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	
Ξ	Chronic		Hyperlipidemia		This is a test note :					1		272.4	
2	Chronic		Diabetes mellitus type 2									250.00	
3	Episodic		Pelvic pain (musle pain, equisitely internis	tender left obturator								789.09	
=	Sub-acut	e	Nontraumatic rotator cuff tear I righ	t.	Previous nontraumatic ro months of physical therap		cuff tear in 2011. Patient's pain was resolved, range o	f motion and strength restoerd with 6				727.61	
	Latest	All Active Problem Info	1				Visit Info						
Image: Chronic Image: C	Goal Notes Patient Instructions/Care			e Plan	-	Visit Instructions	Care Plan Activities			-			
		Pain resolution, restore full ROM and strength. Patient's goal is to reach this without further, surgery or injections. Modified by: RICHARDS,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 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 the EHR.

SNOMED CT[®] in the RPMS EHR

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 developed by Centers for Medicare and Medicaid Services (CMS) and released by the NLM

Use in EHR - assist in the transition of problem lists to SNOMED

🔜 ICD 9 To SNOMED CT Lookup						×
Search Date: 03/20/2014 💌						
ICD 9 value: 738.0	_	_				Find
Subset			SNOMED Concept		ICD S	Э
Subset	÷.	Þ	Acquired deformity of nose		738.0	
IHS Problem List	•		Alar collapse		738.0	
Asthma	þ.		Deformity of nasal sinus wall		738.0)
Cog Funct Status CQM Problems			Description $ riangle$	Relationship	$\overline{\Delta}$	ICD 9
Family History NIST Problems			Deformity of bone	Parent (IsA)		738.9
NIST Hobienia			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
			SNOMED Concept		ICD 9	Э
	÷.		Flattened nose		738.0)
	÷.		Nasal deviation		738.0)
	÷.		Nasal hump		738.0)
	÷.		Overdevelopment of nasal bones		738.0)
	÷.		Parrot beak nasal deformity		738.0)
	Ð		Postoperative supratip depression of nose		738.0 998.8	
	÷.		Saddle nose		738.0)
		Ī				

Cance

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

		ntegrated oblem List	Expand	AIL		ic 🔽 Sub-acute e 🔲 Current/Most recer_	E	Û.	Get S(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
	-	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 (more)

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

Integrated Problem List			Expand Al		Episodic Sub-acute Inactive Current/Most recer			Get S	СТ	Pick Lis	st POV	Add
		Status	Onset Date	Provider Narrative		Comments		PHx	PIP	IP	ICD	
	Ξ	Episodic		Cerebral edema							ZZZ.999	
	-	Episodic		Impaired glucose tolerance pre impaired GTT testing	enatal						R73.02	
	-	Episodic	10/27/2014	Mild pre-eclampsia pre eclamy hypertension at 36 weeks	sia						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 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 about 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 issues 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, sub-acute, social/environmental
- Used by ALL clinicians who document care
- Nationally vetted and released pick lists
- Care planning documentation

Integrated Problem List Display

_	legrated Iolem List Status	Expand Onset Date	Provider Narrative	Current/Most recen	t Inpatient Comments				PHx	PIP	IP	ICD	-
-	Chronic	Cuser Dave	Hyperlipidemia		This is a test note :				FRA	E.E.	HC.	272.4	_
	Chronic		Diabetes mellitus type 2									250.00	
=	Episodic		Pelvic pain I musle pain, equisitely internis	tender left obturator								789.09	
=	Sub-acute		Nontraumatic rotator cuff tear righ	t	Previous nontraumatic ro months of physical thera	itator o py. :	cuff tear in 2011. Patient's pain was resolved, range o	f motion and strength restoerd with 6	5			727.61	
	Latest PRVs	All Active Problem Info Goal Notes	1	Patient Instructions/Car	e Plan	-	Visit Info Visit Instructions	Care Plan Activities			-		
		Patieint's goal surgery or inje	n, restore full ROM and strength. I is to reach this without further, ctions. ICHARDS,SUSAN P 03/12/2014	Physical therapy for 3 (significantly improved (agreed to additional im interventions. Modified by: RICHARD	OR if worsen pateint		Referral to PT. Follow up in 2 weeks. Modified by: RICHARDS, 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 problems 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 🛛	V Pt Goa	ls 🔍 Anticoa	ig 🔍 Eyeglass 🔪	AMI	Strok	(e					5
lı Pr	ntegrated oblem Lis	st Expa	and All Social/Env	Episodic	Sub-acute	ent Inpatient	6	Get SCT P	L Pick List P	POV	Add	E	dit D	Delete
	Status	Onset Date	Provider Narrative			Comments					PHx	PIP	IP ICE	5
	Chronic		*FLAT FEET										73	4.
=	Chronic	08/16/2005	*Abnormal EKG			Pediatric cardiologist sugge ekg with Asheville Cards 8/0 RVH : Refer to cards if palpi)7 : extreme rig	hť axis deviation, ir	ncomplete RBBB;				79	94.31
	Chronic	07/06/2006	*Exercise induced asthma		_								.99	999 🚽
_	Chronic		*seborrhea occipital scalp										69	0.11
Note the leading * which identifies Th		^{es} This "not	was renamed from res"		Mappings to is not an exa mapping to l Library of Mo	ict match Of ICD. Mappin	R less g	ranul	ar	e				

All problems after converting to SNOMED terms

	oblem List	ind All	Chronic 🔽 Episodic Social/Env 🔽 Inactive	Sub-acute	Get SCT Pick List	POV	Add		Edit Delete
	Status 🔺	Onset Date	Provider Narrative		Comments	PHx	PIP	IP	ICD
	Chronic		Asthma						493.90
	Episodic		URI - Upper respiratory in	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 updated to SNOMED prior to use.

NOT	IFICATIONS	COVER SH	IEET YTRIAGE PROBLEMS YPRENATAL YWELL CHILD YWELLN	ESS (MEDS (LABS (ORDERS (CONSULTS (NOTES))
Pro	blem List	Family History	Surgical Hx Patient Goals AMI Anticoagulation Asthma	Eyeglass Stroke
	ntegrated oblem List	Expan	All Chronic C Episodic Sub-acute	Get SCT Pick List POV Add Edit Delete
	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
13	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."

NOT	IFICATIONS	COVER SI	HEET TRIAGE PROBLEMS	PRENATAL WELL CHILD	WELLNESS MEDS LAB	BS YORDERS YCOM	ISULTS VN	DTES
Pro	blem List	Family History	Surgical Hx Patient Goals	AMI Anticoagulation	Asthma Eyenlass Strok			
	ntegrated roblem List	Expan	nd All Social/Env T Inaction		Get SCT	Pick List POV	Add	Edit Delete
	Status	Onset Date	Provider Narrative	Con	nments	PHx	PIP IP	ICD
	Chronic	08/02/2004	*PTSD					309.81
1	Chronic		*ALLG RHINITIS					477.9
	Chronic		*L NASAL POLP					471.9

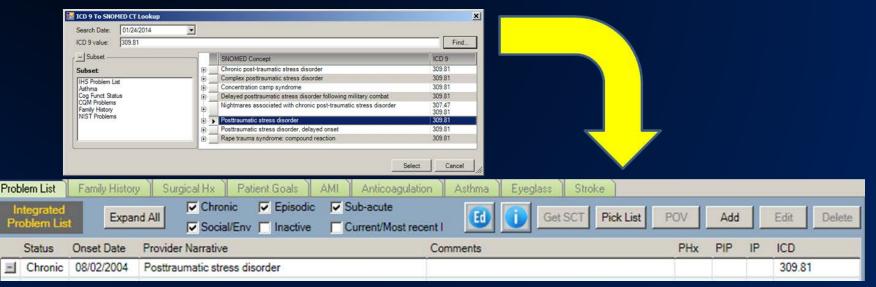
This searches the ICD-9 to SNOMED reverse mapping tool.

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.

Step 2:

Add Any New Problems Addressed Today

3. Click "Pick List."

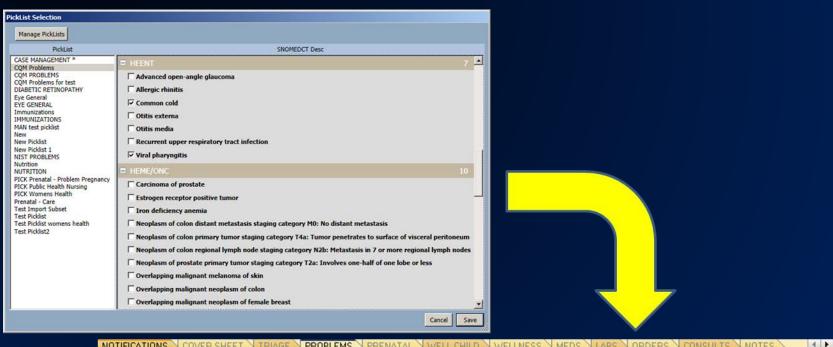
NOTIF	ICATIONS	COVER SH	HEET TRIAGE	PROBLEMS	PRENAT	TAL WELL CHILD	WELLNI	ESS MEDS	LABS O	RDERS CO	NSULTS	5 VN	OTES	4 1
Probl	em List	Family History	Surgical Hx	Patient Goals	AMI	Anticoagulation	Asthma	Eyeglass	Stroke					
Integrated Problem List Expand All Social/E				ic 🔽 Episodi /Env 🔽 Inactive		Sub-acute Current/Most recent I	6	Get S	CT Pick Li	st POV	Add		Edit	Delete
	Status	Onset Date	Provider Narrative			Co	mments		-	PHx	PIP	IP	ICD	
	Chronic	08/02/2004	Posttraumatic stre	ss disorder									309.81	
1	Chronic		*ALLG RHINITIS										477.9	



Step 2:

Add Any New Problems Addressed Today (cont.)

4. Select problem(s) and save.



NUTI	ICATIONS	COVERSE	IEET THIAGE PH	ROBLEMS YPH	IENATAL WELL CHILD	WELLNESS MEDS	G YLABS YUHD	EHS YLUP	ISULTS	LUI	JIES I
Prob	lem List	Family History	Surgical Hx Pa	atient Goals	AMI Anticoagulation	Asthma Eyeglass	Stroke				
	tegrated oblem List	Expand	All Social/Env	 Episodic Inactive 	Sub-acute	Get	SCT Pick List	POV	Add		Edit Delete
	Status	Onset Date	Provider Narrative		C	omments		PHx	PIP	IP	ICD
	Episodic		Viral pharyngitis								462.
=1	Episodic		Common cold								460.
=	Chronic	08/02/2004	Posttraumatic stress of	disorder							309.81
1	Chronic		*ALLG RHINITIS								477.9

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	EET TRIAGE	PROBLEMS	PRENATAL WELL CHILI	WELLNESS	MEDS VLA	BS CORDE	ERS CON	SULTS	NN	OTES	
Prob	lem List	Family History	Surgical Hx	Patient Goals	AMI Anticoagulation	Asthma Ey	eglass Stro	ke					
	itegrated oblem List	Expand	All Social			ı 🖸 🪺	Get SCT	Pick List	POV	Add		Edit	Delete
	Status	Onset Date	Provider Narrative	е	C	Comments			PHx	PIP	IP	ICD	
	Episodic		Viral pharyngitis									462.	
1	Episodic		Common cold									460.	_
1	Chronic	08/02/2004	Posttraumatic stre	ess disorder								309.81	_

Step 3: Select POV (cont.)

7. Click "Save" to set as POVs.

vov											×	
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	Episodic	Viral pharyngitis	ব	C First episode C New episode C Old episode C Ongoing episode C Undefined episodicity					□ DP □ MED □ EX □ N □ LA □ P	Treatment/ Regimen		
1377	Episodic	Common cold	दा	C First episode C New episode C Old episode C Ongoing episode C Undefined episodicity					COP CMED CEX CN CLA CP	Treatment/ Regimen		
6936		Posttraumatic stress disorder	ব	C First episode C New episode C Old episode C Ongoing episode C Undefined episodicity					C DP C MED C EX C N C LA C P	Treatment/ Regimen		

SNOMED CT	Provider Narrative	Provider Text	ICD	Priority A
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 uncoded 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 * Required Field		Get SCT Pick list
Provider Text		
)

Edit Problem

Edit prompts user for SNOMED if the problem has not yet been updated.

• You have additional option of using "Get SCT" option if the problem has an ICD-9 code.

Integrated Problem Maintenance -	Edit Problem	×
Problem ID TST-26	Pregnancy Related 🔽 🛛	Use as POV Save Cancel
* SNOMED CT * Required Field		Get SCT Pick list
Provider Text *Cervical Spinal S	Stenosis 723.0	
see the existing Narrative and ICD	Search 9. SNOMED	ICD-9 to SNOMED reve mapping tool

You w Provid

Add/Edit Problem – Optional Fields

	Integrated Proble	em Maintenance - Edit Problem				×
Only SNOMED	Problem ID DI	3-1 Priority 0	Use as POV		Save	Cancel
Term and Status are required fields.	* SNOMED CT * Status * Required Field	Endometriosis C Chronic C Sub-acute C Episo	odic C Social/Environmental C In		Get SCT	Pick list
٦	Provider Text	bowel, bladder, peironeum, ovaries, ur Endometriosis bowel, bladder, p	reters eironeum, ovaries, ureters 617.9			
These optional fields may be used to add information.	Qualifiers Date of Onset	Severity: Severity	Clinical Course			
	Comments Narrative			Date	Add Author	Delete
Г	Care Plan Info		Add Visit	Instruction / Care Plans	/ Goal Acti	vities
Care planning is only editable if selected as POV.	Goal Notes	Care Plans	Visit Instructions	Care Plannin	g Activitie	5

Add/Edit Problem – Optional Fields (cont.)

Asthma Classification Control New episode Old episode Ongoing episode Undefined episodicity Only expose	m ID DB-3	B Priority 0	🔽 Use as POV 🔽 Primai	y Save Cancel	
Asthma 493.90 Qualifiers Severity Clinical Course Severity Clinical Course First episode New episode Old episode Ongoing episode Undefined episodicity Asthma provide episode Only expose Asthma provide episode Narrative Comments Add Delete Date author Care Plan Info Add Visit Instruction / Care Plans / Goal Activities	* Status		lic C Social/Environmental C In		
Severity Clinical Course Severity Clinical Course Image: Classification Control Asthma Classification Control Old episode Ongoing episode Ongoing episode Ongoing episode Ongoing episode Ongoing episode Ongoing episode Ongoing episode Ongoing episode Obte of Onset Is Injury Comments Add Narrative Date Add Visit Instruction / Care Plans / Goal Activities		sthma 493.90			
Asthma Classification Asthma Classification Control New episode Old episode Ongoing episode Undefined episodicity Only expose Asthma plane Asthma plane Comments Add Narrative Date Author Date Care Plan Info		everity	Clinical Course		Optional,
Date of Onset Comments Add Date Date <	na Cl	Classification Co	ontrol	First episode New episode Old episode Ongoing episode	Asthma pron
Narrative Date Author Care Plan Info Add Visit Instruction / Care Plans / Goal Activities	arterative U				Asthma prob
Goal Notes Care Plans Visit Instructions Care Planning Activities	an Info		Add Visit	Instruction / Care Plans / Goal Activities	
	ites	Care Plans	Visit Instructions	Care Planning Activities	

Care planning now editable

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

F	ickList Selection			
	Manage PickLists			
	PickList	SNOMEDCT Desc		
	Cardiology * Family Practice ICD 10 demo Prenatal primary diagnoses	Chronic ischemic heart disease	3	
		Conget Hyperi (0) Chronic ischemic heart disease G:	Cardiolo	ogy 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 man health examination Well woman health examination 	4	
		Cancel	Save	

Search Tools -"Get SCT" Reverse Mapping Tool

Allows for quick conversion from ICD-9-encoded problem to SNOMED.

• Highlight problem and click "Get SCT".

	IPL	Fam	ily Hx 🔨 Surgical Hx 🔨 Pt Goals 🏹	Anticoag 🗸 Eyeglass 🗸 AMI 🔨 Stroke			
In Pro	tegrated oblem List	Expand	All Chronic Cepisodic Sub-acute	nt Inpatient Get SCT Pick List PO	Add	E	lit Delete
	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"

📙 ICD 9 To SNOMI	ED CT Lookup				×
Search Date:	10/25/2013 🔹				
ICD 9 value:	272.2	-		Find	1
		_			
_ Subset			SNOMED Concept	ICD 9	U.
Subset		Ð	Cerebral degeneration associated with generalized lipidosis	330.2 272.2	
IHS Problem List Asthma		÷.	Cutaneous xanthoma	272.2	
Cog Funct Status		÷.	Diffuse normolipemic plane xanthomatosis	272.2	
CQM Problems		÷.	Eruptive xanthoma	272.2	
Family History		÷.	Familial combined hyperlipidemia	272.2	
NIST Problems		<u>.</u>	Familial type 3 hyperlipoproteinemia	272.2	
		÷.	Generalized plane xanthoma	272.2	
		÷.	Mixed hyperlipidemia	272.2	
		١	Plane xanthoma	272.2	
		È.	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	
		÷	Xanthoma diabeticorum	250.80 272.2	
		÷	Xanthoma of eyelid	272.2 374.51	
		÷.	Xanthoma secondary to lymphedema	272.2 457.1	
		÷.	Xanthomatosis	272.2	
		÷.	Xanthomatosis, familial	272.2	
			s	elect Cancel	

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 . . .*

÷		Ge	272.2			
÷		Mip	ked hyperlipidemia	272.2		
			Description	A Relationsh	V ICD 9	
		· 📰	Hyperlipidemia	Parent (IsA)	272.4	
		·	Primary combined hyperlipidemia	Child	272.4	
	Į	·	Secondary combined hyperlipidemia	Child	272.4	
		SN	ICD 9			
÷.		Pla	ine xanthoma		272.2	

SNOMED Lookup

🔜 SNOMED CT Lookup				×
Diagnosis Lookup: Fully specified name 	0	Synonym	Search Date: 09/04/2013	-
Maximum Results : • 25 • 50 • 100	0	200 O ALL		
Search: leprosy			IHS SNOMED A	LL SNOMED
Subset		Problem	'is a' relationship	Mapped ICD
Subset	Đ	Leprosy	is a Mycobacteriosis (disorder)	030.9
IHS Problem List	÷.	Mycobacteriosis	is a Disease due to Gram-positive bacteria (disorder)	031.9
Asthma	Đ.	Borderline leprosy	is a Leprosy (disorder)	030.3
Cog Funct Status CQM Problems	÷.	Lepromatous leprosy	is a Cutaneous infectious disease due to Mycobacteria (disorder is a Leprosy (disorder)) 030.0
Family History NIST Problems	.	Tuberculoid leprosy	is a Cutaneous infectious disease due to Mycobacteria (disorder is a Leprosy (disorder)) 030.1
	÷	Indeterminate leprosy	is a Cutaneous infectious disease due to Mycobacteria (disorder is a Leprosy (disorder)) 030.2
			Select	Cancel

If you select the **Fully Specified Name**, it will store the preferred term. Clicking "+" allows the user to view synonyms from which to choose.

Ę	► L	.eprosy	is a Mycobacteriosis (disorder)	030.9
		Leprosy		Preferred
		Leprosy, NOS		Synonym
		Hansen's disease		Synonym
		Infection due to My	cobacterium leprae	Synonym
		Mycobacterium lepr	ae infection	Synonym

SNOMED Lookup by Synonym

🔜 SNOMED CT Lookup			×
Diagnosis Lookup: O Fully specified name	Synonym	Search Date: 09/04/2013	•
Maximum Results :	O 200 O ALL		
Search: leprosy		IHS SNOMED A	LLSNOMED
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	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	synonym for Borderline leprosy (disorder) is a Leprosy (disorder)	030.3
	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	Leprosv (disorder)	030.9 💌
		Select	Cancel

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

POV Selection Tool

Prob	Iem List Family History	Surgical Hx 1	Patient Goals AMI Anticoagulation Asthma Eyeg	ass Stroke	_			
ln Pro	tegrated Expand All	Chronic	Episodic Sub-acute Inactive Current/Most recent Inpatient	Get SCT Pick Lis	POV	Add	Edit	Delete
	Status	Onset Date	Provider Narrative	Comments	PHX	PIP	IP	ICD
E	Sub-acute		Wood asthma					495.8
1	Social/Environmental	10/30/2013	Medical records review TESTING TT1566					.9999
E	Chronic	10/15/2013	Chronic mixed headache syndrome i testing Get SCT					339.89
1	Chronic	09/25/2013	Extrinsic asthma with asthma attack Edited text	testing edit :				493.02
E	Episodic		Diabetes mellitus					784.99

Allows for quick selection of one or more SNOMED encoded problems

Highlight >> POV button



POV Selection Tool

- 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 process is unchanged
- No longer need to code un-coded problems
- Will still validate and assign appropriate POV ICD codes
- Provider narrative 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

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 two fields are mandatory for new problems.
- Transition tools: "Get SCT" reverse mapper and Pick Lists.
- SNOMED with mapping tools stabilizes front-end and eases the impact to clinicians with transition to ICD-10.
- Minimal change for coding; coders will 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 is at the end of the slide set for your review.

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

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. <i>Example</i> : 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 Examples: 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 Proble	em Maintenance - Edit Problem			×					
Problem ID D	B-1 Priority 0	Use as POV F Primary	Save	Cancel					
* SNOMED CT * Status * Required Field	C Chronic C Sub-acute C Episodia	c C Social/Environmental C Inac	Get SCT	Pick list					
Provider Text	bowel, bladder, peironeum, ovaries, urete	ers		Add Visit Instruction Visit Instructions	is / Care Plans / Goal Notes / Care Pla	inning Activit	lies		×
	Endometriosis bowel, bladder, peir	roneum, ovaries, ureters 617.9		visit Instructions				cation provided	
Qualifiers	Severity: Severity	Clinical Course	Episodicities	Date Status 09/04/2013 C Signed C Unsign	d Most visits will have visit instructions.		Disease Process Exercise Medications	Nutrition	
				Goal Notes		1	Comprehension Level	GOOD	•
Date of Onset			IS INJU	Date Status			Length	6 (min)	
Comments			Add	09/04/2013 C Active	Goals will be less common, mostly for problems at diagnosis and at points of	or chronic of change.	Readiness to Learn	EAGER TO LEARN	•
Narrative			Date Author	Patient Instructio	ns/Care Plan		and the second second	egimen/Follow-up	
<u> </u>				Date Status				gimen/Follow-up	
Care Plan Info			struction / Care Plans / Goal Acti	C Unsign	chronic problems at diagnosis and at		Teatmenty K	ginen/ronow up	
Goal Notes	Care Plans	Visit Instructions	Care Planning Activitie	s craig	ned change.		Educati	on Provided	
		2 	×				Comprehension Level: GOC Length: 6 mins Readiness to Learn: EAGER Disease Process Exercise Medications		
							ОК	Cancel	1

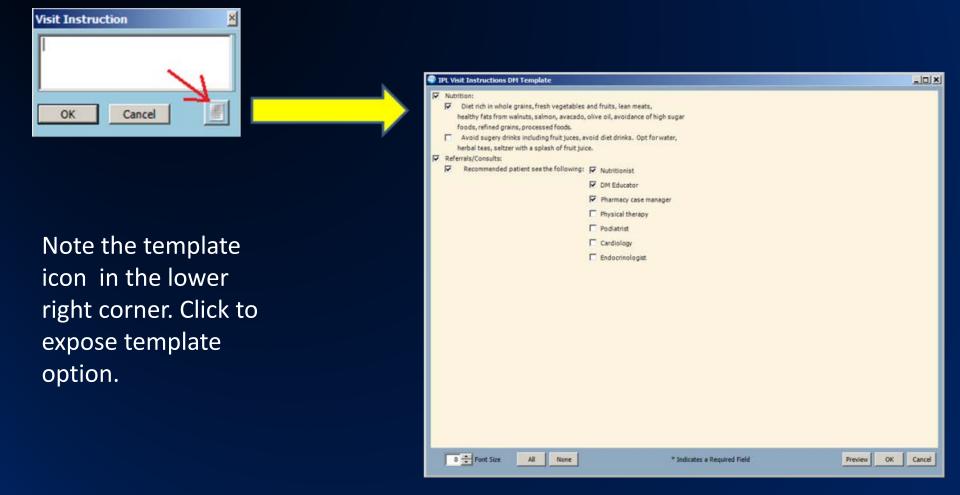
Care Planning -From Add/Edit Dialog (cont.)

Care Plan Info		Add Visit	Instruction / Care Plans / Goal Activities			
Goal Notes	Care Plans	Visit Instructions	Care Planning Activities			
6	Add Replace/Edit Delete Sign					
	Inactivate	×	<u>×</u>			
			isit Instructions / Care Plans / G it Instructions	Goal Notes / Care Plan		xtion provided
		Dat 12/2	e 3/2013		Disease Process	Nutrition Lifestyle Adaptation Prevention
		Go	al Notes		Treatment/Reg	imen/Follow-up
		Date	8		Current Visit - Care	Planning Activities
		12/2	3/2013 Note the focus and cursor are	e in the Goals field	Treatment/Reg	imen/Follow-up
		Ca	re Plans		Education	Provided
		Dat 12/2	e 3/2013		Length: 0 mins	
					ок	Cancel

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	
137	Episodic	Asthma	L L	C First episode New episode Old episode Ongoing episode Undefined episodicity		🕑 R	dd eplace nactivate				Treatment/ Regimen		-
1374	Episodic	Diabetes mellitus This is a test		C First episode New episode Old episode Ongoing episode Undefined episodicity		🛛 🕴 D	elete		□ DP □ EX □ LA		Treatment/ Regimen		-
Pr	ma ry POV	,											
A	thma			•									
												Save Can	cel
										Goal I	lote		×
										availa	able in the	template icon is e right lower corne	:1
										0	K	Cancel	

Templates for Goals, Care Planning, and Visit Instructions



Care Plan View

Integrated Problem List Expand All Image: Chronic image: Chroitatio image: Chroit image: Chronic image: Chronic im				t Inpatient			Get SCT Pick List	POV	Add	E	Edit Delete	
	Status	Onset Date	Provider Narrative		Comments				PHx	PIP	IP I	ICD
	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
Ξ	Sub-acute	e	Nontraumatic rotator cuff tear righ	t	Previous nontraumatic ro months of physical therap		uff tear in 2011. Patient's pain was resolved, rang	e of motion and strength restoerd with 6				727.61
	Latest	All Active										
	Lange (C	Problem Info				U Visit Info						
	PRVs	Goal Notes		Patient Instructions/Car	e Plan	^	Visit Instructions	Care Plan Activities		-	<u>^</u>	
		Pain resolution, restore full ROM and strength. Patieint's goal is to reach this without further, surgery or injections. Modified by: RICHARDS,SUSAN P 03/12/2014			OR if worsen pateint	Ŧ	Referral to PT. Follow up in 2 weeks. Modified by: RICHARDS,SUSAN P 03/12/201	4			-	
	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

Review tools and consider drafting 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 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.
```