EHR v 1.1 p13 SNOMED CT[®] and the Integrated Problem List (IPL)

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Topics

- Overview of SNOMED CT[®]
- Getting started with IPL tips for a smooth transition
- Overview of the IPL functionality
- Rolling out IPL functionality

	Status	Onset Date	Provider Narrative		Comments				PHx	PIP	IP	ICD
1	Chronic		Hyperlipidemia		This is a test note :							272.4
1	Chronic		Diabetes mellitus type 2									250.00
1	Episodic		Pelvic pain (musle pain, equisitely internis	tender left obturator								789.09
1	Sub-acute		Nontraumatic rotator cuff tear righ	t	Previous nontraumatic ro months of physical therap	itator o py. :	cuff tear in 2011. Patient's pain was resolved, range o	of motion and strength restoerd with 6				727.61
	Latest	All Active	1									
	pov-1	Problem Info					Visit Info					
	PAVS	Goal Notes		Patient Instructions/Ca	re Plan	-	Visit Instructions	Care Plan Activities			-	
		Pain resolutio Patieint's goa surgery or inju Modified by F	n, restore full ROM and strength. I is to reach this without further, ections.	Physical therapy for 3 significantly improved agreed to additional in interventions. Modified by: RICHARC	months. If not OR if worsen pateint saging and other DS.SUSAN P 03/12/2014		Referral to PT. Follow up in 2 weeks. Modified by: RICHARDS.SUSAN P 03/12/2014					
						*					-	

What is SNOMED CT[®]?

Systematized NOmenclature of MEDicine Clinical Terms (SNOMED CT[®]) is a comprehensive multilingual clinical terminology that provides clinical content and expressivity for clinical documentation.

Clinician friendly language to document clinical impressions, findings and diagnoses.

Why the Change to SNOMED CT[®]?

2014 Certified EHR requires:

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

Transition to ICD-10 – our goals are to:

- Stabilize the user interface in advance of ICD-10 changes
- Improve clinical documentation of problems and encounter diagnoses to support ICD-10 coding

More About SNOMED CT®

- Extremely large set of concepts and descriptions representing many standard terminologies
- Scalable for a variety of uses
- Owned and maintained by the International Health Terminology Standards Development Organisation (IHTSDO) in Denmark
- Released in the U.S. by the National Library of Medicine (NLM)

Source: IHTSDO, www.snomed.org

SNOMED CT[®] Definitions

Clinical Expressions

Concept – the computer readable "code"

Example: 823660015 (concept for the disorder of the Common Cold)

Descriptions – explain concepts in a human readable expression

Example:

Common cold (disorder) – fully specified name which is unique

Common cold – preferred term

Cold – synonym

Head cold – synonym

Relationships – define the type of association between two related concepts Example: Common Cold (disorder), a viral upper respiratory tract infection (disorder)

SNOMED CT[®] Reduces Ambiguity

SNOMED CT[®] Definitions (cont.)

Scalability and mapping

Subsets - reference sets, value sets - a collection of SNOMED CT[®] concepts used for a particular purpose

Example: Pick List, Sub-search, drop down selection in EHR **Extensions** - incorporate concepts, descriptions and terms that are unique to a particular region or country

Example: U.S. and U.K. have their own extensions **Cross maps** - explicit links to health-related classifications and coding schemes such as ICD-9-CM and ICD-10

Example: SNOMED to ICD-9 map

SNOMED CT[®] in the RPMS EHR

Where will you see SNOMED CT[®] ?

- You will select SNOMED CT[®] terms instead of ICD-9 or ICD-10 codes for diagnoses and conditions on the problem list, and clinical indications when ordering labs, medications and consults.
- SNOMED CT[®] codes will also be stored in the background in other areas of EHR.

SNOMED CT[®] in the RPMS EHR (cont.)

What does this mean for the clinical user?

- The most significant change is a redesigned and redefined problem list.
- The way problems are entered and managed and how POVs are selected has been changed.

What is the Single Most Important Thing I Can Do Now to Prepare?

Clean up existing problem lists.

- Remove redundant entries.
- Remove inappropriate entries.
- Inactivate resolved problems.
- Focus on cleaning up active problems; if time allows clean up inactive problems.
- Ensure problem entries are coded when possible.
 - When updating, search and select coded entry.
 - Data entry can run a list of un-coded problems and assist with coding (*do not ask coders to do this until the clinical staff has removed redundant and inappropriate entries).*

Mappings to ICD

Mappings are an integral part of the design of the Integrated Problem List and how SNOMED CT[®] will assist IHS with the transition to ICD-10.

These mappings automate, only when appropriate, assignment of ICD codes.

Mappings are transparent to the user. They are visible when selecting a SNOMED, on the problem list, visit diagnosis, and clinical indications.

SNOMED CT[®] Related Maps Used in RPMS

ICD-9 to SNOMED CT[®] reverse map was developed by CMS and released by NLM

• **Use in EHR** - for assistance in the transition of the problem lists to SNOMED

IED CT Lookup						
03/20/2014 💌						
738.0						Find.
- Subset		S	NOMED Concept		ICD 9)
ubset			cquired deformity of nose		738.0	
•	÷.	A	lar collapse		738.0	
Asthma			eformity of nasal sinus wall		738.0	
IS			Description	△ Relationship	∇	ICD 9
		-	Deformity of bone	Parent (IsA)		738.9
		-	Disorder of nasal sinus	Parent (IsA)		519.9
			Disorder of skull	Parent (IsA)		733.90
			Congenital deformity of wall of nasal sinus	Child		748.1
		S	NOMED Concept		ICD S)
		F	lattened nose		738.0)
	÷.	N	lasal deviation		738.0	
	÷.	N	lasal hump		738.0	
	÷.	C	Verdevelopment of nasal bones		738.0	
	÷.	P	arrot beak nasal deformity		738.0	
	÷۳.	P	ostoperative supratip depression of nose		738.0 998.8	9
	÷.	S	addle nose		738.0	
	03/20/2014 738.0 t IS	10 C C LOOKUP 03/20/2014 738.0 t 15 16 17 16 17 17 17 17 17 17 17 17 17 17	101 Clockp 10320/2014 ▼ 738.0 t 15 16 17 16 17 17 17 17 17 17 17 17 17 17	03/20/2014 738.0 Image: Signal state sta	03/20/2014 738.0 Image: SNOMED Concept Image	03/20/2014 738.0 Image: SNOMED Concept Image: SNOMED Concept

SNOMED CT[®] Related Maps Used in RPMS (cont.)

SNOMED CT[®] to ICD-9 – provided by CMS and delivered **by** NLM

 Use in EHR – for SNOMED Problems and Problems selected as POVs prior to ICD-10 transition

Integrated Problem List		ntegrated oblern List	Expand	All Chronic Cepiso	odic 🔽 Sub-acute ve 🔲 Current/Most recer	Ed	0	Get SO	CT Pick List
		Status	Onset Date	Provider Narrative	Comments	PHx	PIP	IP	ICD
I	-	Episodic		Cholelithiasis					574.20
	-	Chronic		Diabetes mellitus type 2					250.00
l	-	Episodic		Pneumonia					486.

SNOMED to ICD-9 Mapping Examples

SNOMED Term	ICD-9	Storage of Mapped Codes
Sunburn of second degree	Sunburn of second degree 692.76	1:1 This is a 1:1 match so will store in the POV when selected.
Diabetic Nephropathy	Diabetes with renal manifestations, type II or unspecified type, not stated as uncontrolled 250.00 Nephritis and nephropathy, not specified as acute or chronic, in diseases classified elsewhere 583.81	1:1: This is a 1:1 match so will store both ICD-9 codes. When problem is selected as POV, 2 POVs will store.
Ganglion of the wrist	Ganglion of joint 727.41	Narrow to Broad: Closest ICD-9 code is less specific than the SNOMED. This will store in POV when selected.

When there is no mapping available OR when the closest ICD-9 code is more specific than the SNOMED, then the system will assign .9999 un-coded. The code assigned by coders will depend on the SNOMED term selected and the remainder of the visit documentation.

SNOMED CT[®] Related Maps Used in RPMS

SNOMED CT[®] to ICD-10 – Rule-based map developed and maintained by IHTSDO with WHO, validated by AHIMA and released in U.S. by NLM

 Use in EHR – for SNOMED problems and POVs on or after the ICD-10 compliance date

lr Pr	ntegrated oblem List	Expand A	Chronic Cepisodic Sub Social/Env Inactive Cur	rent/Most recer	Get	БСТ	Pick Lis	st POV Add
	Status	Onset Date	Provider Narrative	Comments	PHx	PIP	IP	ICD
	Episodic		Cerebral edema					ZZZ.999
-	Episodic		Impaired glucose tolerance prenatal impaired GTT testing					R73.02
-	Episodic	10/27/2014	Mild pre-eclampsia pre eclamysia hypertension at 36 weeks					O14.00
-	Sub-acute	01/07/2014	Chlamydial infection					A74.9

SNOMED to ICD-10 Mapping Examples

SNOMED Term	ICD-10	Comment
Essential Hypertension	Essential hypertension I10	"Always true" rule: This is 1:1 match. Will store in POV when selected.
Type II diabetes mellitus uncontrolled	Type 2 diabetes mellitus with hyperglycemia E11.65	"Always true" rule: This is 1:1 match. Will store in POV when selected. Also contains the following map advice which coders can see – "Use additional code to identify any insulin use (Z79.4)"
Cerebral Edema	Cannot be automatically mapped	This requires more information to code. Passes map advice which can be seen by coders as hover on problem list, and in PCC data entry.

- "Always true" map rule is 1:n mapping. SNOMEDs assigned any other map rules require additional data to determine codes and the system will assign ZZZ.999 un-coded diagnosis.
- All other map rule types store ZZZ.999 "uncoded" diagnoses; however, may contain map advice.
- Any "map advice" from the SNOMED to assist coders in selecting ICD-10 code is passed for viewing in EHR and PCC data entry.

Map Advice

- Part of the SNOMED to ICD-10 mapping tool released by NLM
- Advice is specific for selected SNOMED code and part of the information that is retrieved from the SNOMED database
- Provides coders with a target code (and secondary codes when applicable) and tips to help them assign ICD-10 based on the encounter documentation
- Visible via hover on the IPL in the EHR and in PCC Data Entry for each SNOMED concept
- Can help coding staff educate providers around required documentation for ICD-10

Example of Map Advice for SNOMED Term "Cerebral Edema"

ICD: ZZZ.999

Rule #1 Target Code: G93.6 ALWAYS G93.6

Rule #2 Target Code: P11.0 IF CEREBRAL EDEMA DUE TO BIRTH INJURY CHOOSE P11.0 MAP OF SOURCE CONCEPT IS CONTEXT DEPENDENT

Rule #3 Target Code: S01.80X? IF TRAUMATIC CEREBRAL EDEMA WITH OPEN INTRACRANIAL WOUND CHOOSE S01.80X? EPISODE OF CARE INFORMATION NEEDED POSSIBLE REQUIREMENT FOR AN EXTERNAL CAUSE CODE MAP OF SOURCE CONCEPT IS CONTEXT DEPENDENT

Rule #4 Target Code: S06.1X0? IF TRAUMATIC CEREBRAL EDEMA CHOOSE S06.1X0? CONSIDER ADDITIONAL CODE TO IDENTIFY SPECIFIC CONDITION OR DISEASE EPISODE OF CARE INFORMATION NEEDED POSSIBLE REQUIREMENT FOR AN EXTERNAL CAUSE CODE MAP OF SOURCE CONCEPT IS CONTEXT DEPENDENT

Rule #5 Target Code: S06.1X0? IF TRAUMATIC CEREBRAL EDEMA WITH OPEN INTRACRANIAL WOUND CHOOSE S06.1X0? EPISODE OF CARE INFORMATION NEEDED POSSIBLE REQUIREMENT FOR AN EXTERNAL CAUSE CODE MAP OF SOURCE CONCEPT IS CONTEXT DEPENDENT

Rule #6 Target Code: S06.1X0? IF TRAUMATIC CEREBRAL EDEMA WITHOUT OPEN INTRACRANIAL WOUND CHOOSE S06.1X0? EPISODE OF CARE INFORMATION NEEDED POSSIBLE REQUIREMENT FOR AN EXTERNAL CAUSE CODE MAP OF SOURCE CONCEPT IS CONTEXT DEPENDENT No mapping advice available

SNOMED CT[®] vs. ICD For Clinician Documentation

SNOMED	ICD
 Better clinical coverage 100,000 terms in clinical findings hierarchy 	 Statistical focus, less common diseases lumped together ICD-9-CM 14,000 terms ICD-10-CM 68,000 terms
Used directly by clinicians during process of care	Used by coding professionals after episode of care
More clinician friendly language	Not all terms are clinician friendly and some have little clinical relevance
Terms reflecting any level of granularity appropriate for situation	 Can include awkward terminology due to embedded coding guidelines Presumes knowledge of coding rules Dictates level of granularity (NOS, NEC)
Flexible data retrieval organized in multiple hierarchies	

Fung, KW. NLM, NIH. 2010. How SNOMED CT can help in the ICD-10-CM transition. AHIMA.

Examples

Condition	ICD-9	ICD-10	SNOMED CT®
Asperger's Disorder	Other specified pervasive developmental disorders 299.8	Asperger's disorder F84.5	Asperger's Disorder 23560001
Apert Syndrome	Acrocephalosyndactyly 755.55	Congenital malformation syndromes predominantly affecting facial appearance Q87.0	Apert Syndrome 205258009
Metabolic acidosis	Acidosis 276.2	Acidosis 276.2	Metabolic acidosis 59455009

Source: AHIMA

INTEGRATED PROBLEM LIST -TIPS FOR A SMOOTH TRANSITION

What is a "Problem List"?

IHS problem list historically reflected chronic problems. POVs reflected issues addressed during each encounter.

2014 Certification shifted this approach. "Problem List" simply describes problems that have been documented for the patient. This includes essentially all diagnoses (chronic, episodic, and problems requiring follow-up).

As a result:

IPL will represent all problems that have been documented, including episodic and administrative, and also incorporates care planning documentation.

Integrated Problem List (IPL): New Features

- Non-redundant SNOMED-based list
 - SNOMED maps to ICD or assigns un-coded in background
- POV selection from IPL
- Used for ALL problems— chronic, episodic, subacute, social/environmental
- Used by ALL clinicians who document care
- Nationally vetted and released Pick Lists
- Care Planning Documentation

Integrated Problem List Display

	Status	Onset Date	Provider Narrative		Comments				PHx	PIP	IP	ICD
1	Chronic		Hyperlipidemia		This is a test note :							272.4
	Chronic		Diabetes mellitus type 2									250.00
1	Episodic		Pelvic pain I musle pain, equisitely internis	tender left obturator								789.09
I	Sub-acut		Nontraumatic rotator cuff tear righ	t	Previous nontraumatic rot months of physical therap	ator c y. :	uff tear in 2011. Patient's pain was resolved, range o	f motion and strength restoerd with 6				727.61
	Latest	All Active	1									
	mul	Problem Info				-	Visit Info				-	
	FRVS	Goal Notes		Patient Instructions/Car	re Plan	-	Visit Instructions	Care Plan Activities			-	
		Pain resolution Patieint's goal surgery or inje	n, restore full ROM and strength. I is to reach this without further, actions.	Physical therapy for 3 significantly improved agreed to additional im interventions.	months. If not OR if worsen pateint raging and other		Referral to PT. Follow up in 2 weeks. Modified by: RICHARDS,SUSAN P 03/12/2014					
		Modified by R	ICHARDS.SUSAN P 03/12/2014	Modified by: RICHARD	IS,SUSAN P 03/12/2014							

Data Migration to IPL

All data will be retained when moving data from the Problem List to the new Integrated Problem List.

The following data will change/move:

- Notes will be retained but are now called "Comments"
- Provider narratives will have leading * until the problem is updated with a SNOMED term

*Hypertension *Osteoarthritis right knee

• Once problem are updated they will be displayed in SNOMED term provider text format

Essential Hypertension

Osteoarthritis of knee | right

Statuses will be migrated to new status (see following table)

Problem Statuses

Current (EHRp12)	Migrate to (EHRp13)	Examples
Active	Chronic	Diabetes, Hypertension, Asthma
Personal History	Inactive	Inactive problem of Chicken Pox
Inactive	Inactive	

New Statuses	Examples
Sub-acute	Breast mass, ankle injury – something you are working up or that needs short-term follow up
Episodic	Cold, female UTI – disposition straightforward "follow up PRN or if not improving"
Social/Environmental	Homeless, lack of running water, alcoholic in home

IPL Main Screen

Problem list prior to conversion to SNOMED

	IPL	- Family	/Hx 🔨 Surgical Hx 🔨 Pt Goals	Anticoag	g 🛛 Eyeglass	AMI	Strok	e					(
lı Pr	ntegrated oblem Lis	t Expa	Ind All Social/Env Inactive I	Sub-acute Current/Most rece	nt Inpatient	6	Get SCT P	Pick List	POV	Add	E	dit	Delete
	Status	Onset Date	Provider Narrative		Comments					PHx	PIP	IP I	CD
	Chronic		*FLAT FEET										734.
=	Chronic	08/16/2005	*Abnormal EKG		Pediatric cardiologist sug ekg with Asheville Cards RVH : Refer to cards if p	ggest repeat EKG 8/07 : extreme rig alpitations, feels f	2 yrs and fax to the ht axis deviation, ir aint, near syncope :	m for reading acomplete RE	g. : normal 3BB; ?				794.31
_	Chronic	07/06/2006	*Exercise induced asthma	_		/							.9999
-	Chronic		*seborrhea occipital scalp										690.11
Note the leading * which identifies This v the problems that require "note conversion to SNOMED					was renamed from es"	m	Mappings to is not an exa mapping to l Library of Mo	ICD, will ct match CD. Map edicine	map to . OR less ; oping from	.9999 i granul m Nati	f ther ar onal	e	

IPL Main Screen (cont.)

All problems after converting to SNOMED terms

lı Pr	ntegrated oblem List	and All	Chronic V Episodic	Sub-acute	Get SCT Pick List	POV	Add		Edit Delete	е
	Status 🔺	Onset Date	Provider Narrative		Comments	PHx	PIP	IP	ICD	
	Chronic		Asthma						493.90	
=	Episodic		URI - Upper respiratory i	nfection					465.9	
=	Social/Environmental		Transportation barrier im resources	pedes ability to use community					.9999	
-	Sub-acute		Breast lump left upper o	uter quadant, tender					611.72	

Essentials for IPL

The IPL has a wide range of functionality. Most of the functionality is optional for clinicians, however, enabling staged implementation.

Required entry is not overwhelming, so we will begin with the **three required steps** essential in the early transition period.

Easing the Stress of the First Days

Scenario:

It is your first day of clinic after EHRp13 was installed. You have fewer patients scheduled in anticipation of the software changes.

Your first patient is here for a follow up and has a sore throat and cold symptoms.

Update Problems

Update the problems you are addressing with the patient today.

• Note that any problem with leading * in provider narrative needs update to SNOMED prior to use.

NOT	FICATION	S COVER SI	HEET VTRIAGE PROBLEMS PRENATAL WELL CHILD WELLNESS MEDS LABS ORDERS	CON	SULTS	N NC	ITES 💽 💶 🕨						
Prot	Problem List Family History Surgical Hx Patient Goals AMI Anticoagulation Asthma Eyeglass Stroke												
Integrated Problem List Expand All Image: Chronic													
	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 (PATERNAL ONLY)				V18.0						

Step 1:

Update Problems to Address Today

This is why cleaning up problem lists and having data entry assist in coding un-coded problems is helpful.

1. Highlight problem for update and click **Get SCT**.

NO	FIFICATI	ONS	COVER S	HEET TRIAGE	PROBLEMS	PRENATAL WELL C	HILD WELLNE	ESS	MEDS YLAB	SCORDE	ERS COM	SULTS	NY.	OTES	
Pr	blem Lis	t	Family Histor	y Surgical Hx	Patient Goals	AMI Anticoagulati	on Asthma	Eye	place Stroke						
F	Integrat roblem	ed List	Expan	nd All	nic 🔽 Episod al/Env 🔽 Inactiv	ic 🔽 Sub-acute e 🔽 Current/Most rec	ent I	ü	Get SCT	ick List	POV	Add		Edit	Delete
	Status	1	Onset Date	Provider Narrative			Comments			-	PHx	PIP	IP	ICD	
	Chron	ic	08/02/2004	*PTSD								1		309.81	
1	Chron	nic		*ALLG RHINITIS										477.9	
1	Chron	nic		*L NASAL POLP										471.9	

Step 1:

Update Problems to Address Today (cont.)

For most of your ICD coded problems, this will return a selection of SNOMED terms to choose.

2. Highlight choice and click **Select** to update the entry.

If you have un-coded entries or codes, do not reverse map. You may use Pick List or SNOMED search to update the problem.

E	ICD 9 To SNOMED CT Lookup		×				
	Search Date: 01/24/2014	-					
	ICD 9 value: 309.81	Record	Find				
	Subset	SNOMED Concept	ICD 9				
	Subset	Chronic post-traumatic stress disorder	309.81				
	IHS Problem List Asthma	Complex posttraumatic stress disorder Concentration camp syndrome	309.81				
	Cog Funct Status	Delayed posttraumatic stress disorder following military combat	309.81				
	Family History	Nightmares associated with chronic post-traumatic stress disorder	307.47 309.81				
	INIG T Fromenia	Posttraumatic stress disorder Posttraumatic stress disorder delayed onset	309.81				
		Rape trauma syndrome: compound reaction	309.81				
		Sele	ict Cancel				
Problem List	Family History Surg	ical Hx Patient Goals AMI Anticoagula	ition Asthma Eyeglass Stroke				
Integrated Problem List	Expand All	Chronic C Episodic Sub-acute Social/Env Inactive Current/Most re	ecent I Et Get SCT Pick List	POV	Add		Edit Delete
Status	Onset Date Provider	Narrative	Comments	PHx	PIP	IP	ICD
Chronic	08/02/2004 Posttrau	matic stress disorder					309.81

Step 2:

Add Any New Problems Addressed Today

3. Click Pick List.

NOT	FICATION	S COVER SH	IEET (TRIAGE)	PROBLEMS	PRENAT.	AL (WELL CHILD		ess (meds	(LABS		RS CON	SULTS	NNC	DTES	
Problem List Family History Surgical Hx P				Patient Goals	s AMI Anticoagulation Asthma Eyeglass Stroke										
Integrated Problem List Expand All Social/			nic 🔽 Episodi al/Env 🔲 Inactive	ic ⊽Si e ∏C	ub-acute urrent/Most recent I	6	Get	SCT	Pick List	POV	Add		Edit	Delete	
	Status	Onset Date	Provider Narrative	е		Co	omments				PHx	PIP	IP	ICD	
	Chronic	08/02/2004	Posttraumatic str	ess disorder										309.81	
	Chronic	ronic *ALLG RHINITIS												477.9	

Step 2:

Add Any New Problems Addressed Today (cont.)

4. Select problem(s) and Save.


At this point, the problems you need to select as POV and use for Clinical Indications when placing orders are updated.

Only problems that have been updated to SNOMED are selectable on the Clinical Indication dropdown.

Step 3: Select POV

- 5. Highlight the problems you managed today.
- 6. Click the **POV** button.

NOTI	FICATIONS	COVER SH	HEET TRIAGE PROBLEMS	PRENATAL NWELL CHILD N	WELLNESS MEDS MLABS	ORDERS	CONS	SULTS	VN0	TES	•
Prob	olem List	Family History	Surgical Hx Patient Goals	AMI Anticoagulation /	Asthma Eyeglass Stroke		_				
lr Pr	ntegrated oblem List	Expan	d All Chronic Cepisodic	: 🔽 Sub-acute Current/Most recent I	Get SCT Pick	List PO	v	Add		Edit De	lete
	Status	Onset Date	Provider Narrative	Com	iments	-	PHx	PIP	IP	ICD	
	Episodic		Viral pharyngitis							462.	
	Episodic		Common cold							460.	

Step 3: Select POV (cont.)

7. Click **Save** to set as POVs.

POV											
ID	Status	Prov. Narrativ	POV	Episodicity	Prov. Text	Goal Notes	Care Plans	Visit Instructions	Pt Ed	Tx/Regimen/ FU	Tx/Regimen/FU display only
1377	7 Episodic	Viral pharyngitis	A.	C First episode C New episode C Old episode C Ongoing episode C Undefined episodicity					CDP CMED CEX CN CLA CP	Treatment/ Regimen	
1377	7 Episodic	Common cold	R	C First episode C New episode C Old episode C Ongoing episode C Undefined episodicity					F DP F MED F EX F N F LA F P	Treatment/ Regimen	
6936	5 Chronic	Posttraumatic stress disorder	R	C First episode C New episode C Old episode C Ongoing episode C Undefined episodicity					Г DP Г MED Г EX Г N Г LA Г P	Treatment/ Regimen	
Pri Vi	imary PO' ral pharyn	v gitis									Save

SNOMED CT	Provider Narrative	Provider Text	ICD	Priority /
Viral pharyngitis	Viral pharyngitis		462.	Primary
Common cold	Common cold		460.	Secondary
Posttraumatic stress disorder	Posttraumatic stress disorder [309.81	Secondary

Review of the Few Required Steps

For each existing problem you will address today:

- 1. Highlight problem for update and click **Get SCT**. If un-coded or if does not return a SNOMED choice, you may use a Pick List or Search for a SNOMED term.
- 2. Highlight choice and click **Select** to update entry.

For each new issue you will address today:

- 3. Click **Pick List**.
- 4. Select problem(s) and save.

Enter Orders if needed.

Select POVs:

- 5. Highlight the problems you managed today.
- 6. Click the **POV** button.
- 7. Save.

Add Problem

Adding a problem

Only two fields are required to enter a problem:

- SNOMED CT
- Status defaults to "episodic" unless it is defaulted differently in pick list

All other fields are optional.

Add Problem (cont.)

- You may select from pick list by clicking **Pick list**.
- You may search for SNOMED by entering text and clicking ellipsis (...).

Add Problem		×
Problem ID DB-5	Pregnancy Related Use as POV	Save Cancel
* SNOMED CT		Get SCT Pick list
Provider Text		
,		

Edit Problem

- Edit prompts user for SNOMED if the problem has not yet been updated.
 - You have an additional option of using "Get SCT" option if the problem has an ICD-9 code.



Add/Edit Problem – Optional Fields

	Integrated Proble	em Maintenance - Edit Problem	and the second			×
	Problem ID DB	8-1 Priority 0	Use as POV		Save	Cancel
Term and Status are required fields.	* SNOMED CT * Status * Required Field	C Chronic C Sub-acute C Episod	ic C Social/Environmental C Inac	tive C Personal H	Get SCT tx	Pick list
٦	Provider Text	bowel, bladder, peironeum, ovaries, uret Endometriosis bowel, bladder, pei	ers roneum, ovaries, ureters 617.9			
	Qualifiers	Severity:	Clinical Course			
These optional fields may be		Severity	Clinical Course			
used to add information.	Date of Onset					
	Comments				Add	Delete
	Narrative			Date	Author	
				_	_	
Г	Care Plan Info		Add Visit In:	struction / Care Plan	is / Goal Acti	vities
Care planning is only editable if selected as POV.	Goal Notes	Care Plans	Visit Instructions	Care Planni	ng Activitie	:5

Add/Edit Problem – Optional Fields (cont.)

		Integrated Problem ID D * SNOMED CT * Status * Required Field	em Maintenance - Edit Proble B-3 Priority 0 - Asthma C Chronic C Sub-acute C	Episodic C Social/Environment	Primary al C Inactive C Personal	Save Cancel Get SCT Pick list Hx	×
		Provider Text	Asthma 493.90		_		
		Qualifiers	Severity: Severity	Clinical Course	Episodiciti	es	Optional,
		Asthma	Classification	Control	First episod New episod Old episode Ongoing ep Undefined e	e e sisode episodicity	Asthma prompts only exposed for
		Date of Onset Comments				Add Delete	Asthma problems
	٦	Narrative			Date	Author	
Care planning	L	Care Plan Info			Add Visit Instruction / Care Pla	ins / Goal Activities	
now equable	ſ	Goal Notes	Care Plans	Visit Instructio	ns Care Plann	ing Activities	

Search Tools - Pick Lists

- Over 50 vetted SNOMED pick lists are available for import.
- Pick lists may be used as imported or customized by CAC.
- Available customizations:
 - Default status
 - Group similar pick list items together for display
 - Add/Delete terms

Pick List Example

	PickList Selection			
	Manage PickLists			
I	PickList	SNOMEDCT Desc		
	Cardiology * Family Practice ICD 10 demo Prenatal primary diagnoses	 Cardiology Chronic ischemic heart disease 	3	
		Conger (0) Chronic ischemic heart disease	G: Cardiolog	gy S: Chronic
		 Diabetes Diabetes mellitus type 2 Diabetic neuropathy Diabetic renal disease Diabetic retinopathy Health Maintenance Well child visit Well child visit, 2 month Well child visit, 2 month Well man health examination Well woman health examination Infectious Disease 	4	
		Cancel	Save	

Search Tools: "Get SCT" Reverse Mapping Tool

Allows for quick conversion from ICD9-encoded problem to SNOMED.

• Highlight problem and click Get SCT.

	IPL	Fam	ily Hx 🔨 Surgical Hx 🔨 Pt Goals 🔨	Anticoag Eyeglass AMI Stroke				
Int Prol	egrated blem List	Expand	All Chronic C Episodic C Sub-acute	ent Inpatient Get SCT Pick List PO	Add	Ed	lit	Delete
5	Status	Onset Date	Provider Narrative	Comments	PHx	PIP	IP	ICD
	Chronic		*ANGINA - IMPROVED	NORMAL CHOLESTEROL RISK FACTORS :				413.9
	Chronic		*HYPOTHYROIDISM					244.9
_	Chronic	04/10/2007	Hemorrhoids					455.6
	Chronic	04/10/2007	Restless legs					333.94
_	Chronic	04/11/2007	*Chronic Obstructive Pulmonary Disease					496.
	Chronic	10/22/2007	Essential hypertension					401.9
	Chronic	10/22/2007	*ABDOMINAL PAIN	10/30/07 ABD U/S SHOWS CHRONIC CHOLECYSTITIS. :				789.09
_	Chronic	10/22/2007	*CONSTIPATION					564.09
	Chronic	10/25/2007	Electrocardiogram abnormal					794.31
	Chronic		*HYPERLIPIDEMIA					272.2
	Chronic	10/29/2007	*POST HERPETIC NEURALGIA					053.19

Return of "Get SCT"

Returns ICD9 to SNOMED matches. Also returns the parent (less granular) and children (more granular) of the matches from which clinicians can choose. *This does not work for un-coded diagnoses, which is why problem list cleanup is so important . . .*

Search Date: 10/25/2013		2
CD 9 value: 272.2		Fied
- Subset	SNOMED Concept	ICD 9
Subset	 Cerebral degeneration associated with generalized lipidosis 	330.2
1HS Problem List	Cuteneous xenthome	272.2
Con Funct Status	Diffuse normolipemic plane xanthomatosis	272.2
CQM Problems	Euplive xanthoma	272.2
Family Hatory	Familial combined hyperlipidemia	272.2
NIST Problems	Familial type 3 hyperlipoproteinemia	272.2
	Generalized plane xanthoma	272.2
	 Mixed hyperlipidemia 	272.2
	Plane xanthoma	272.2
	 Primary genetic mixed hyperlipidemia 	272.2
	Secondary xanthomatous infiltration of the skin	272.2
	 Tubero-eruptive xanthoma 	272.2
	Tuberous xanthoma	272.2
	Verruciform xanthoma	272.2
	a) Xanthona diabeticorum	250.80 272.2
	3 Xanthoma of eyelid	272.2 374.51
	Anthoma secondary to lymphedema	272.2 457.1
	() Xanthomatosis	272.2
	4 Xanthomatosis, familial	272.2

-	Generalized plane xanthoma		272.2
	Mixed hyperlipidemia		272.2
	Description	Relationsh.	ICD 9
L	Hyperlipidemia	Parent (IsA)	272.4
-	Primary combined hyperlipide	emia Child	272.4
1	Secondary combined hyperlip	pidemia Child	272.4
	SNOMED Concept		ICD 9
-	Plane xanthoma		272.2

SNOMED Lookup

• If you select the Fully Specified Name, it will store the preferred term. Clicking the plus sign (+) allows the use to view synonyms from which to choose.

earch: leprosy			IHS SNOMED ALL	SNOMED
_]Subset		Problem	'is a' relationship	Mapped ICD
Subset		Leprosy	is a Mycobacteriosis (disorder)	030.9
IHS Problem List		Mycobacteriosis	is a Disease due to Gram-positive bacteria (disorder)	031.9
Asthma	÷	Borderline leprosy	is a Leprosy (disorder)	030.3
Cog Funct Status CQM Problems	æ-	Lepromatous leprosy	is a Cutaneous infectious disease due to Mycobacteria (disorder) is a Leprosy (disorder)	030.0
NIST Problems		Tuberculoid leprosy	is a Cutaneous infectious disease due to Mycobacteria (disorder) is a Leprosy (disorder)	030.1
	æ	Indeterminate leprosy	is a Cutaneous infectious disease due to Mycobacteria (disorder) is a Leprosy (disorder)	030.2

is a Mycobacteriosis (disorder)	030.9
	Preferred
3	Synonym
ease	Synonym
to Mycobacterium leprae	Synonym
m leprae infection	Synonym
	is a Mycobacteriosis (disorder)

SNOMED Lookup by Synonym

SNOMED CT Look	ир			×		
Diagnosis Lookup: Maximum Results :	C Fully specified name © 25 C 50 C 100	© Synonym © 200 ⊂ ALL	Search Date: 09/04/2013	•		
Search: leprosy			IHS SNOMED AL	L SNOMED		
Subset		Problem	'is a' relationship	Mapped ICD		
IHS Problem List		Borderline leprosy	Borderline leprosy (disorder) is a Leprosy (disorder)	030.3		
Asthma Cog Funct Status CQM Problems Family History NIST Problems	ma Funct Status A Problems ily History T Problems	Full lepromatous leprosy	synonym for Lepromatous leprosy (disorder) is a Cutaneous infectious disease due to Mycobacteria (disorder) is a Leprosy (disorder)	030.0		
		Full tuberculoid leprosy	synonym for Tuberculoid leprosy (disorder) is a Cutaneous infectious disease due to Mycobacteria (disorder) is a Leprosy (disorder)	030.1		
		Group B leprosy	up B leprosy synonym for Borderline leprosy (disorder) is a Leprosy (disorder)			
		Group I leprosy	synonym for Indeterminate leprosy (disorder) is a Cutaneous infectious disease due to Mycobacteria (disorder) is a Leprosy (disorder)	030.2		
		Indeterminate leprosy	Indeterminate leprosy (disorder) is a Cutaneous infectious disease due to Mycobacteria (disorder) is a Leprosy (disorder)	030.2		
		Lepromatous leprosy	Lepromatous leprosy (disorder) is a Cutaneous infectious disease due to Mycobacteria (disorder) is a Leprosy (disorder)	030.0		
		Leprosv	Leorosv (disorder)	030.9 💌		
			Select	Cancel		

 Option to search/display by synonym – also displays the fully specified name and "is a "relationship.

POV Selection Tool

roblem Lis

Statu

Sub-a Social Chron

E Episo

- Allows for quick selection of one or more SNOMED encoded problems
- Highlight >>POV button

	Onset	Date Pr	ruider h	larrative				Comments			HX	PIP IP	ICD
	Crister	W	ood ast	hma				Commente			1		495.8
ental	10/30	2013 M	edical re	cords review TESTI	NG TT1566								.9999
	10/15	2013 CI	hronic m	ixed headache syndro	me I testing	Get SCT							339.89
	09/25	2013 E	drinsic a	sthma with asthma at	tack Edited	text		testing edit :					493.02
		Di	abetes r	mellitus									784.99
POV													ž
ID	Status	Prov. Narrativ	POV	Episodicity	Prov. Text	Goal Notes	Care Plans	Visit Instructions	Pt Ed	Tx/Regimen/ FU	Tx/Regim	en/FU display only	1
1376	Sub-acut	Wood asthma	4	C First episode C New episode C Old episode C Ongoing episode C Undefined episodicity					FOP FMED FEX FN FUA FP	Treatment/ Regimen			
1376	Social/Er	Medical records review TESTIM TT1566	4	C First episode C New episode C Old episode C Ongoing episode C Undefined episodicity					TOP THED TEX TN TUA TP	Treatment/ Regimen			
1375	Chronic	Chronic mixed headache syndrome test Get SCT	4	C First episode C New episode C Old episode C Ongoing episode C Undefined episodicity					FOP FMED FEX FN FUA FP	Treatment/ Regimen			
1374	Chronic	Extrinsic asthma with asthma att Edited text	P	C First episode C New episode C Old episode C Ongoing episode					F DP F MED F EX F N F LA F P	Treatment/ Regimen			

POV Selection Tool (cont.)

From this tool, you may simply click save and store items as POV or use any optional fields:

- Add Episodicity
- Enter Provider Text specific to this encounter (does not store back to problem)
- Goal Notes
- Care Plan notes
- Visit Instructions
- Patient Education
- Treatment/Regimen terms
- Change primary POV
- Last column is display only

Changes for Data Entry/Coding Staff

- Much of the process is unchanged
- No longer need to code un-coded problems
- Will still validate and assign appropriate POV ICD codes
- Provider narrative will be more consistent:
 - Format: SNOMED term | provider text
 - Example: Essential Hypertension | uncontrolled

IPL – Projected Progression of Usage

Timeframe	Feature	Rationale
Phase 1 – transition and updating IPL	Get SCT reverse mapping and pick lists	Updating IPL
Phase 1 – transition and updating IPL	POV dialog	Quick way to add POVs

Phase 1: "Surviving the tsunami of software"

 These quick tools allow clinicians to get through their clinical encounters with relative ease.

IPL – Projected Progression of Usage (cont.)

Timeframe	Feature	Rationale
Phase 2 – getting comfortable	Visit instructions on POV dialog	Quick way to add visit instructions. Enter once, display in PHR, print on CS, and drop into TIU note.
Phase 2 – getting comfortable	Patient education on POV dialog	Quick way to add Pt Ed
Phase 3 – optimizing documentation	Goal notes, care plan notes	Therapeutic goals and plans of care from various team members enhances communication. Displays on Clinical Summary, PHR.
Phase 3 – optimizing documentation	Treatment/regimen	Can enhance documentation of follow-up instructions, case management, protocol driven care, and nursing care

** Visit instructions, goals, and care planning notes display on the Clinical Summary and Transition of Care Summary and can drop into encounter documentation.

It Takes a Village to Migrate to IPL

Recommend leveraging *all clinicians* to participate as they encounter opportunities to update in their workflow:

- Nursing Example: ordering standing order labs can update problems prior to selecting as Clinical Indication.
- Pharmacy Example: update problems and select as POVs for medication refills.

It Takes a Village to Migrate to IPL (cont.)

Who will assist in Problem List migration?

• It is NOT appropriate to engage non-clinician staff (clerks, coders, medical records) in the migration of the problem lists from ICD-9 to SNOMED.

Summary

- Clean up problems now.
- Plan approach to problem list migration.
- No data is lost in the migration to SNOMED.
- Problems can be updated and selected as POVs in three steps.
- Only 2 fields are mandatory for new problems .
- Transition tools: "Get SCT" reverse mapper and Pick Lists.
- SNOMED with mapping tools stabilizes front end eases the impact to clinicians with transition to ICD-10.
- Minimal change for Coding. Coders will have have more controlled, cleaner narratives from which to code.
- Map advice will aid coders with the ICD-10 transition.
- New TIU objects allow data entered on IPL to drop into encounter notes [requires CAC configuration].

Resources

Care Planning information at end of slide set for your review.

SNOMED issues – select "SNOMED (DTS) for application <u>http://www.ihs.gov/rpms/index.cfm?module=Feedback</u>

Enhancement requests – select "Electronic Health Record (EHR)" for application

http://www.ihs.gov/rpms/index.cfm?module=Feedback

ICD 10 Documentation examples

http://www.crozerkeystone.org/healthcare-professionals/icd-10-update/icd-10-documentation/

Questions?



It won't make EHR work any better, but if it makes you feel good "GO FOR IT!"

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Even good change is stressful...

SUPPLEMENTAL INFO ON CARE PLANNING

Care Planning

Optional documentation

- Goal notes
- Care Plan notes
- Visit Instructions
- Patient Education
- Treatment/Regimen/Follow up

Care Planning (cont.)

May be accessed:

- From Add/Edit Problem dialog
- From POV selection dialog

Content populated by:

- Free text
- Site developed templates (like used in note)
 Documentation can be dropped into your encounter notes using TIU objects.

Care Planning (more)

Field	Common Usage
Visit Instructions	Used for any problems managed during visit. Example : A1C elevated. Increase metformin. Eliminate soda and juice, opt for water. Increase walks to 30 min/day. Refer to diabetic education.
Goal Note	Entered when diagnose chronic, subacute, or social environmental problem and updated periodically. <i>Example</i> : A1C less than (<) 7
Care Plan Note	Entered when diagnose chronic, subacute or social/environmental problem. <i>Example</i> : A1C every 3 months until reach goal, then every 6 months. Yearly dilated eye exam. Lipid, nephropathy screening yearly (etc.).

Care Planning

Field	Common Usage
Treatment/Regimen/ Follow up	Interventions, treatments, follow up that may be selected <i>Examples</i> : Follow up in 3 weeks, treatment adjusted per protocol
Patient Education	 May store subtopics for problem: Disease Process Exercise Lifestyle Adaptation Medications Nutrition Prevention

Care Planning - From Add/Edit Dialog

Integrated Problem Maintenance - Edit Problem	×	
Problem ID DB-1 Priority 0 🔹 🔽 Use as POV 🔽 Primary Save C	Cancel	
SNOMED CT Endometriosis Get SCT Pic * Status C chronic C Sub-acute © Episodic C Social/Environmental C Inactive C Personal Hx * Required Field	ik list	
Provider Text bowel, bladder, peironeum, ovaries, ureters Endometriosis bowel, bladder, peironeum, ovaries, ureters 617.9	Add Visit Instructions / Care Plans / Goal Notes / Care Planning Activi Visit Instructions	Patient Education provided
Qualifiers Severity: Clinical Course Severity Clinical Course Episodicities	Date Status 09/04/2013 Signed Most visits will have visit instructions.	Disease Process Nutrition Exercise Medications Prevention
Date of Onset	Goal Notes	Comprehension Level GOOD
Comments Add 0	09/04/2013 C Active G Unsigned Goals will be less common, mostly for chronic problems at diagnosis and at points of change.	Readiness to Learn EAGER TO LEARN
NarrativeDate Author	Patient Instructions/Care Plan	Treatment/Regimen/Follow-up Current Visit - Care Planning Activities
Care Plan Info Add Visit Instruction / Care Plans / Goal Activiti Control to the plane of the pl	09/04/2013 C Active Care plan will be less common, mostly for chronic problems at diagnosis and at points of chrone chronic problems at diagnosis and at points of chrone	Treatment/Regimen/Follow-up
Goal Notes Care Plans Visit Instructions Care Planning Activities	change.	Education Provided Comprehension Level: GOOD Length: 6 mins Readiness to Learn: EAGER TO LEARN Disease Process Exercise Medications
		OK Cancel

Care Planning - From Add/Edit Dialog (cont.)



Care Planning - From POV Dialog

POV													×
ID	Status	Prov. Narrativ	POV	Episodicity	Prov. Text	Goal Notes	Care Plans	Visit Instructions	Pt Ed		Tx/Regimen/ FU	Tx/Regimen/FU display only	
1376	Episodic	Asthma	C	C First episode New episode Old episode Ongoing episode Undefined episodicity			dd eplace			MED N P	Treatment/ Regimen		
1374	Episodic	Diabetes mellitu: This is a test	N	 First episode New episode Old episode Ongoing episode Undefined episodicity 			elete		DP EX LA	☐ MED ☐ N ☐ P	Treatment/ Regimen		
Pri	ma ry PO V	1											
As	thma			•									
												Save Cano	el
										Goal I	lote		×
										Note	that the t	template icon is	_



Click here for templates

Templates for Goals, Care Planning, and Visit Instructions

Note template icon in lower-right corner. Click to expose template option.



Template Option

	IPL Visit Instructions DM Template		
л Л	 Nutrition: Diet rich in whole grains, fresh vegetables a healthy fats from walnuts, salmon, avacado, o foods, refined grains, processed foods. Avoid sugery drinks including fruit juces, av herbal teas, seltzer with a splash of fruit juic Referrals/Consults: Recommended patient see the following: 	and fruits, lean meats, olive oil, avoidance of high sugar oid diet drinks. Opt for water, e. V Nutritionist DM Educator Pharmacy case manager	<u> </u>
		Physical therapy Podiatrist Cardiology Endocrinologist	
	8 Font Size All None	* Indicates a Required Field	Preview OK Cancel

Care Plan View

lı Pr	ntegrated oblern List	Expand	All Chronic C Episodic	Sub-acute	Innatient			Get SCT Pick List	POV	Add	E	dit Delete
	Status	Onset Date	Provider Narrative		Comments				PHx	PIP	IP I	CD
	Chronic		Hyperlipidemia		This is a test note :							272.4
	Chronic		Diabetes mellitus type 2									250.00
	Episodic		Pelvic pain musle pain, equisitely internis	tender left obturator								789.09
=	Sub-acute	e	Nontraumatic rotator cuff tear righ	t	Previous nontraumatic rota months of physical therapy	ator cuf y. :	ff tear in 2011. Patient's pain was resolved, r	ange of motion and strength restoerd with 6				727.61
	Latest	All Active										
	ppy-1	Problem Info					Visit Info				-	
	PRVS	Goal Notes		Patient Instructions/Care	e Plan -	*	Visit Instructions	Care Plan Activities			<u>^</u>	
		Pain resolution Patieint's goal surgery or inje Modified by: R	n, restore full ROM and strength. is to reach this without further, ctions. ICHARDS,SUSAN P 03/12/2014	Physical therapy for 3 n significantly improved C agreed to additional im- interventions. Modified by: RICHARD	nonths. If not DR if worsen pateint aging and other S,SUSAN P 03/12/2014	•	Referral to PT. Follow up in 2 weeks. Modified by: RICHARDS.SUSAN P 03/12/	2014			7	
	Episodic		Well woman health examination									.9999
Care Planning

- Care Planning is signed and secure.
- Care planning notes are logically deleted leaving an audit trail.
- Problems with care planning documentation cannot be deleted, only inactivated.

Treatment/Regimen

- Currently contains some data points for clinical quality measures
- Will be pared down for release
- Will welcome some field input through RPMS feedback for relevant additions

IPL – Care Planning Considerations

Use of Goal Notes, Care Plan Notes, Visit Instructions enhanced by TIU Templates

• Consider local committee to work with CAC on development of these.

Review tools and consider drafting some guidance around care planning documentation.

- Who should document?
- Appropriateness of content
- When to delete notes
- When to inactivate notes

TIU Object "Active Problems w/o Dates"

Displays problems marked as "Chronic"

```
Chronic Problems:

Obesity | Can add clarification

Chronic otitis externa | right

Diabetes mellitus type 2 |

Asthma |

Lactocele | This is a test

Abnormal findings diagnostic imaging heart+coronary circulat |

Closed fracture of proximal ulna, comminuted | left, traumatic acute, swell

ing and hematoma at site
```

TIU Object "V Problem List"

Displays the problems selected as POV for current visit and visit instructions

```
Problem: PCOS - Polycystic ovarian syndrome |
Mapped ICD:256.4 Status: CHRONIC
-Instruction Date: 3/12/2014@12:51:21
-Signed by:
 -INSTRUCTIONS:
  Test instruction
Problem: Well woman health examination |
Mapped ICD:.9999 Status: EPISODIC
Problem: Nontraumatic rotator cuff tear | right
Mapped ICD:727.61 Status: SUB-ACUTE
Problem: Pelvic pain | musle pain, equisitely tender left obturator internis
Mapped ICD:789.09 Status: EPISODIC
-Instruction Date: 3/12/2014@17:53:40
-Signed by: RICHARDS, SUSAN P
 -INSTRUCTIONS:
  Referral to pelvic PT. Use vaginal muscle relaxers at night as needed.
```