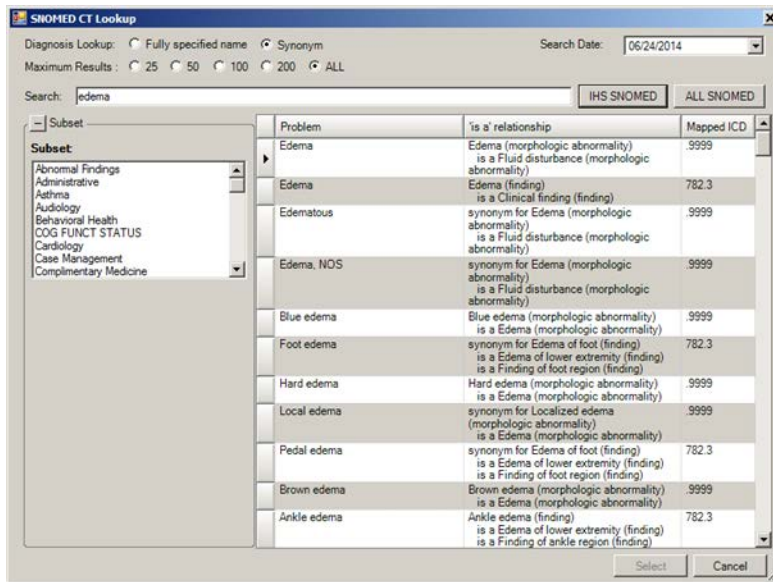


Figure 10-3: SNOMED CT look up display without subset filter, synonym

The choices can be narrowed by selecting to display only the terms containing “edema” in the cardiology subset.

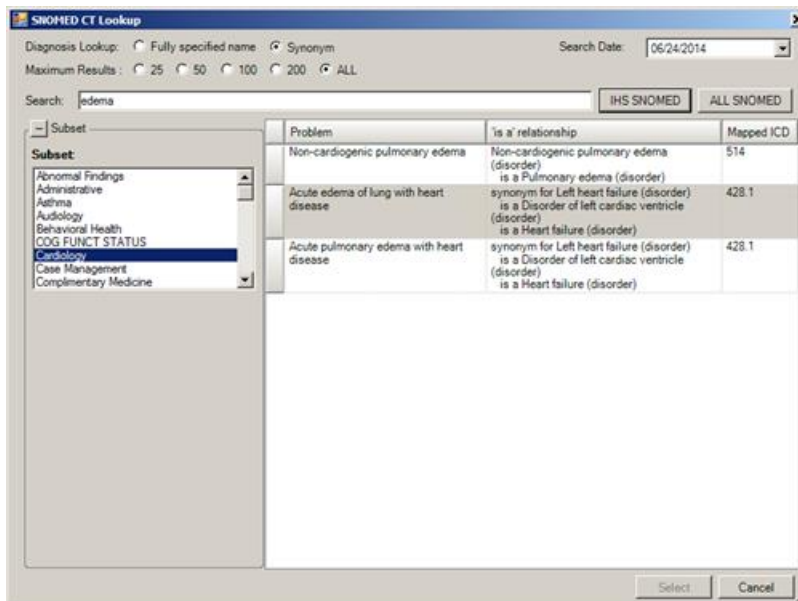


Figure 10-4: SNOMED CT look up display with subset filter, synonym

This works for Diagnosis Lookup for FSN, as well.

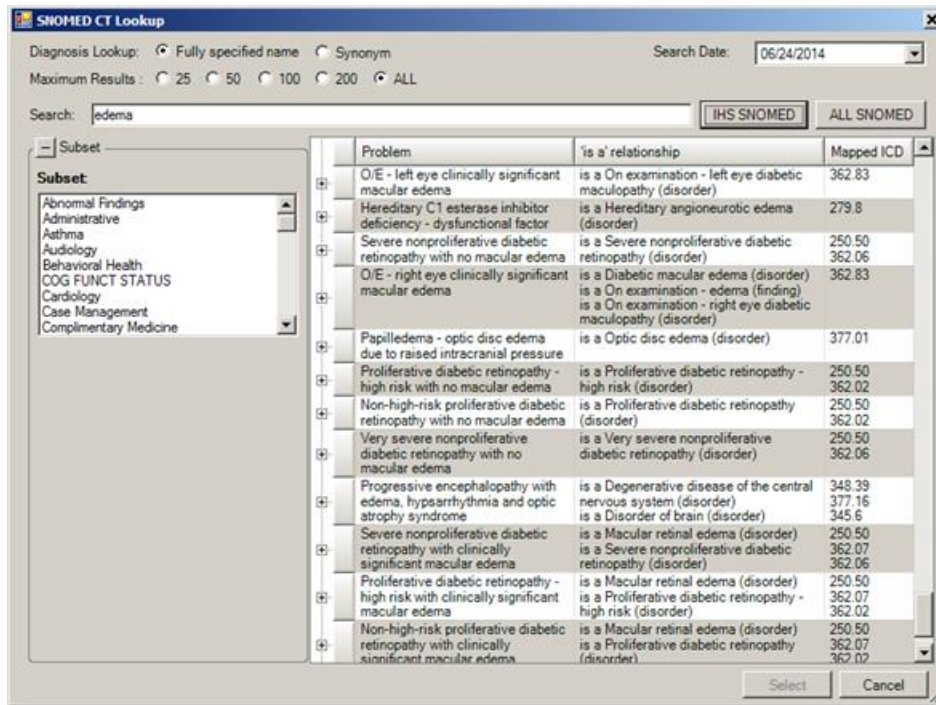


Figure 10-5: SNOMED CT look up display without subset filter, FSN

Note there are fewer results because the “edema” terms are synonyms of the FSN’s. These are displayed beneath each term.

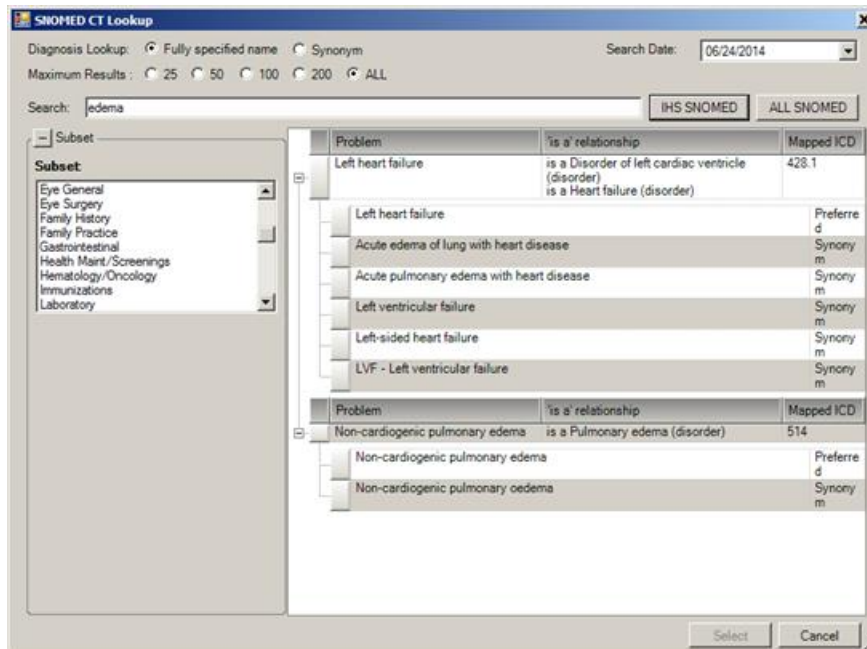


Figure 10-6: SNOMED CT look up display, FSN detail

10.4 Pick Lists

Pick Lists can be used to select a single SNOMED CT® term (add or edit a problem) OR to select multiple problems (from the main IPL screen), which is helpful when populating a problem list for a new patient.

Your Clinical Applications Coordinator (CAC) can import and customize national pick lists:

- Add/remove items
- Group like items together to improve navigation of the pick list
- Assign default statuses to the items (Chronic for Hypertension, Episodic for Common Cold)

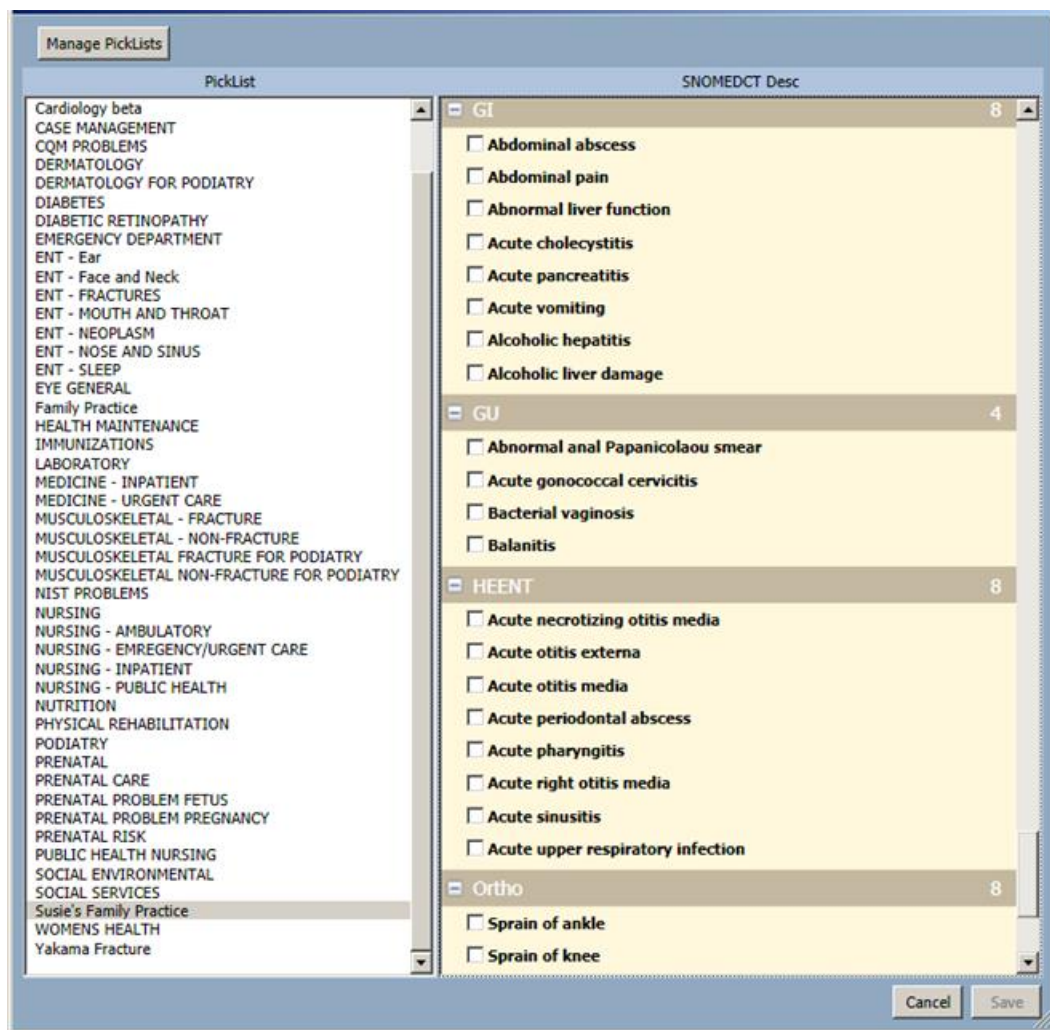


Figure 10-7: Pick List

11.0 POV management

11.1 Why must all POV's be reflected on the problem list?

Meaningful Use Stage 2 implements longitudinal problem documentation. Active problems include any problems addressed for a patient, including episodic issues.

It is important that statuses be used appropriately in the problem list. The CAC can facilitate this by defaulting statuses of pick list entries. See Section 2.5.

Over time the episodic problem list will be a kind of patient specific pick list. People come in commonly for things like coughs, colds, rashes, etc. So over time, additions will be fewer.

Example: A patient will have “common cold” on his problem list and if he presents six times in three years for a common cold, the problem detail will list date/time of each visit the patient was seen for this issue.

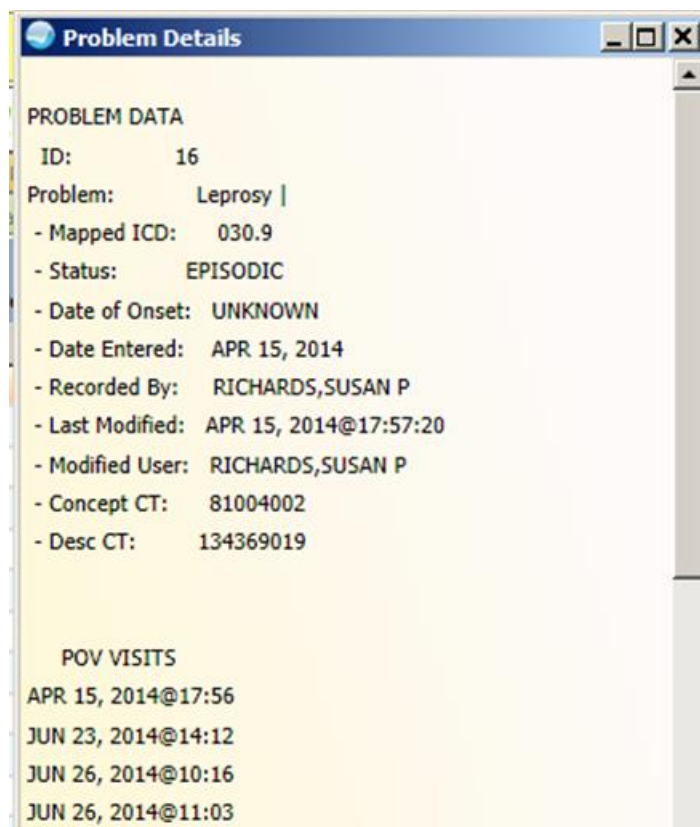


Figure 11-1: Problem detail

11.2 Administrative and screening diagnoses are cluttering up my problem lists. How should I manage this issue?

Yes, patients will commonly have one instance of issues like “Renewal of Prescription” or “Adult Health Examination” on the problem list. For now, make sure these are marked as “episodic” so you can filter them out of the display.

In the future (EHRp15, tentative) will introduce a couple of enhancements to improve the filter and display of information.

- Adding a status “Admin/Screening” so you can mark these types of issues and filter them out of your display.
- Ability for clinicians to default their IPL displays. So if you want to always display Chronic and Sub-acute, and only check the other statuses as needed, then you can set this as your default.
- Introduce a tabular view to better organize problems.

What can my CAC and I do now to improve the display?

1. Your CAC can set up the pick lists to default selections to a specific status on the problem list. So diabetes, hypertension can be defaulted to “chronic”, breast mass and ankle fracture to “sub-acute”, renewal of prescription to “episodic” or “inactive”, no transportation to “social/environmental”, etc.
2. Remove columns (if you wish) and mark the status you want to display (perhaps Chronic and Sub-acute) when you log into EHR. These defaults will remain until you log out of your session.

Why can't I delete a problem if it has been used as a POV?

The problem list is now a longitudinal record of care rather than just a snapshot of what the chronic problems are currently. We now capture the following data (that we did not previously) about a problem:

- Changes in SNOMED CT® term
- Changes in provider text
- Add/removal of qualifiers
- Add/Removal of asthma classification
- Goals and care plan notes
- When problem was used as POV or monitored while on inpatient
- Visit instructions
- Referrals for which a problem was selected as purpose of referral
- Patient education if selected for the problem

- Treatment/regimen

If a problem was used as POV, has goals or care plans or has visit instructions, it can no longer be deleted.

Why are there two POVs with the same narrative on the Visit Diagnosis?

Some SNOMED CT® terms, like Diabetic Peripheral Neuropathy, are actually described by two ICD diagnoses. When you select as POV, it stores two POV's – one for each of the codes with the same provider narrative (the ICD narrative that is pulled from the ICD file and associated with the ICD code, will, of course, be different as it always has been).

The POV object does pull in the Provider Narratives, so for these it can appear twice in the note because there are two POVs depending on the TIU object your CAC uses in your notes. (It has always been this way; coding added these codes later to the POV file). Some of this goes away with ICD-10 as ICD10 is much more granular and there are fewer SNOMED CT® terms that map to >1 ICD code.

SNOMED CT	Provider Narrative	Provider Text	ICD	Priority	Asthma Control
Asthma	Asthma		493.90	Primary	WELL CONTROLLED
Diabetic renal disease	Diabetic renal disease		250.40	Secondary	
Diabetic renal disease	Diabetic renal disease		583.81	Secondary	

Figure 11-2: Visit diagnosis display after storing a problem mapped to 2 ICD codes

12.0 Clinical Indication

12.1 Do I have to update existing ICD problems to SNOMED CT® that I want to use before I select a clinical indication when placing orders for chronic problems?

You always have the option to select “other” from the clinical indication prompt. However, updating the problem will make selecting a clinical indication easier because you can select the problem from the dropdown.

Nursing and Pharmacy should be engaged in updating problems, as well, during their workflow. Nurses and pharmacists often implement standing orders for chronic illnesses or queue up renewals for chronic medications.

12.2 Do nurses need to enter a problem on the problem list before entering orders based on symptoms or triage protocols?

No, but this depends on your local policies and procedures. There are a couple of approaches you can take depending on your providers’ workflow, and may vary from provider to provider or clinic to clinic. These recommendations support the workflow when a provider sees the patient.

1. Nurse does not enter symptom in problem list. Nurse enters only clinical indication by selecting “other” and searching for symptom.

- Workflow:

If the order is for a symptom and the patient will be seeing a provider then the nurse clicks the “clinical indication”, then selects “other” and searches for an appropriate indication such as “fever” or “dysuria”.

2. Nurse enters symptom on problem list. The provider then edits the problem changing the SNOMED CT® when diagnosis is determined.

- Workflow:

Nurse clicks the “clinical indication” when ordering a lab, then selects “other” and searches for an appropriate indication such as “dysuria”.

Provider diagnoses and edits the problem of “Dysuria” and changes the SNOMED CT® to “Urinary Tract Infection”

*** Potential issue with process #2 – if SNOMED CT® for “Urinary tract infection” is already on the problem list, the provider will be unable to change the “dysuria” to that diagnosis.

13.0 Nursing specific questions

13.1 If I convert a problem from ICD to SNOMED CT®, am I “diagnosing” the patient?

NO. The problem is on the problem list. Updating to a SNOMED CT® term is not “diagnosing” the patient.

What kinds of problems would a nurse document on the IPL?

The problem list needs to remain uncluttered as much as possible. Everyone caring for the patient should use existing problems as POVs when appropriate and avoid adding similar terms to clutter the list. It is also important that added problems are assigned the appropriate status. You do not want a lot of episodic issues (colds, gastroenteritis, diaper rash, occasional ear infection) to clutter the chronic or sub-acute problem list. In particular, these groups should be very “clean”. Similarly, the Social/Environmental should reflect relevant issues that impact the patient’s overall health and ability to engage in healthy activities – transportation issues, adherence issues, social support, etc.

Avoid adding POVs unnecessarily, particularly when entering clinical indications. Many times for triage orders, it is more appropriate to search for a clinical indication just like you did prior to EHRp13. See Section 12.0.

Nursing can participate in problem list management (based on site policy). The problem list is designed to be multidisciplinary. To reduce clutter, it is important each facility consider the best approach to problem management, who should enter what and which statuses should be used for various types of problem entries. Refer to your local policies and procedures to determine how nurses at your facility should document on the IPL.

13.2 When should a nurse add a problem to the problem list?

1. Nurse only visit – if there is not an appropriate problem the nurse should add a new problem and select it as POV.
2. When taking a history for a patient – particularly a new patient (if included in local policy and procedures). Comments may always be used to document where the information was obtained such as “per patient history” or “per summary from Dr. Jones, Cardiology”.

3. Problems identified by the nurse - Many social and environmental issues such as transportation issues, mobility issues, lack of social support, etc. will be identified by nursing staff and may be added using the Social/Environmental status. (Follow local policy and procedures and optimize pick lists by defaulting pick list items to specific problem statuses. This will help keep the problem list de-cluttered and meaningful).

13.3 How do nurses document POVs for nurse only encounters?

Whenever possible, nurses should use existing problems as POV's for nurse-only visits. This may require converting an ICD problem to SNOMED CT®.

Use existing problems as POVs whenever possible:

- Patient presents for B12 injection
 - Use existing problem of B12 deficiency or pernicious anemia as POV
- Patient presents for BP check
 - Use existing problem of Hypertension for blood pressure check as POV
- Home visit for Directly Observed Therapy for TB
 - Use existing problem of TB as POV

Add a problem to use as a POV for NURSE ONLY visit if no existing problem is appropriate:

- Patient presents for immunization only visit
 - Add “Immunization advised” as episodic problem and use as POV
- Patient presents for B12 injection. There is not a problem on the problem list, but there is a historical “B12 deficiency” POV that the provider used on a prior visit
- Patient self presents for pregnancy test. She is actively trying to conceive. She declines a provider visit and just wants a pregnancy test, which is negative.
 - Add problem to problem list and use as POV. I would recommend some Policies and Procedures around family planning type visits. Potential Problems added to list could be:
 - Trying to Conceive
 - Pregnancy test negative
 - Preconception care
 - Family planning surveillance
- Home visit for Hospital Follow up for Pneumonia. Patient was referred by hospital and has not been seen for issue at the clinic.

- Add problem “Pneumonia” as sub-acute problem. Consider adding “per discharge notes from hospitalization 6/1/14” as comment. Use as POV.

14.0 Pharmacy specific questions

14.1 If I convert a problem from ICD to SNOMED CT®, am I “diagnosing” the patient?

NO. The problem is on the problem list. Updating to a SNOMED CT® term is not “diagnosing” the patient.

14.2 If I add a problem to the problem list from verbal history (such as taking a history from a patient) or from a document such as discharge summary, am I “diagnosing” the patient?

NO. Adding an existing problem from provider documentation, discharge summaries or from patient history (as providers we add existing problems to the problem list, we do not “re-diagnose” the patient) are not “diagnosing a patient”. Of course providers should routinely review the problem list for accuracy –as should patients by reviewing their PHR and/or clinical summary.

- When adding new problems, consider adding the source of the information to comments “per patient, diagnosed by Dr Jones” or “per consult report from Dr Alexander”.

14.3 What kinds of problems would a pharmacist document on the IPL?

The problem list needs to remain uncluttered as much as possible. Everyone caring for the patient should use existing problems as POVs when appropriate and avoid adding similar terms to clutter the list. It is also important that added problems are assigned the appropriate status. You do not want a lot of episodic issues (colds, gastroenteritis, diaper rash, occasional ear infection) to clutter the chronic or sub-acute problem list. In particular, these groups should be very “clean”. Similarly, the Social/Environmental should reflect relevant issues that impact the patient’s overall health and ability to engage in healthy activities – transportation issues, adherence issues, social support, etc.

Avoid adding POVs unnecessarily particularly when entering clinical indications
See Section 12.0.

Pharmacists can participate in problem list management (based on site policy). The problem list is designed to be multidisciplinary. To reduce clutter, it is important each facility consider the best approach to problem management, who should enter what and which statuses should be used for various types of problem entries. Refer to your local policies and procedures to determine how pharmacists at your facility should document on the IPL. Converting existing ICD-9 problems to SNOMED CT®. This is important in selecting problems as POV for pharmacy refills.

- Taking history from a patient (or from patient records) and updating problem list
 - When adding a new problem, consider adding the source of the information to comments “per patient, diagnosed by Dr Jones” or “per discharge summary from Dr Alexander”.
- Adding relevant pharmacy related issues (many are appropriate for Social/Environmental)

14.4 How do pharmacists document POVs for pharmacy only encounters?

Whenever possible, pharmacists should use existing problems as POVs. This may require converting an ICD problem to SNOMED CT®.

Use existing problems as POVs:

- Patient presents for Anticoagulation Clinic or other disease management visit, referred by PCP
 - Use (or convert existing problem) “Anticoagulant Drug Monitoring”
 - Use (or convert existing problem) supporting diagnosis such as atrial fibrillation, aortic valve replacement, etc.
- Patient presents for refills
 - Use (or convert existing problem) Hypertension, etc.
 - Use “Dispensing Medication” (SNOMED 373784005) as primary or secondary POV per local requirements. Add to IPL for first refill visit after IPL implementation. Otherwise use existing. This will be automatically stuffed to the pharmacy visits in EHRp14/APSP 1018.

Add a problem to use as a POV:

- Patient presents for first med refill after IPL implementation
 - Add “Dispensing Medication” (SNOMED 373784005) as an episodic problem and use as POV. (With EHRp15, you can change this status to Admin/Routine). Enter primary or secondary POV per local requirements.
- Patient presents for immunization only visit (if this is in your procedures)
 - Add “Immunization advised” as an episodic problem and use as POV
- Patient presents with prescriptions from hospital discharge for Pneumonia

- Add problem “Pneumonia” as sub-acute problem. Consider adding “per discharge notes from hospitalization 6/1/14” as comment. Use as POV.

15.0 Coding and Billing

15.1 Provider narratives from EHR – what do they look like and why can't I edit them?

Provider narrative will be more consistent. The provider narrative is stored as the SNOMED CT® description ID (which is a number corresponding to the term the provider selected), and any text the provider enters in the “Provider Text” field (which is limited to 60 characters) is stored and delimited by a “|”.

When the system translates it for view in coding queue, visit file, reports, EHR display, etc., it returns the SNOMED CT® Description (the human readable text for the description ID) and the provider text in the format below:

Format: SNOMED CT® term | provider text

Standard Term Clinician Free Text

Example: Hyperlipidemia| uncontrolled

Because part of the narrative is a standard term (and it is actually stored as a numeric value) it is not editable by data entry/coding.

How are ICD codes assigned in EHR?

1. Clinicians select a SNOMED CT® Problem and set as POV (encounter diagnosis).
2. Clinician enters provider text for visit from POV dialog (optional).
3. Coder reviews provider narrative, qualifiers, encounter notes and accepts or changes mapped codes, assigns code to uncoded entries and adds any additional codes.
 - a. After the conversion to ICD-10, additional “map advice” is passed to coding staff to assist with transition to ICD-10.

15.2 Why doesn't Data Entry assign ICD codes to the unmapped (.9999) entries on the problem list?

SNOMED CT® is a “controlled vocabulary”. Each SNOMED CT® term is carefully defined by an international team of terminologists. The term is placed by the terminologist in a specific hierarchy with specific relationships. This is where the power of SNOMED CT® lies. Because the content is organized based on its clinical meaning, the information can be utilized more accurately and more thoroughly. ICD is also organized hierarchically, but its purpose is billing and utilization so the information cannot be extracted and grouped the same way.

The mappings to ICD are based on the specific SNOMED CT® term. The mapping is from the SNOMED CT® term to the ICD. The SNOMED CT® term may NOT be automatically because:

1. The closest mapping is more specific requiring a bit more documentation.
2. The closest mapping is only partial map (and there is a new build out or coming that tweaks the mappings) or ;
3. It has not been mapped by the international mapping project.

The final assigned ICD codes for POVs are based on the entirety of the encounter documentation. Yes, many times it IS derived from the SNOMED CT® term assigned, however, provider text and encounters documentation CAN and WILL change the resulting ICD codes assigned on visits. This will be far more frequent with ICD-10, and the provider can change the provider text on the Problem for any POV. This is to allow ease of clarification documentation of assessment of problems particularly when used as POV.

- Problem = SNOMED CT®
 - ICD display is for information only and is dynamic – that is, it reflects what the mappings are today, not when they were entered
 - Provider Narrative is SNOMED CT® description + provider text
- POV = ICD
 - We happen to utilize the mappings to assist in assigning a suggested code (or .9999) when selecting a problem for use as POV.
 - Suggested ICD code is sent to POV based on Problem SNOMED CT® (mappings)
 - Problem SNOMED CT® becomes part of the POV narrative (SNOMED CT® description + provider text unless alternate provider text is used)

We connect the problems, POV, education, orders, referrals, and care planning by pointing back to the Problem internal entry number – they are associated – this allows us to put information back together and display longitudinal care planning documentation.

You do not want to re-code these or you would have to do it all over again for ICD-10. Additionally, if the coders assigned codes to the problem list based on the SNOMED + Provider Text, they would have to re-code it every time the provider changed the provider text or the SNOMED CT® for a problem. It is unnecessary and unsustainable.

15.3 Why can't Data Entry change the provider narrative for Problems and POVs entered in EHR?

SNOMED CT® is a controlled vocabulary. A team of international terminologists carefully define each and every term used. Editing any part of the SNOMED CT® term can change the meaning and relationships. Providers have the latitude to add "provider text" which is combined with the SNOMED CT® term and delimited by the "|".

15.4 When I enter the proper ICD code on the POV, the problem list doesn't change?

Correct, this is intentional. Assigning a code to the POV in the past did not code the problem list either. Also, the ICD code assigned to the Visit Diagnosis is a result of the SNOMED CT® term, the provider text (the information to the right of the "|" in the narrative) and the chart documentation. This code is true for the date/time of the visit and based on the encounter information. The ICD codes on the problem list simply display what the SNOMED CT® term (what is displayed to the right of the "|" in the provider narrative) automatically maps to now.

15.5 There are abbreviations in the Provider Narrative and I cannot change these.

When these are to the left of the "|" in the provider narrative, then the abbreviation is imbedded in the SNOMED CT® term. A future SNOMED CT® update removes these abbreviations from Fully Specified Names. In the short term, encourage your providers to select from the synonyms available that do not contain abbreviations.

A/N care: H/O infertility	is a Antenatal risk factors (situation)	V23.0
A/N care: H/O infertility		Preferred
Antenatal care: H/O infertility (context-dependent category)		Synonym
Antenatal care: H/O infertility (situation)		Synonym
Antenatal care: history of infertility		Synonym

Figure 15-1: SNOMED CT® with abbreviations

15.6 Sometimes I see two or more POVs with the same provider narrative?

Correct, this is intentional. There are some SNOMED CT® terms that require two or more ICD codes to fully describe the term.

Example: Diabetic nephropathy. 250.40 describes the diabetes; 583.81 describes the nephropathy. And in this example, the coder can add an additional ICD for long term insulin use.

The coder has the latitude to remove the second (3rd, 4th) POV and add back the appropriate ICD codes as long as an instance of the original narrative is retained.

Diabetic nephropathy well controlled on insulin and lisinopril	250.40
Diabetic nephropathy well controlled on insulin and lisinopril	583.81

Figure 15-2: Visit Diagnosis for problem mapped to 2 ICD codes

16.0 Care Planning Documentation

16.1 Can it be used for inpatient Nursing Care Plans?

The care planning was designed very generically because we did not want to guess what Meaningful Use Stage 3 would include.

The Care Planning is usable for some general care planning and, I think, eventually sites will be able to use the IPL for nursing care plan. However, it is not likely ready for the large complex nature of nursing care plans with the MU2 release. We really need some better displays of data before it will be usable for Nursing care planning complexity. You can certainly add Nursing diagnoses to the problem list and mark them as being managed for inpatient (but recommend that sites develop P&P for problem list management).

With the MU2 release, the template functionality is limited – it does not yet support all template configurations. The developers are working on this for EHRp14. We are also improving the display in TIU objects and Health Summaries in that set of patches based on feedback from beta sites. This moves us forward in usability for the care planning content.

With respect to care planning roll out, what I would recommend is this: once MU2 software is released, review the functionality understanding that the template limitations will improve with subsequent releases. Begin to use the functionality – it certainly can be used for setting goals, plans of care for chronic issues like diabetes and hyperlipidemia, capturing work up plan for presenting issues like breast mass, and good for visit instructions. I believe Visit Instructions will be used quite a bit. This will help you articulate what changes we (OIT) can consider to make this more functional for nursing care planning.

We will want feedback as clinicians begin using care planning for the following:

1. Navigation and display of Care Planning
2. TIU object layout and formatting
3. Health summary layout and formatting
4. Alternate displays – such as a way to pull and display/print problem and care planning (like we can for launching med lists from the meds tab)
5. What automation could we include to avoid clutter – an example might be automatically inactivating care plans for problems used on inpatient that have a status of episodic?

Once you have a bit of exposure to the tools and discuss the ways you would like to use the tools, you will be able to provide us more specific feedback on what kinds of modifications we can do to meet your needs.

17.0 Future planned enhancements

17.1 EHRv1.1p14

IPL:

- Priority display will return in sortable column
- POV column will display a check mark for problems selected as POV for current encounter
- Care planning template corrections
- Pick list configuration to restrict display to specific clinicians or locations
- Adding status of “Admin/Routine” to set for screening, chart review, and med refill type problem entries

Stroke and AMI tools

- New tools to document patients presenting for acute stroke and acute chest pain

17.2 EHRv1.1p15

IPL:

- User can set default display (for example: remove columns, default to “Chronic” and “Sub-Acute”)
- Select POVs directly from Pick Lists. This would include smart logic to check problem list for matching SNOMED CT® concept and, if present, only mark that problem as “used as POV” to avoid duplicate entries.
- Adding an IPL status of “Admin/Routine”
- Breaking out display of problems into tabs: Chronic/Sub-acute, which would approximate the old “problem list”, Social/Environmental, Episodic, Admin/Routine

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)

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