

CHCN NextGen EHR Support Documentation

End of Visit Template Configuration

Version 3; September 19, 2013

I. Purpose of this document

The purpose of this document is to describe in detail the “CHCN End of Visit Template,” a custom-designed template to be used in NextGen EHR. This document will cover background of the template, and its implementation steps, configuration. Usage of the template is in a separate document.

Since the “EOV Template” is designed to be flexible and configurable by each health center / organization, by definition, this documentation will be a guidepost, rather than a concrete set of directions.

Currently, this template is only in use by the Alameda County community health centers, who are members of the Community Health Center Network (CHCN).

And this document is not planned to be updated after its initial release. Each Health Center is free to customize as needed.

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III. Background

A. Creation:

- i. Created 2012-13 by Mark O’Leary at Community Health Center Network for benefit of the eight network health centers.
- ii. Pilot development was conducted at Axis Community Health in Pleasanton and Livermore, California, a community health center providing family practice medical and behavioral health services.
- iii. The purpose of the pilot was to define a FEW various types of issues that could be addressed by an end of visit tool, using a variety of approaches.

B. What does it do?

- i. The intent is to try to ensure complete services, processes and documentation for each visit.
- ii. Rather than having Billing have to send the paper superbill back to the provider days or weeks after the visit, then requiring the provider to pull the chart, review what happened, and correct the superbill...THEN send it back to Billing to be rebilled....why not try to catch the errors and omissions AT the visit?

C. What it cannot do (yet)?

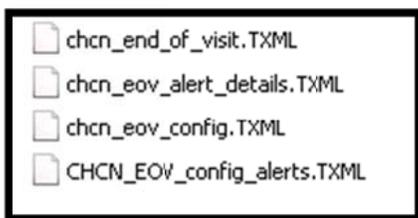
- i. Ideally, we’d like to do the checks on lab ordering with proper diagnoses at the time of the order. However, right now the EOV relies on the Claim Edits, which can only check after the CPT codes have all been submitted, which is often a while AFTER the visit itself has completed. CHCN is working on the ability to check the ORDER.

- ii. Only if you are on NextGen 5.7 will you be able to add the EOV template as a new tab on the top (like SOAP, etc.). If you are on an earlier version, you can add a button to the 5.7, “Finalize OV” tab to jump to the EOV template.
- iii. Future: only displaying the alerts by type of user (MA or Provider)
- iv. Items being investigated:
 - 1) Allergies: Alert that you need one of the 3 selections, not just if table filled in or None.
 - 2) If “uses tobacco” = current, and Tobacco Cessation check box is not checked, have alert.
 - 3) Is there an alert to ensure “submit to superbill, CPTs submitted?” no. by individual template. Can identify the button and add later? Medications not been sent would be good.
 - 4) Future: Order Module Lab: doesn’t have insurance. This info included in step 3.
General tab: billing type, insurance not selected. May be a fixit, may be too late for EOV?
SQL analysis. Send Mark a Failed screen shot?
- v. **Will work on** only displaying the alerts by type of user (MA or Provider)

IV. Steps to Implement: EOV Configuration

A. Install the templates

1. Go to the CHCN Portal
2. Download and import the EOV templates, which are:



And this Stored Procedure:



As well as this SQL Script: `create eov bill trig proc.sql`

3. Run the SQL script (`create eov bill trig proc.sql`) from the SQL Server Management Studio. Download this file to generate the placeholder version of the billing trigger Stored Procedure. The billing trigger alert will be customized for each clinic due to different workflows and SIM libraries. This script creates a placeholder alert that can be modified to meet each clinic’s specific needs.

B. Configure the EOv Config template

1. You will use the CHCN EOv Config practice template to configure the EOv process.
 - a. This is a flexible template that allows you to set up your own custom alerts.
2. In NG EHR, under System/Practice Templates, open the CHCN EOv Config:



3. Open the “EOv Template Config”

[Note: you will replace “ACH” with your clinic abbreviation]

CHCN End of Visit Configuration

URL for SSRS report: e.g. http://chcnssrs01/ReportServer_ACH/Pages/ReportViewer.aspx?EHR_Reports/Orders and Meds summary for encounter
 replace ACH with the abbrev for your clinic...

Svc category for drop down 1: Svc category for drop down 3:

Svc category for drop down 2: Svc category for drop down 4:

Note: Reqd ICDs also refreshed as part of nightly fixit process

Alerts configuration [Refresh EOv alert list](#)

Proc Desc	Enabled Ind	Alert Level	Launch Template Type	Launch Template Name	Alt Launch Template Name
02 Missing reqd ICD codes (claim edit 117)	y				
03 Missing BP on office visit	y	MA	T	ng_ov_intake	obgyn_home
04 Missing smoking status	y	MA	T	ng_ov_histories	gyn_history
05 Missing allergy info	y	MA	T	ng_ov_intake	gyn_assess_plan
06 Missing tobacco use	y	MA	T	ng_ov_histories	gyn_history
07 Unsubmitted lab or diag orders	y	MA	T	order_module_processing	order_module_processing
08 Missing BMI plan	y	Prov	P	bmi_actions	bmi_actions
09 Pending lab order	y	MA	M	Orders	Orders
10 Missing Title X template	y	Prov	T	TitleX	TitleX
11 Missing allergy review info	y	MA	T	ng_ov_intake	gyn_assess_plan
12 Missing tobacco cessation discussed	y	MA	T	ng_ov_histories	gyn_history
13 FPACT encounter missing S code diagnosis	y	P	P	ach_assessment	gyn_assess_plan

Specialty codes that will use alternative launch template:

Alert-specific information/config

Visit Types for 03 Missing BP on Office Visit: Missing BP alert will run for any encounter with a visit type in this list
 Use commas to separate the different visit types

Visit Types for 10 Missing Title X template: Missing Title X template alert will run for any visit type in this list

Patient plan document list:

Visit note document list:

Configure alerts to run; alert leve not used currently, reserved for future enhancement

Note: alert names begin with 02; 01 just clears all existing alerts for the encounter

14 Missing patient education documentation	y	P	P	ord_custom_plan	ord_custom_plan
15 Missing patient plan document on office visit	y	P	T	ach_check_out	ach_check_out
16 Missing visit note document	y	P	T	ach_em_history	
17 Referral order with no diagnosis code	y	P	T	ach_mpw_referrals_order	ach_mpw_referrals_order

4. Once template open  click on so that it can give you your accurate alert list.

5. Enter your URL for the SSRS report

- a. What is the SSRS Report?
 - i. This governs what report is launched by the 'Orders and Meds Listing' report on the EOV template.
 - ii. This report is meant to aid the provider / MA in seeing at a glance ALL the orders and meds associated with the patient for a final check.
- b. Steps:
 - i. Enter the URL for the 'orders and meds listing' report
 - ii. Sample format:

`http://chcnssrs01/ReportServer_ACH/Pages/ReportViewer.aspx?/EHR_Reports/Orders and Meds summary for encounter`

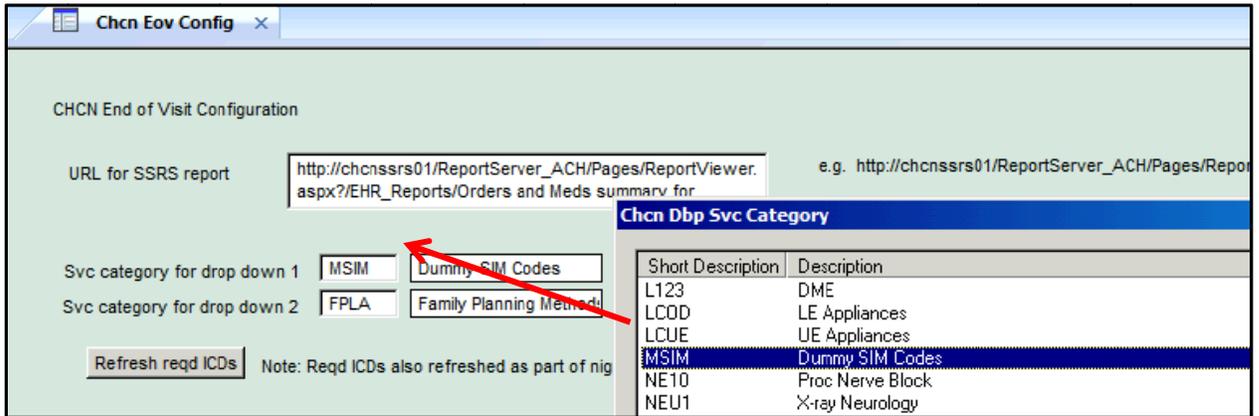
URL for SSRS report	<code>http://chcnssrs01/ReportServer_ACH/Pages/ReportViewer.aspx?/EHR_Reports/Orders and Meds summary for</code>
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[Note: you will replace “ACH” with your clinic abbreviation]

6. Set up your Service Categories for the drop downs

- a. What are the Service Categories?
 - i. You can have up to 4 drop down boxes or “Service Categories” that will appear at the bottom of the EOV template to allow users to enter additional procedure codes.
 - ii. Examples: “Dummy Codes” Service Category is used for tracking codes that are not in the templates. Another example might be “Family Planning methods”.
- b. Steps:
 - i. First setup the SIMs you want into a Category, and name it. (EX: Dummy codes, Family Planning Methods)
 - ii. Start with “Svc category for drop down 1”
 - iii. This can be configured by clicking on the box to bring up a list of all service categories – **Be Patient**, the pick list can take a couple of seconds!
 - iv. Select a Service Category and any SIMs in that category will be available in the drop down.
 - v. The name of the service category is used as the actual title of the drop down list.

- vi. These are optional - you can leave all of them blank and they will not appear on the template at all.

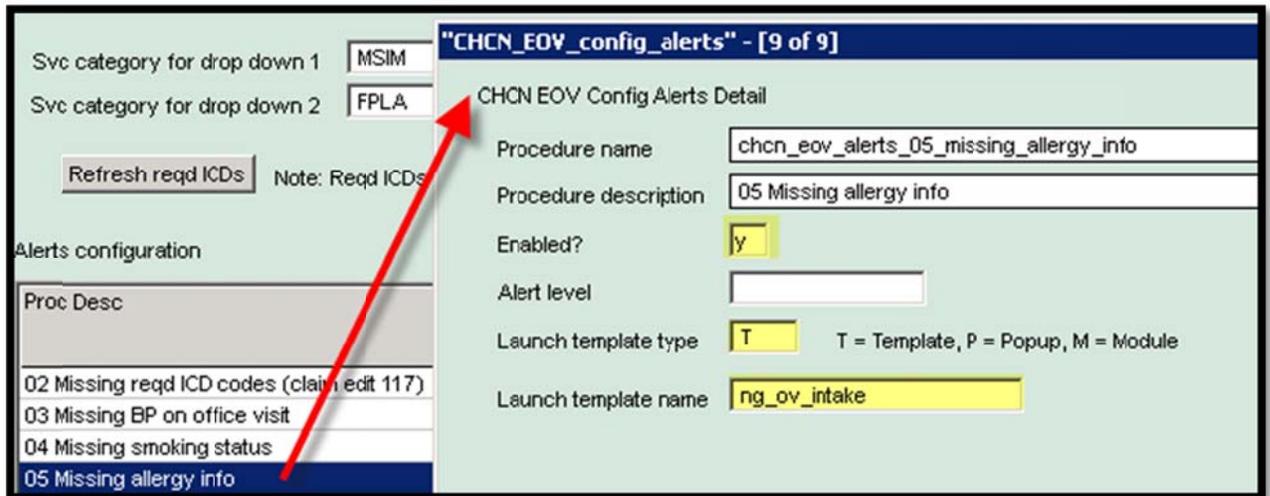


7. Set up your Alerts

a. What are the Alerts?

- i. Alerts appear in a table on the EOV Template to tell staff that there are problems with the visit that need to be addressed.
- ii. Examples: missing vitals, missing smoking status, code not submitted for breast exam, Title X template missing, etc.

b. Individual Alert Steps:



- i. For Alerts configuration, you can double-click on any alert to open the popup, then click on enabled box to activate it.
- ii. Alert level:
 - a. This appears on the Alert table.
 - b. It is a free text field associated with each Alert.

- c. Axis has chosen to use is as an indicator for WHO should be handling that alert: the Provider or the MA.
- iii. T/P/M and Name
 - a. Used to set a template, pop up or module to open when the user clicks on the alert message
 - b. T/P/M - sets whether the destination is a Template, Pop-Up, or Module
 - c. Name – the NextGen template or popup name
 - d. If the “Launch Template type” is configured you must fill in the actual name of where you want to be directed once the alert is clicked on EOv template. NOTE: it is case sensitive!
 - e. To find these names, refer to your NextGen Advanced template training, using the Template Editor.

CHCN End of Visit Configuration

URL for SSRS report: e.g. http://chcnssrs01/ReportServer replace ACH with the abbrev for you

Svc category for drop down 1: Svc category for drop down 3:

Svc category for drop down 2: Svc category for drop down 4:

Note: Reqd ICDs also refreshed as part of nightly fixit process

Alerts configuration [Refresh EOv alert list](#)

Proc Desc	Enabled Ind	Alert Level	Launch Template Type	Launch Template Name
02 Missing reqd ICD codes (claim edit 117)	y			
03 Missing BP on office visit	y	MA	T	ng_ov_intake
04 Missing smoking status	y	MA	T	ng_ov_histories
05 Missing allergy info	y	MA	T	ng_ov_intake
06 Missing tobacco use	y	MA	T	ng_ov_histories
07 Unsubmitted lab or diag orders	y	MA	P	order_module_processing
08 Missing BMI plan	y	Prov	P	bmi_actions
09 Pending lab order	y	MA	M	Orders
10 Missing Title X template	y	Prov	T	TitleX

c. Billing Trigger Alert Steps:

- i. What are Billing Triggers?
 - a. Billing triggers can be added to the EOv so that charges can be added to the encounter based on certain conditions being true.
 - b. Can be used for tracking codes, to fix broken kbm billing triggers, or to add a billing trigger that is missing from the kbm
 - c. Using this feature allows you to add the triggers without having to customize additional templates

- ii. How do we set them up?
 - a. The billing triggers feature of EOV is not configurable via the practice template.
 - b. Each health center will have its own custom stored procedure to execute the billing triggers for their clinic.
 - CHCN can help with this customization
 - Procedure that needs to be maintained is: chcn_eov_bill_trig_data

V. Steps to Implement: Testing

A. Testing the EOV Config template

1. Once the alerts have been configured, you should test to ensure they are set up correctly.
2. Pick a test patient and conduct a visit, intentionally leaving off information, or not completing the templates, in order to trigger the alerts you set up. From each of the visit templates you may be using: Intake-OV, OBGYN-Home, or *Intake.
3. Once you have “completed” the Encounter, open the EOV template.
 - a. If you are not on NextGen 5.7 yet, you will need to open the template manually, either from the templates icon, or, if you’ve set it up: the left navigation bar, or a custom button.
 - b. It is called: “Chcn End of Visit”

B. COMMON TROUBLESHOOTING TIPS

- i. Why aren’t my alerts popping up?
 - A. CHCN EOV Config: Be sure you turned on the alert, and input the Visit Types
 - B. Some alerts rely on there being a blood pressure to indicate it was a medical visit. Once the BP has been entered, and you refresh the alerts, MORE alerts will pop up.
- ii. I left off height and weight, why isn’t there an alert?
 - A. We only created an alert for blood pressure, height and weight aren’t always gathered at every visit.

VI. Steps to Implement: Rollout

- It is suggested that you have a clinician / MA team test the EOV thoroughly and give feedback as to where the alert should “jump” to fix the problem.
- You will need to determine when / where in the workflow the EOV template will be used and by whom.
- Set an implementation date
- There will need to be training for the providers and MAs on use
- When ready to implement, set up the template “start” (button, tab, etc.)

- Follow up Reporting:
 - There is an “EOV Audit report” that will tell you how many alerts were “fired” and how many fixed by provider, by site, for a specified time period. This is very useful in determining the need for follow up training, etc.

VII. Alert list

For detailed information on how each looks, and how to clear them, see the User Documentation.

IMPORTANT Definition:

- **Office visit: when a blood pressure or weight** has been captured, OR Refused or Unobtainable is checked on vitals

LIST OF CURRENT ALERTS		
ALERT	DESCRIPTION	NOTES
02 Missing ICD codes (claim edit 117)	Leverages the configuration of claim edit 117 to identify missing required ICD codes for a particular procedure CPT code.	<ul style="list-style-type: none"> • Must run the CHCN Fixit quality nightly process if you enable this alert so that any updates to claim edit 117 get processed and made available to the alert. Otherwise you must manually enable it. • After configuring the claim edit, you can generate the necessary tables for EOV using the 'Refresh reqd iCDs' button.
03 Missing BP on office visit	<ul style="list-style-type: none"> • This alert works for “Visit Types for 03 Missing 03 Missing BP on Office Visit” set up in the EOV configuration template. • For example, you can set them up for: Office visit, gyn visit, nurse visit, Coumadin visit, etc. 	<ul style="list-style-type: none"> • Alert fires if there is no <i>vital_signs_</i> record of a blood pressure for the encounter or if diastolic is not between 20-150 or if systolic not between 30-250 • AND unobtainable not checked (<i>vital_signs_.chk_unobtainable</i> = 0) • AND refused not checked (<i>vital_signs_.chk_refused</i> = 0)
04 Missing smoking status	<ul style="list-style-type: none"> • Checks for current smoking status. 	<ul style="list-style-type: none"> • Only encounters where valid blood pressure or weight have been entered and patient is 13 or older are checked • Alert fires if there is a null value in the smoking status (<i>social_hx_.opt_smoke_stat</i>) field

LIST OF CURRENT ALERTS		
ALERT	DESCRIPTION	NOTES
05 Missing allergy info	<ul style="list-style-type: none"> Checks to see if any allergy items were checked 	<ul style="list-style-type: none"> Only encounters where valid blood pressure or weight have been entered and patient is 13 or older are tested Alert fires if no allergies are included in the allergy module (patient_allergy table) and checkbox for no known allergies (master_im_chk_noallergies) is not checked (= 0)
06 Missing tobacco usage	<ul style="list-style-type: none"> The meaningful use section required 	<ul style="list-style-type: none"> Only encounters where valid blood pressure or weight have been entered and patient is 13 or older are tested No record in tobacco_usage_table for encounter
07 Unsubmitted lab or diagnostic orders	<ul style="list-style-type: none"> To ensure all orders and labs are ordered correctly, and submitted 	<ul style="list-style-type: none"> Orders in order_table with actClass of 'LAB', 'DIAGSTUDY' or 'X-Ray' <ul style="list-style-type: none"> Not completed, cancelled or deleted Ordered on current encounter actMood = ORD Both the order_module_lab_id and the order_module_order_num are NULL or blank Intended to match the filter criteria on upper data grid for unsubmitted orders on the order_processing_module template (8.0.1 version)
08 Missing BMI Plan	<ul style="list-style-type: none"> To ensure a BMI Plan was completed, if needed. All patients between 13 – 18 years old If age is 19 - 64, and BMI is below 19 or over 26, OR age is over 65 and BMI is < 23 or >30; then there must be a BMI Plan Turned off for pregnant women (7/20/13) 	<ul style="list-style-type: none"> This is specifically text in the BMI Out of Range Actions template, “Instructions” field, which includes the text “BMI.” i.e., No orders with 'BMI' in the actText field that were ordered in the same calendar year as the current encounter It is suggested you have predefined protocols for the BMI. EX: BMI Overweight Plan, BMI Underweight Plan
09 Pending Lab Order	<ul style="list-style-type: none"> To ensure completion of the 3rd and final step in lab ordering 	<ul style="list-style-type: none"> In the Order Module itself, any lab with test status of “Pending” and ngn_status of “ordered”

LIST OF CURRENT ALERTS		
ALERT	DESCRIPTION	NOTES
10 Missing Title X template	<ul style="list-style-type: none"> If the visit is GYN Visit, then it will require that the Title X template be saved on the encounter. 	<ul style="list-style-type: none"> It is difficult to figure out the trigger if a regular visit turns to Family Planning. Encounter has a visit type from the “Visit Types for 10 Missing Title X template” list in the EOV Configuration template. If there is an active alias for the Title x template (titlex) we look for the alias - so if you've customized the template so it points to your custom version, we check that the custom version is on the encounter
11 Missing allergy review	<ul style="list-style-type: none"> If it is an office visit (see vitals rules) and If neither the Allergy “reviewed no changes” nor “allergies added today” were checked. 	<ul style="list-style-type: none"> Allergy_table_.opt_allergies_today value must be either '1' or '2'
12 Missing tobacco cessation discussed	<ul style="list-style-type: none"> If an office visit (see vitals rules), and Patient is 13 or older and Is a current smoker 	<ul style="list-style-type: none"> Patient is documented as a current smoker (most recently edited record in tobacco_usage_.txt_tobacco_use_status = 'current') Patient's smoker status for MU is documented (social_hx_.opt_smoke_stat is between 2 and 4 - 2 = 2 current everyday smoker, 3 = current sometimes smoker, 4 = smoker current status unknown) Smoking cessation discussed is not checked on Histories - OV template Note: This alert may have to be modified for clinics using new 8.1 templates... Note: The Social History Adult template (social_hx) also has a checkbox for tobacco cessation discussed - that field is social_hx_.chk_tobacco_cessation
13 FPACT encounter with no S code diagnosis	<ul style="list-style-type: none"> If the primary payer is FPACT (on the CHCN Payer Meta Info practice template) 	<ul style="list-style-type: none"> Must have non-void charges At least 1 of the charges must have an S code diagnosis attached as any 1 of the 4 dx codes
14 Missing patient education documentation	<ul style="list-style-type: none"> For an office visit and Patient is 13 years of age or older And there is no patient education generated 	<ul style="list-style-type: none"> There are no completed orders on the encounter with actClass of INSTRUCT or EDU
15 Missing patient plan document	<ul style="list-style-type: none"> For an office visit There is no Patient Plan generated 	<ul style="list-style-type: none"> This alert works for “Patient plan document list” set up in the EOV Configuration template.

LIST OF CURRENT ALERTS

ALERT	DESCRIPTION	NOTES
16 Missing visit note	<ul style="list-style-type: none"> For an office visit There is no progress note generated as defined by the clinic 	<ul style="list-style-type: none"> This alert works for the “Visit note document list” set up in the EOV Configuration template. Examples: Master_in, GYN Master, OB-Master, nurse_master
17 Referral order with no diagnosis code	<ul style="list-style-type: none"> For a referral order And a missing diagnosis code 	<ul style="list-style-type: none"> Encounter has a referral order -actClass = 'REF' or 'REFR', not deleted, completed or cancelled, recommendedReason not 'Protocols' Referral order has a blank or null diagnosis code
18 PAP specimen obtained but no PAP order in order_ table	<ul style="list-style-type: none"> To ensure PAP order is made, which is necessary for other flows (protocols, etc.) 	<ul style="list-style-type: none"> Specimen obtained: pe_gu_female_.pap_done = 1 No order with actClass = PAP excluding cancelled and deleted orders and protocol orders (actMood = RMD)
19 PAP order in order_ table with missing actCode or actMood	<ul style="list-style-type: none"> To ensure pap detail is completed 	<ul style="list-style-type: none"> Can happen if you indicate a pap was done on the female GU exam template without completing the pap detail popup Order with actClass = PAP excluding cancelled and deleted orders and protocol orders (actMood = RMD) with null or blank actCode or actText fields
20 No medication info	<ul style="list-style-type: none"> For an office visit, ensure that meds were either added or confirmed that there were none 	<ul style="list-style-type: none"> Only encounters where valid blood pressure or weight have been entered (or vitals were refused or unobtainable) Trigger fires if there are no active medications listed for the patient AND the 'no medications' checkbox on the intake template (master_im_.chk_nomed) is not checked (= 1)
21 Missing medications reviewed indicator	<ul style="list-style-type: none"> For an office visit, ensure that medication review was completed 	<ul style="list-style-type: none"> Only encounters where valid blood pressure or weight have been entered (or vitals were refused or unobtainable) Alert fires if medications reviewed checkbox on intake is not checked (i.e. master_im_.chk_medreviewed != 1)

LIST OF CURRENT ALERTS		
ALERT	DESCRIPTION	NOTES
22 No LMP documented	<ul style="list-style-type: none"> For an office visit, for women in age range where an LMP is expected, there should be a date. 	<ul style="list-style-type: none"> Any office visit encounter where patient is female, between 8-60 yrs of age, and not pregnant should have a LMP or be documented as either pre-, peri-, or post-menopausal OV = encounter has a visit type from the OV list in the configuration template Female = person.sex = 'F' Pregnant = encounter has a ICD code attached from the 'Diagnosis category indicating pregnancy' dx category configured on the EOV Config template Menopausal status -if histories_.opt_menopausal_stage not equal to 'premenopausal', 'perimenopausal', 'postmenopausal' LMP: pulled from ros_gyn_.lmp field

LIST OF CURRENT BILLING TRIGGERS		
ALERT	DESCRIPTION	NOTES
CBE (clinical breast exam):	<ul style="list-style-type: none"> If a breast exam was done, then the code should be added. The EOV will simply add the code to the encounter. 	if Gyn_pe_proc_.atxt_breast_pic = '2'
Q0091 (pap done):	<ul style="list-style-type: none"> If a pap was done, then the code should be added. The EOV will simply add the code to the encounter. 	<ul style="list-style-type: none"> Indicated PAP: if pe_gu_female_.pap_done = 1

VIII. EOV Design approach

- Once you get used to how the EOV works, then you may want to think about new functionality. The great thing about the EOV template is that we can keep updating it, adding new functionality.
- How would you do it?

The APPROACH:

A. Work with Providers / MAs, clinical staff

1. Define what the big problem areas are for the clinical staff:
 - Forgetting to submit the lab orders (all three levels!)
 - Forgetting to submit dummy codes or specific codes (breast exam code submitted? foot check: billing trigger from template correct?)
 - **Other....?**
2. Check the list below of the current alerts. Others can be added, by different processes, depending upon the type of issues.

B. Work with Billing

1. Similarly, define what the big problem areas are for the Billing staff:
 - The wrong CPT (Procedure) codes are getting submitted for certain procedures and getting rejected (get the specific list, by payer.)
 - The wrong ICD (Diagnosis) codes are getting submitted for certain procedures and getting rejected (get the specific list, by payer.)
 - **Other....?**
2. Check the list below of the current alerts. Others can be added, by different processes, depending upon the type of issues.

C. Define the issue types

1. Divide the issues into categories:
 - Processing / flow issue
 - Billing rules
 - Dummy codes
 - **Other....?**
2. Determine how / where staff input the information in the EHR.
 - a. How will you know when they've done it?
 - b. How do you know when it is correct?
 - c. Note the name of the template, and the NextGen field name, preferably the SYSTEM field name. These look like: Soc_hx_tob_use

IX. Version tracking

Date	What	Who	Why
3/24/13	Initial draft for pilot	Linda Yoshino	To test during pilot
3/28/13	Updated draft with screenshots, discussion answers.	Linda	To test during pilot
3/31/13 and 4/3/13	Updated draft with screenshots, discussion answers.	Linda	To test during pilot
5/17/13	Updated as separate configuration and user guides, updated for Axis Launch	Linda	Launch
9/19/13	Updated for additional alerts, troubleshooting	Linda	After launch updates. more clinic feedback.