CrystalPM - AOA MORE Integration and MIPS (CQM) Tutorial

Introduction:

This is a full overview of the logic of the Clinical Quality Measures (CQMs) supported by AOA MORE and CrystalPM, as well as examples of the data entry required in CrystalPM that will result in the passing of the numerator and denominator for each of the CQMs for a particular patient.

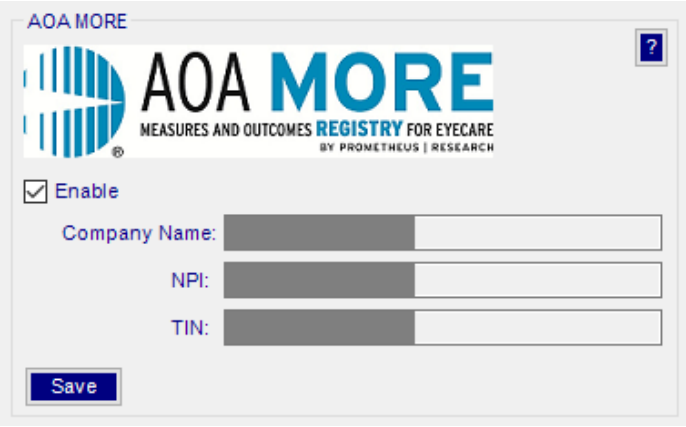
You could also treat this as a tutorial for MIPS, but specifically related to the CQMs and not the Meaningful Use Measures.

We'll also go over the HIE Data Completion prompts, which will appear as green or flashing red buttons in CrystalPM's status bar.

Before that, we'll explain how to ensure that the integration is enabled, and that the required software is installed on your server.

Enabling the Integration:

To enable the AOA MORE integration in CrystalPM, go to Admin->Integrations->HIEs. Check the "Enable" checkbox and click "Save."



CrystalPM Windows Services Install on the Server:

Just enabling the integration in CrystalPM does not mean you're generating and sending messages to AOA MORE. It is required that you schedule a time for our staff to install our services on your server. These three services are:

CpmHl7LocalService
CpmUpdaterService
CpmMonitorService

The CpmHl7LocalService generates and sends the patient messages to our HIE web server, which then sends those messages directly to AOA MORE.

The CpmUpdaterService checks for, downloads, and installs updates to the CpmHl7LocalService, and optionally for CrystalPM.

The CpmMonitorService restarts the other two services every 12 hours, and that's all it does.

It is mandatory that all three services are running. For example, if the CpmHl7LocalService stopped getting updates from the CpmUpdaterService, it's possible that the CpmHl7LocalService would continue sending messages with an outdated format or structure. This is important point, because messages sent to AOA MORE in an invalid format will basically be thrown out.

It's recommended to have automatic CrystalPM updates enabled during the install for a similar reason. We want you to always have to most up-to-date version of CrystalPM when doing this integration, because there could be valuable updates (changes and optimizations) related specifically to this integration.

Automatic CrystalPM Updates with a Cloud Office:

If you're a cloud office, where you use RDP (Remote Desktop Protocol) to run CrystalPM on client machines, as well as hosting your server, it is not recommended that you have automatic CrystalPM updates. However, automatic updates to the CpmHl7LocalService are required, which will work just fine in this setup, because the service is only ever being run by the server and is in the background.

With cloud offices, it's just the way the CrystalPM installation was done initially. Each of your client machines is accessing the same machine remotely over RDP, just with a different user account. Therefore, they're most likely using the same install folder to run CrystalPM, so the same Crystal.exe (in C://Program Files/CrystalPM/), as well as other required files. So, if other users are already using CrystalPM, and another machine starts CrystalPM on that machine, when an update is available, it can't replace the files that are required for the update (like Crystal.exe), because they're already being used by other users. This issue would apply to manual updates as well, if other users were still using CrystalPM at that time.

If you're a cloud office, and you still want to enable automatic updates for CrystalPM at the time of the service install, or you just want to avoid this issue (described above) altogether, there is a fairly simple solution. You just need to make a different CrystalPM installation folder for each RDP user account.

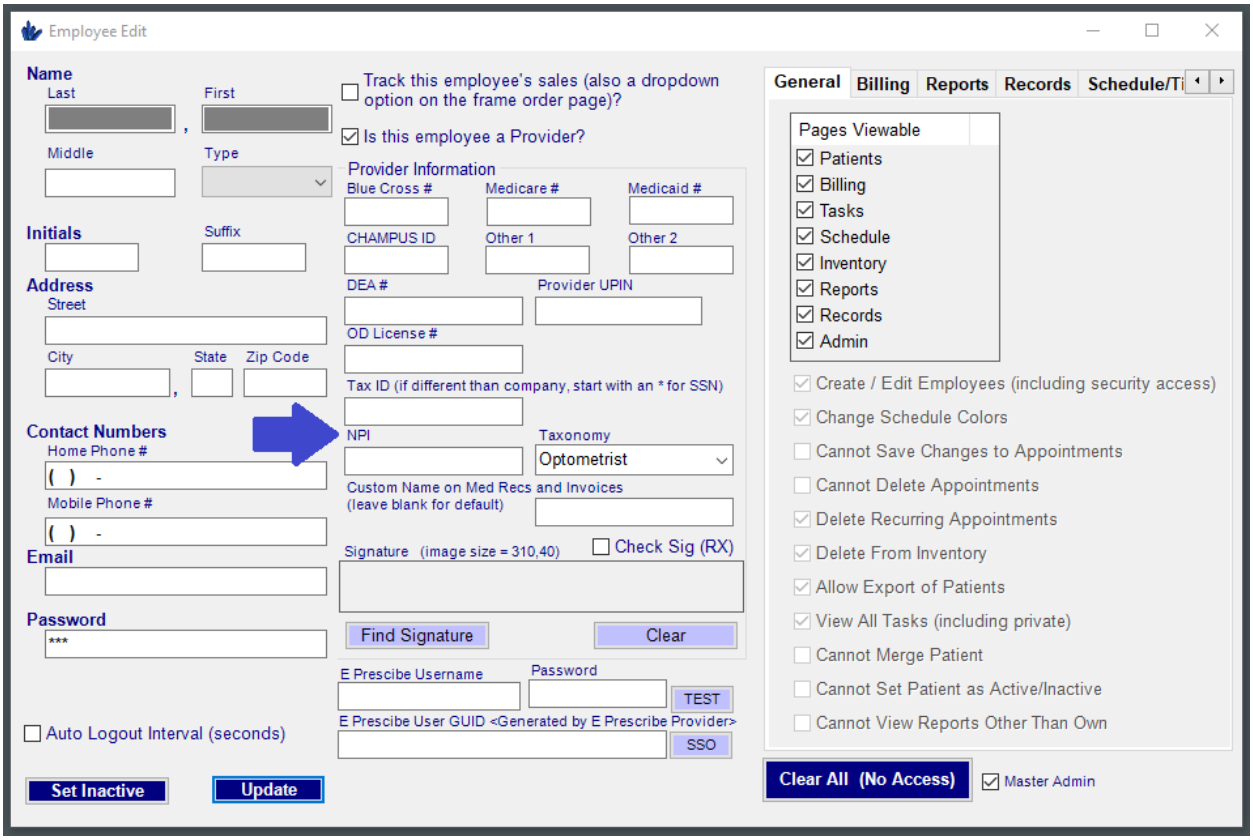
As stated above, by default, each RPD user is running the same Crystal.exe in the same folder (C://Program Files/CrystalPM/) on the same machine. So as an example, your front desk machine logs in as user_01 over RDP. Your first exam room machine logs in as user_02 over RDP.

The solution would be to copy the entire CrystalPM install folder (C://Program Files/CrystalPM/) to a location specific to each user (i.e. C//Users/user_01/Program Files/CrystalPM). You'd still have to create a folder called Program Files in the user's folder before copying over the CrystalPM install folder, and you should create a shortcut on the Desktop and the task bar to the CrystalPM.exe (not Crystal.exe) in the new user-specific install folder.

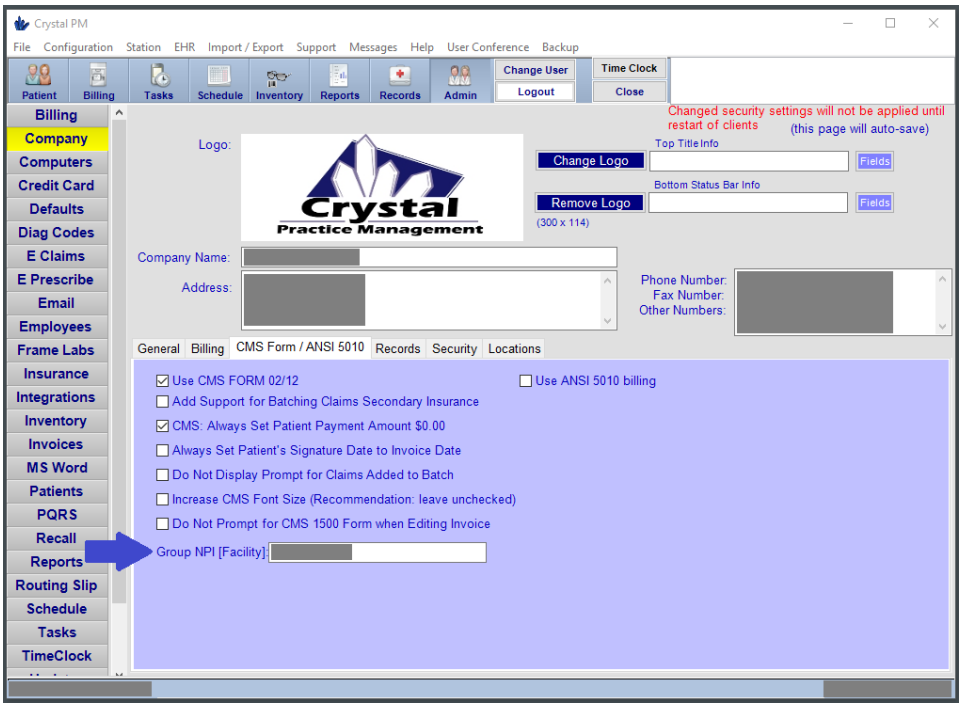
If this is done, then the next time an update is retrieved, the CrystalPM.exe, which is the program that performs the update, will be able to replace the Crystal.exe and other required files, without being interrupted by another user already running the same install of the program.

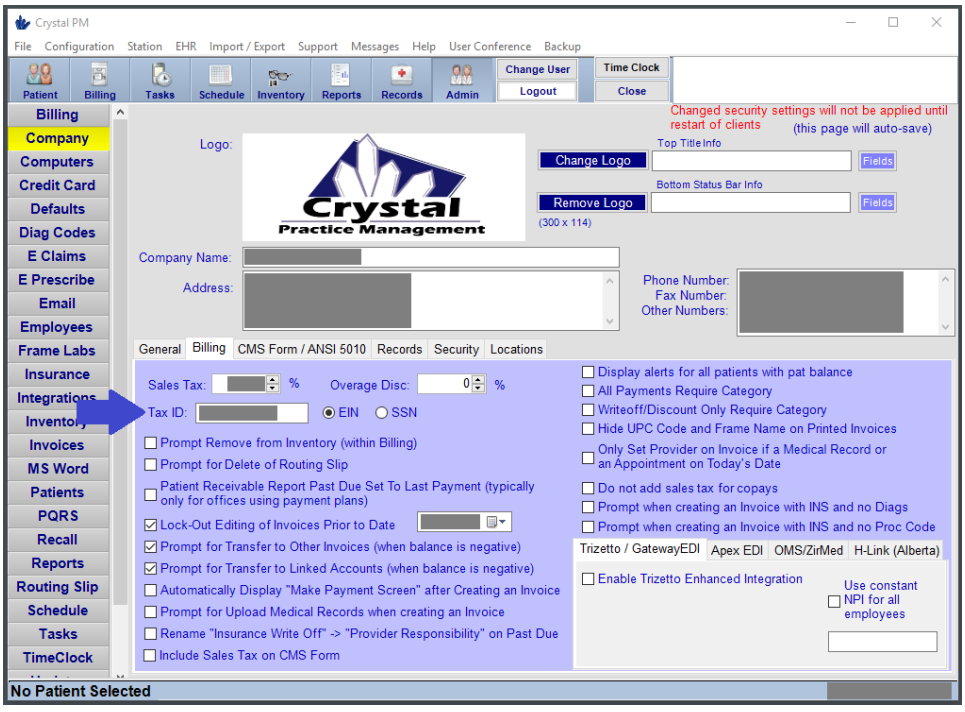
Preparation:

Make sure that each doctor’s NPI and TIN is set in Admin->Employees.



Make sure your location's NPI and TIN is set in Admin->Company.





By default, the NPI and/or TIN set for a doctor will be included in the messages generated and sent to AOA MORE. If those are not set, it will use the NPI and/or TIN for the location.

Workflow with Prompts:

There are certain demographics and medical record fields that are required or desired to be filled out. To make this apparent, we've included the HIE Data Completion Prompts.

The prompts are triggered by any user viewing or modifying patient data for a patient that is definitely or potentially missing data.

Patients will build up as tabs in the prompt window as you view and/or modify them. The set of patients that builds up is not tied to the user you're logged in as. It's tied to the instance of CrystalPM you're running. The list is lost when you close CrystalPM. However, the list will persist if you log out and someone else logs in.

It would be most efficient to have employees other than the doctor(s) fill out the required demographics (name, address, race, ethnicity, etc…) before a patient's exam begins.

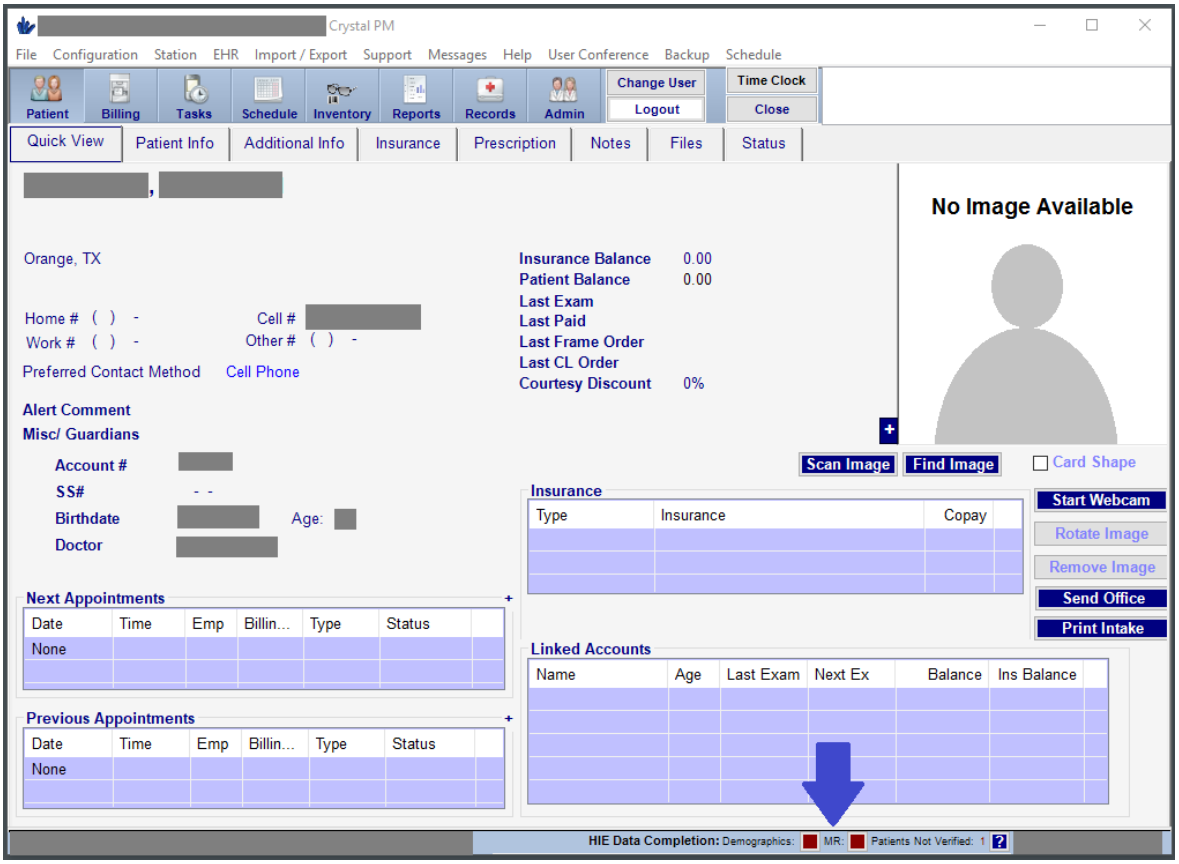
The prompts related to medical record fields (other than Race and Ethnicity) are related to the patient's medical record for today. It will not prompt for these fields on medical records that took place on any other day than today. This will change in a future update, but it makes sense for now, considering you will most likely not know the specific information required to fill out the fields the next day. These medical record fields should be filled out during the exam or right afterwards, since they are directly related to the exam ("Exam Type", "Findings Type", etc…).

Future Updates:

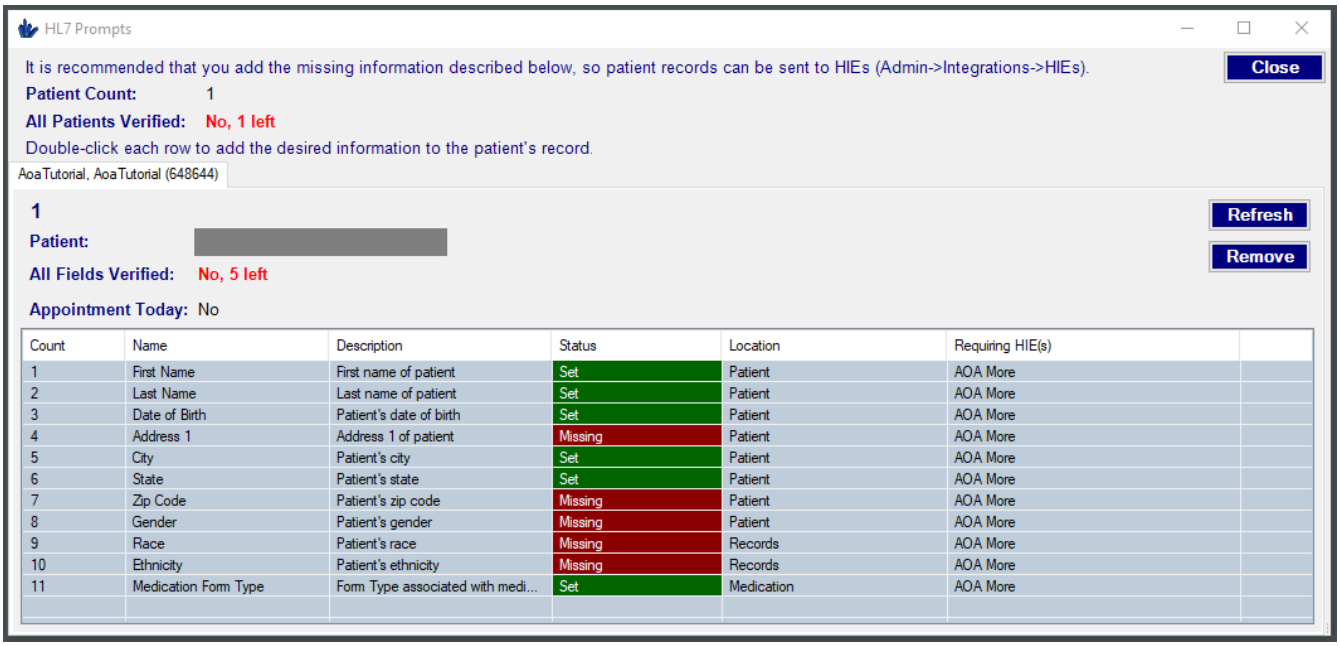
In an update that will be coming out soon, there will be an HIE Data Completion Report, so you'll be able to see the prompts for patients and their medical records that had an encounter (medical record, appointment, invoice, or routing slip) in a date range. When that becomes available, this documentation will be updated with the instructions on how to use that report and other new functionality.

Data Completion Prompts:

When any user views or modifies a patient that is missing demographic or medical record data required or desired for the integration, flashing red buttons will appear in status bar of CrystalPM on the bottom-right portion of the screen.



When either of the buttons is flashing red (demographics or medical record), clicking either will bring up this prompt window.



In this example, the patient is just missing demographics data. However, the race and ethnicity fields are located in the medical record, so a user would not only need access to the Patient page, but also to the Record page to fill out all of these fields.

Double-clicking on a specific row will take you directly the related field for the patient to fill it out.

As the fields are filled out and the data is saved, the prompt will automatically refresh to represent this. When all of the required fields are filled out and the data is saved, the tab for the particular patient will disappear, or the entire prompt window will disappear, if this was the only patient with potentially missing data that had been viewed and/or modified.

The same idea applies to the buttons in the status bar. If there are no viewed/modified patients that are potentially missing data, the buttons will be solid green again.

Clicking the “Remove” button for a patient tab in the prompt will remove the prompts for a patient until they’re viewed/modified again. Removing them does not mean a message will not potentially be generated in the background. It just means they won’t be tracked or represented by a tab in this prompt window until you view/modify the patient again.

Clinical Quality Measures:

In the proceeding sections, we'll be explaining the standard logic and the applied data entry in CrystalPM for each Clinical Quality Measure (CQM) that's officially supported by AOA MORE and CrystalPM's integration. They are as follows:

50v6 - Closing the Referral Loop Receipt of Specialist Report

68v7 - Documentation of Current Medications in the Medical Record (Patient Safety)

122v6 - Diabetes Hemoglobin A1c Poor Control

131v6 - Diabetes Eye Exam

138v6 - Preventative Care and Screening Tobacco Use Screening and Cessation Intervention

142v6 - Diabetic Retinopathy Communication with the Physician Managing Ongoing Diabetes Care

143v6 - Primary Open-Angle Glaucoma (POAG) Optic Nerve Evaluation

165v6 - Controlling High Blood Pressure

167v6 - Diabetic Retinopathy Documentation of Presence or Absence of Macular Edema and Level of Severity of Retinopathy

Even the "human readable" documentation of the CQM logic can be tricky to read and understand, but we'll try to break this down piece by piece.

The included screenshots are from the official specification sheets for each CQM. Links these files are included at beginning of each CQM section below.

These sheets are broken down into three basic parts: header, logic, and value sets. The header contains general information about the CQM (measure title, identifier number, version number, description, etc..). The logic describes how to anticipate or evaluate whether a patient will pass specific portions or all of the CQM logic (numerator, denominator, etc…). The value sets are the groups of codes referenced by the logic.

Many triggering codes are automatically included in the messages generated for a patient, just based on the values selected in dropdown fields in a medical record. But in the case of manually entered procedure (i.e. CPT) or diagnosis (i.e. ICD10, SNOMED) codes, you might want to know exactly which codes trigger a particular portion of a CQM. At the end, we'll cover how to get access to these raw value sets.

50v6 - Closing the Referral Loop Receipt of Specialist Report

Logic

https://ecqi.healthit.gov/system/files/ecqm/measures/CMS50v6_0.html

Population Criteria

- **Initial Population** =
  - AND: First: "Occurrence A of Intervention, Performed: Referral" during "Measurement Period"
  - AND: Union of:
    - "Encounter, Performed: Preventive Care- Initial Office Visit, 0 to 17"
    - "Encounter, Performed: Preventive Care - Established Office Visit, 0 to 17"
    - "Encounter, Performed: Preventive Care Services - Established Office Visit, 18 and Up"
    - "Encounter, Performed: Preventive Care Services-Initial Office Visit, 18 and Up"
    - "Encounter, Performed: Office Visit"
    - "Encounter, Performed: Face-to-Face Interaction"
    - "Encounter, Performed: Ophthalmological Services"
    - during "Measurement Period"
- **Denominator** =
  - AND: Initial Population
- **Denominator Exclusions** =
  - None
- **Numerator** =
  - AND: "Communication: From Provider to Provider: Consultant Report" satisfies all:
    - fulfills "Occurrence A of Intervention, Performed: Referral"
    - starts after start of "Occurrence A of Intervention, Performed: Referral"
- **Numerator Exclusions** =
  - None
- **Denominator Exceptions** =
  - None
- **Stratification** =
  - None

In this documentation, we're just going to focus on the following portions: initial population, denominator and numerator. In this measure and many others, the initial population is equivalent to the denominator (Denominator = AND: Initial Population), so if a patient passes the initial population, they pass the denominator.

The initial population or denominator usually represents the encounter types (i.e. CPT codes), diagnoses (i.e. ICD10 codes), age group, or other basic criteria that creates a general group of patients, of which, are considered eligible to be in the numerator.

Looking at the first line of the initial population, a patient would need a referral during the "Measurement Period." The "Measurement Period" represents the very beginning to the end of the current year (January 1st, 2018 to December 31st, 2018).

The patient would also need at least one encounter during the measurement period. The code (i.e. CPT) representing that type of encounter has to be in one of the specified value sets listed (i.e. 99201 is in the Office Visit value set).

To pass the numerator, there needs to have been a consultation report that fulfills the initial referral and starts after the start of the referral.

50v6 - Closing the Referral Loop Receipt of Specialist Report

Applied

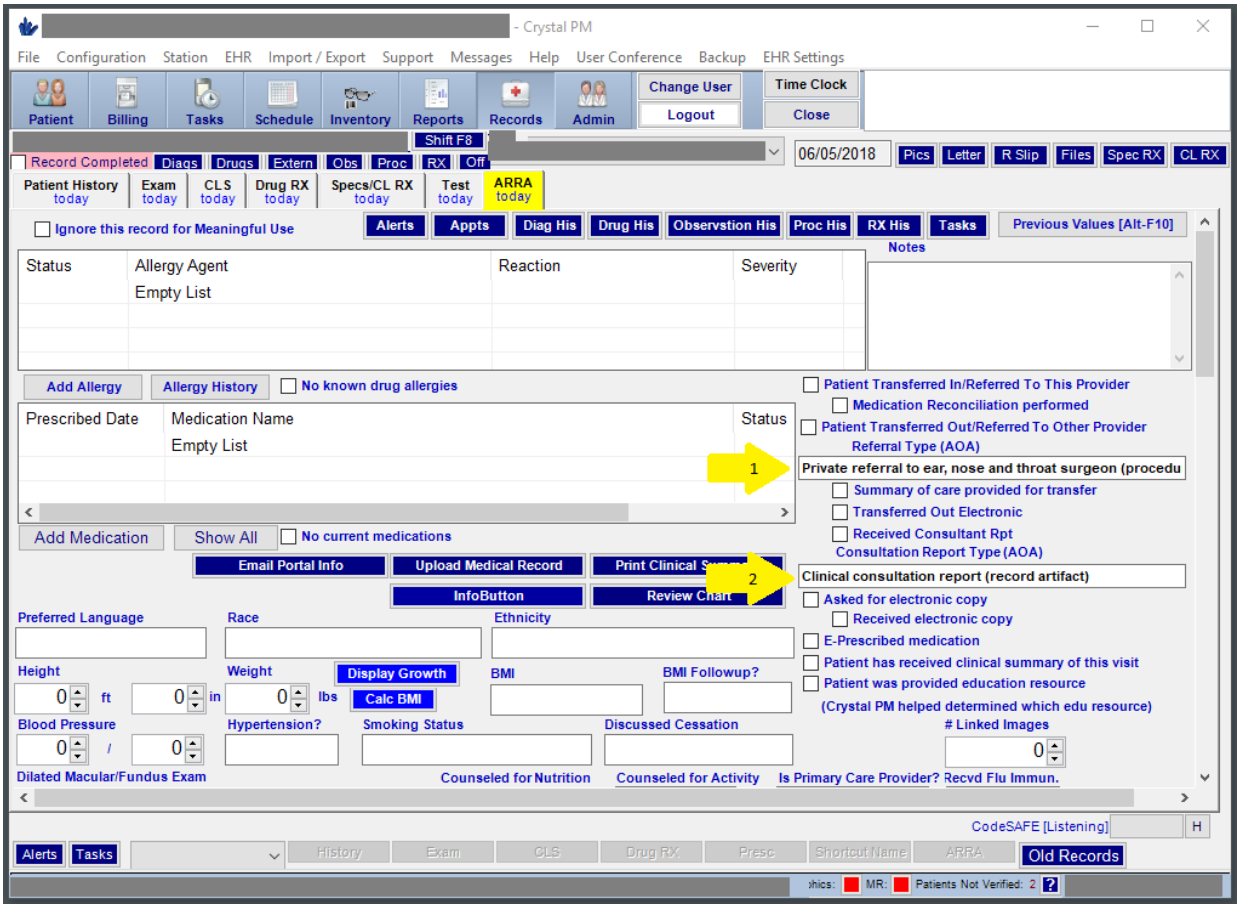
Now let's apply this logic a hypothetical patient in CrystalPM. For this and every other example, we'll create a test patient that passes the initial population, denominator, and numerator.

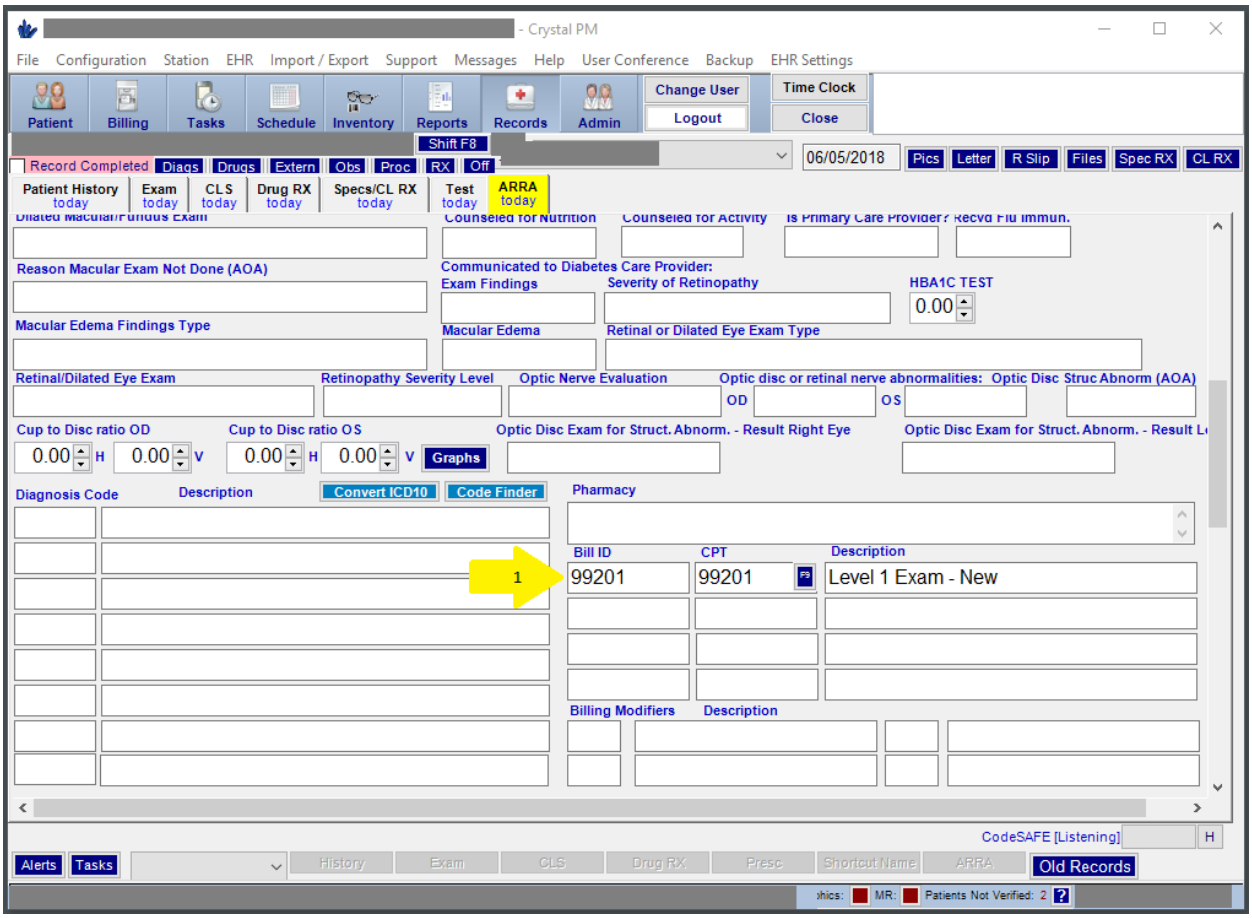
To pass the *"Occurrence A of Intervention, Performed: Referral during Measurement Period"* in the IPP, we select an option from the "Referral Type" field (screenshot #1, arrow #1).

To pass the *"Encounter, Performed: … during Measurement Period"* in the IPP, we need the occurrence of a matching procedure code (i.e. CPT 99201) in the medical record, appointment, invoice or routing slip (screenshot #2, arrow #1).

To pass the *"Communication: From Provider to Provider: Consultant Report"* in the numerator, we select an option from the "Consultation Report Type" field (screenshot #1, arrow #2). This field can be set on the same medical record as where the "Referral Type" field was set or any medical record afterward.

There are currently no data completion prompts associated with this measure. There will be in the near future. It would remind you that the "Referral Type" was set previously and that a matching "Consultation Report" has still not been set, if that is the case.




- Crystal PM
File Configuration Station EHR Import / Export Support Messages Help User Conference Backup EHR Settings
Patient Billing Tasks Schedule Inventory Reports Records Admin
Change User Logout Time Clock Close
Shift F8
06/05/2018
Pics Letter R Slip Files Spec RX CL RX
Record Completed Diags Drugs Extern Obs Proc RX Off
Patient History today Exam today CLS today Drug RX today Specs/CL RX today Test today ARRA today
Reason Macular Exam Not Done (AOA)
Communicated to Diabetes Care Provider:
Exam Findings
Severity of Retinopathy
HBA1C TEST
0.00
Macular Edema Findings Type
Macular Edema
Retinal or Dilated Eye Exam Type
Retinal/Dilated Eye Exam
Retinopathy Severity Level
Optic Nerve Evaluation
Optic disc or retinal nerve abnormalities:
OD
OS
Optic Disc Struc Abnorm (AOA)
Cup to Disc ratio OD
Cup to Disc ratio OS
0.00 H 0.00 V 0.00 H 0.00 V
Graphs
Optic Disc Exam for Struct. Abnorm. - Result Right Eye
Diagnosis Code
Description
Convert ICD10
Code Finder
Pharmacy
Bill ID
CPT
Description
1
99201
99201
Level 1 Exam - New
Billing Modifiers
Description
CodeSAFE [Listening]
Alerts Tasks
History Exam CLS Drug RX Presc Shortcut Name ARRA
Old Records
MR:
Patients Not Verified: 2

68v7 - Documentation of Current Medications in the Medical Record

Logic

https://ecqi.healthit.gov/system/files/ecqm/measures/CMS68v7_0.html

Population Criteria

- **Initial Population** =
  - AND: Age>= 18 year(s) at: "Measurement Period"
  - AND: "Occurrence A of Encounter, Performed: Medications Encounter Code Set" during "Measurement Period"
- **Denominator** =
  - AND: Initial Population
- **Denominator Exclusions** =
  - None
- **Numerator** =
  - AND: "Procedure, Performed: Current Medications Documented SNMD" during "Occurrence A of Encounter, Performed: Medications Encounter Code Set"
- **Numerator Exclusions** =
  - None
- **Denominator Exceptions** =
  - OR: "Procedure, Performed not done: Medical or Other reason not done" for "Current Medications Documented SNMD" during "Occurrence A of Encounter, Performed: Medications Encounter Code Set"
- **Stratification** =
  - None

Once again, the denominator equals the initial population.

To pass the initial population, the patient needs to be 18 years of age or older *("Age>= 18 year(s) at: Measurement Period")*.

Also, an *"Occurrence A of Encounter, Performed: Medications Encounter Code Set during Measurement Period"* needs to occur (i.e. CPT 99201) at least once during the year.

To pass the numerator, the patient needs a *"Procedure, Performed: Current Medications Documented SNMD during Occurrence A of Encounter, Performed: Medications Encounter Code Set"*, which would mean this needs to occur during the encounter mentioned above. The *"Current Medications Documented SNMD"* code and containing entry in included in the message automatically, if certain conditions are met in the medical record, which we'll discuss next.

68v7 - Documentation of Current Medications in the Medical Record

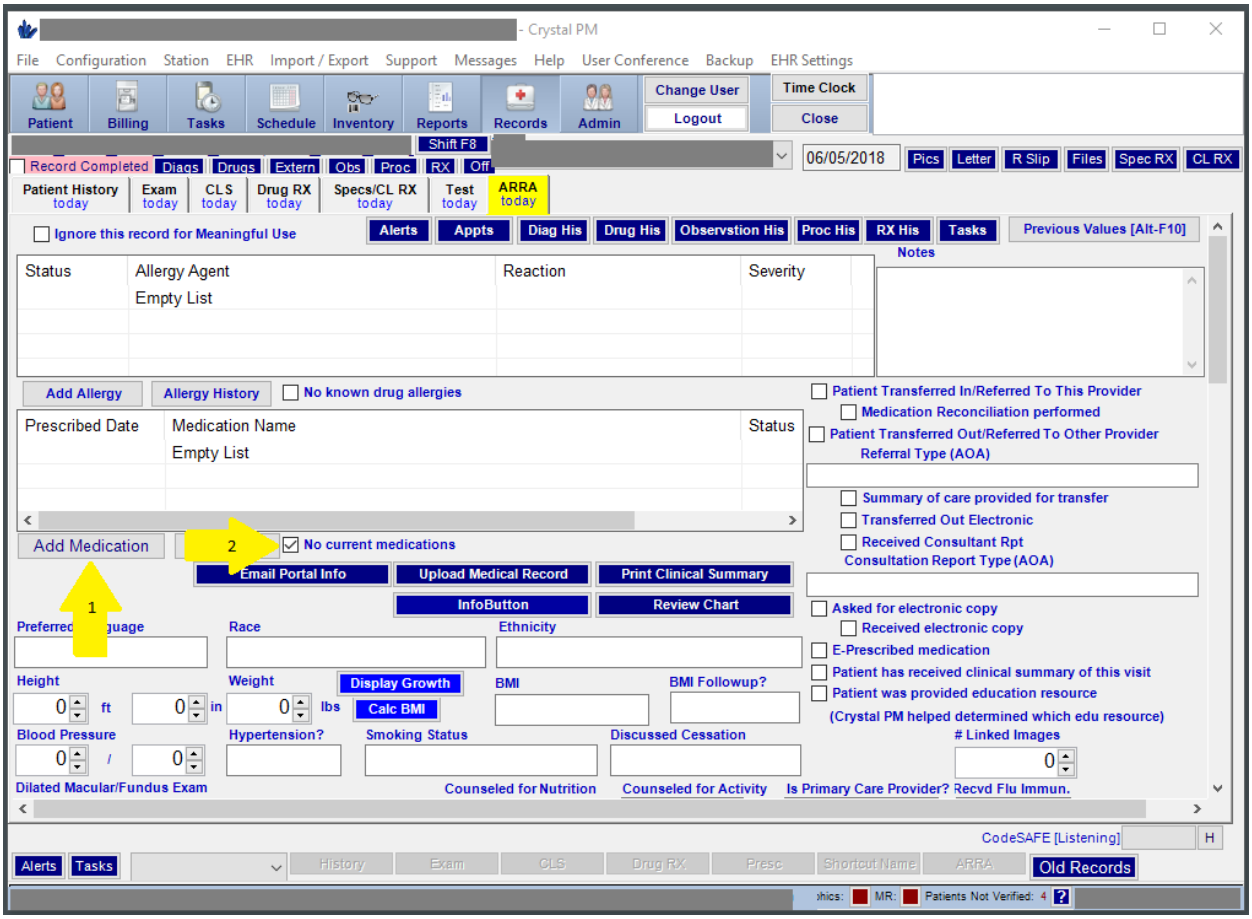
Applied

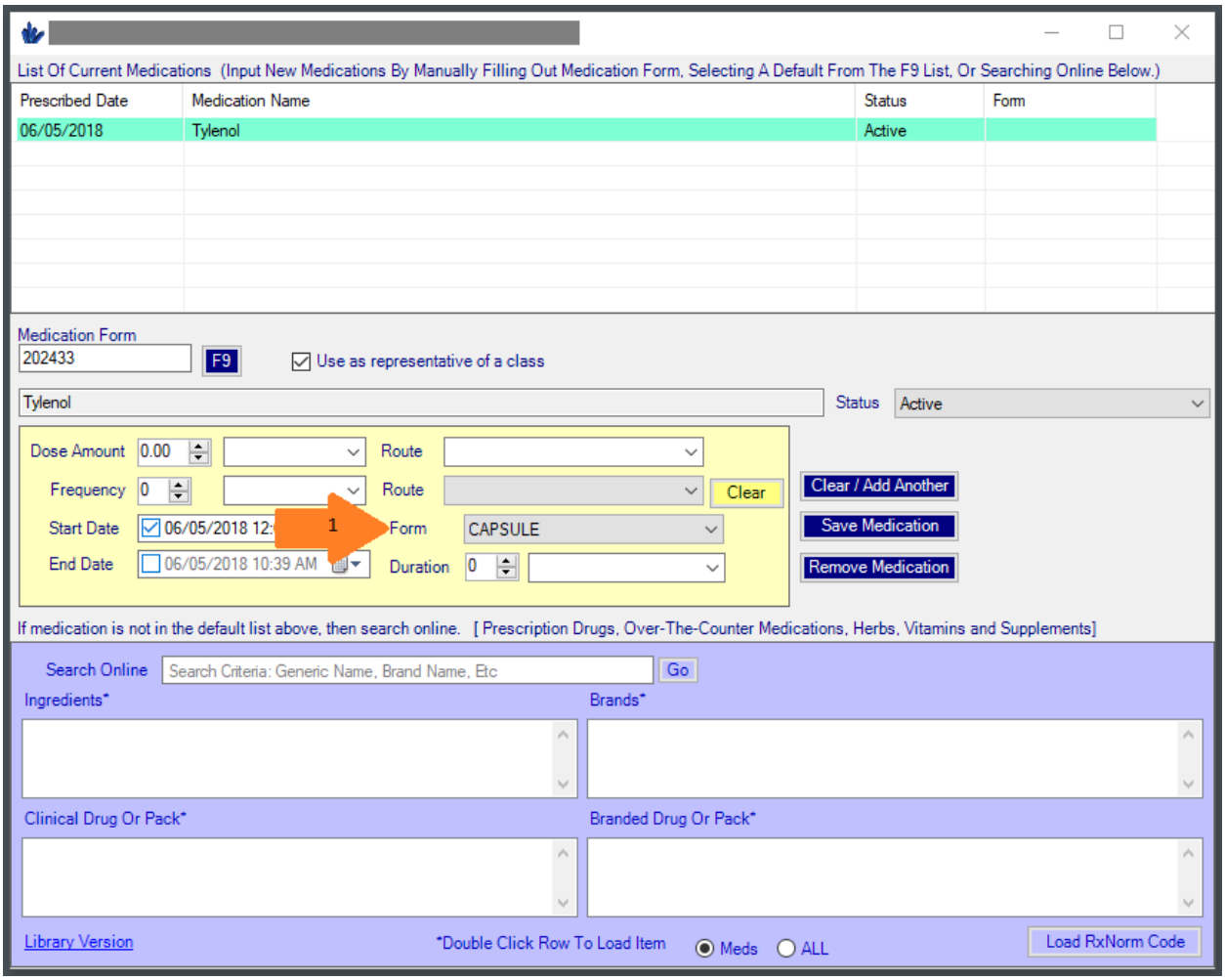
The patient's age is determined by their date of birth, which is already a required and prompted demographic field.

The patient needs an encounter code (i.e. CPT 99201) at least once, now or in a previous medical record, appointment, invoice or routing slip during this year. An example of this was shown for 50v6.

For fulfilling "*Procedure, Performed: Current Medications Documented SNMD during Occurrence A of Encounter, Performed: Medications Encounter Code Set*", there are two scenarios. If the patient has at least one active medication (screenshot #1, arrow #1), you don't have to do anything. If the patient has no medications, then you need to check the "No Current Medications" checkbox (screenshot #1, arrow #2).

This applies to every measure, but every medication needs to have a form type (i.e. capsule, injectable, etc..) set, which is prompted (screenshot #2, arrow #1).




List Of Current Medications (Input New Medications By Manually Filling Out Medication Form, Selecting A Default From The F9 List, Or Searching Online Below.)
Prescribed Date
Medication Name
Status
Form
06/05/2018
Tylenol
Active
Medication Form
202433
F9
Use as representative of a class
Tylenol
Status
Active
Dose Amount
0.00
Route
Frequency
0
Route
Clear
Clear / Add Another
Start Date
06/05/2018 12:
1
Form
CAPSULE
Save Medication
End Date
06/05/2018 10:39 AM
Duration
0
Remove Medication
If medication is not in the default list above, then search online. [Prescription Drugs, Over-The-Counter Medications, Herbs, Vitamins and Supplements]
Search Online
Search Criteria: Generic Name, Brand Name, Etc
Go
Ingredients*
Brands*
Clinical Drug Or Pack*
Branded Drug Or Pack*
Library Version
*Double Click Row To Load Item
Meds
ALL
Load RxNorm Code

122v6 - Diabetes Hemoglobin A1c Poor Control

Logic

https://ecqi.healthit.gov/system/files/ecqm/measures/CMS122v6_0.html

Population Criteria

- **Initial Population** =
  - AND: "Diagnosis: Diabetes" overlaps "Measurement Period"
  - AND: Age>= 18 year(s) at: "Measurement Period"
  - AND: Age< 75 year(s) at: "Measurement Period"
  - AND: Union of:
    - "Encounter, Performed: Office Visit"
    - "Encounter, Performed: Face-to-Face Interaction"
    - "Encounter, Performed: Preventive Care Services - Established Office Visit, 18 and Up"
    - "Encounter, Performed: Preventive Care Services-Initial Office Visit, 18 and Up"
    - "Encounter, Performed: Home Healthcare Services"
    - "Encounter, Performed: Annual Wellness Visit"
    - during "Measurement Period"
- **Denominator** =
  - AND: Initial Population
- **Denominator Exclusions** =
  - OR: "Encounter, Performed: Encounter Inpatient (discharge status: Discharged to Home for Hospice Care)" ends during "Measurement Period"
  - OR: "Encounter, Performed: Encounter Inpatient (discharge status: Discharged to Health Care Facility for Hospice Care)" ends during "Measurement Period"
  - OR: Union of:
    - "Intervention, Order: Hospice care ambulatory"
    - "Intervention, Performed: Hospice care ambulatory"
    - overlaps "Measurement Period"
- **Numerator** =
  - AND:
    - OR: "Laboratory Test, Performed: HbA1c Laboratory Test" satisfies all:
      - Most Recent: (result) during "Measurement Period"
      - (result > 9 %)
    - OR:
      - AND: Most Recent: "Occurrence A of Laboratory Test, Performed: HbA1c Laboratory Test" during "Measurement Period"
      - AND NOT: "Occurrence A of Laboratory Test, Performed: HbA1c Laboratory Test (result)"
    - OR NOT: "Laboratory Test, Performed: HbA1c Laboratory Test" during "Measurement Period"
- **Numerator Exclusions** =
  - None
- **Denominator Exceptions** =
  - None
- **Stratification** =
  - None

To pass the initial population, the patient needs to be 18 years of age or older and less than 75 years of age.

The patient needs an active diagnosis of diabetes.

The patient needs a matching encounter at least once during the year.

To pass numerator, the patient needs a HbA1c lab test result where the most recent value is greater than 9% or no result at all during the year.

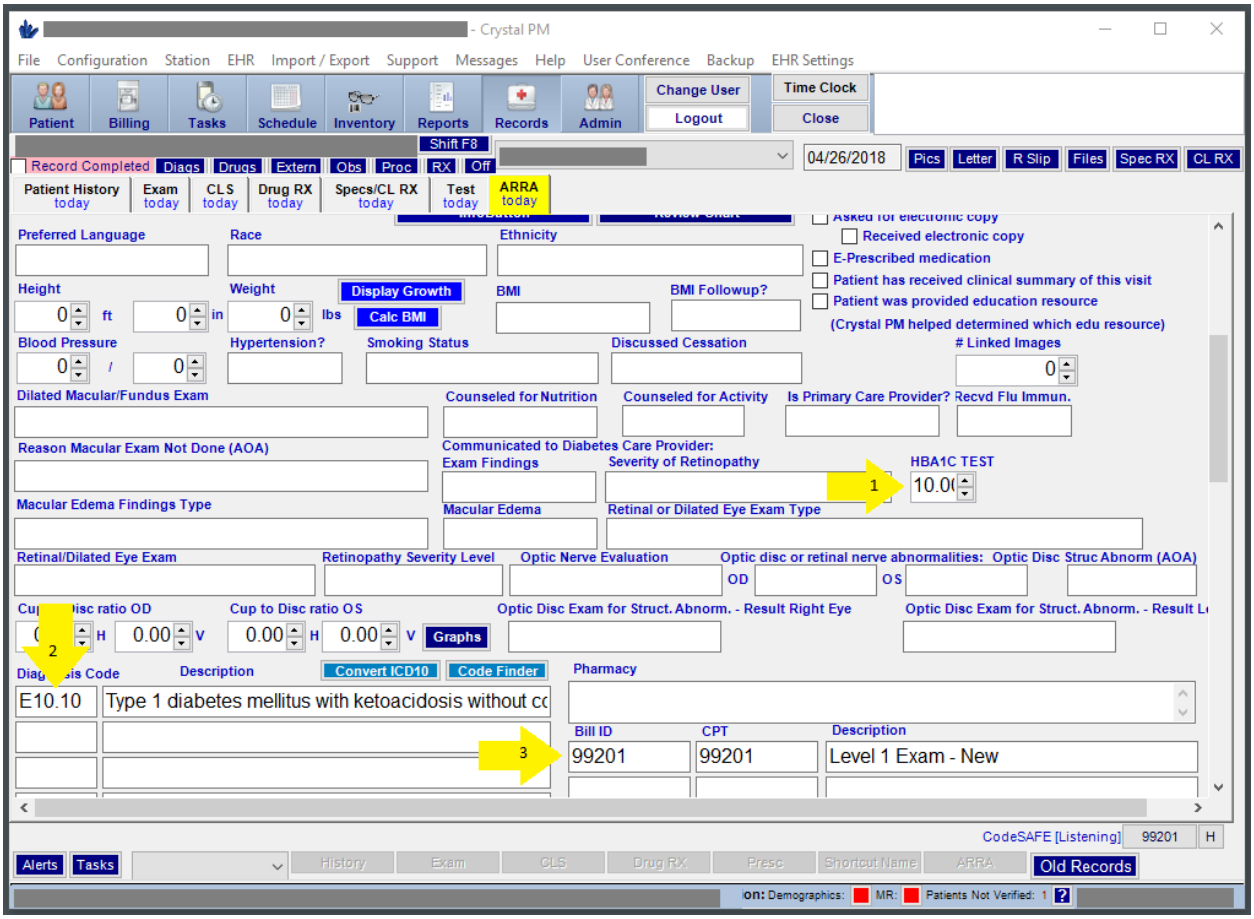
122v6 - Diabetes Hemoglobin A1c Poor Control

Applied

The patient needs have an encounter code (i.e. CPT 99201) set at least once, now or in a previous medical record, appointment, invoice or routing slip during this year (screenshot #1, arrow #3).

The patient needs an active diabetes diagnosis (i.e. ICD10's E10.10) (screenshot #1, arrow #2). A matching SNOMED code in the Problem List would also suffice.

To pass the numerator, the HbA1c field needs a value greater than 9% (i.e. 10%) (screenshot #1, arrow #1), or no value at all (0). The older method discussed in the first AOA MORE integration tutorial video, of entering a lab test and result, will also still suffice.



This measure is more flexible when it comes to the performing or start dates of the data. The diabetes diagnosis could be from years ago, as long as it's still active. The encounter code and the HbA1c test result don't have to be on the same date. They just both have to be during the year to pass the initial population and denominator.

131v6 - Diabetes Eye Exam

Logic

https://ecqi.healthit.gov/system/files/ecqm/measures/CMS131v6_1.html

Population Criteria

- **Initial Population** =
  - AND: "Diagnosis: Diabetes" overlaps "Measurement Period"
  - AND: Age>= 18 year(s) at: "Measurement Period"
  - AND: Age< 75 year(s) at: "Measurement Period"
  - AND: Union of:
    - "Encounter, Performed: Office Visit"
    - "Encounter, Performed: Face-to-Face Interaction"
    - "Encounter, Performed: Preventive Care Services - Established Office Visit, 18 and Up"
    - "Encounter, Performed: Preventive Care Services-Initial Office Visit, 18 and Up"
    - "Encounter, Performed: Home Healthcare Services"
    - "Encounter, Performed: Annual Wellness Visit"
    - "Encounter, Performed: Ophthalmological Services"
    - during "Measurement Period"
- **Denominator** =
  - AND: Initial Population
- **Denominator Exclusions** =
  - OR: "Encounter, Performed: Encounter Inpatient (discharge status: Discharged to Home for Hospice Care)" ends during "Measurement Period"
  - OR: "Encounter, Performed: Encounter Inpatient (discharge status: Discharged to Health Care Facility for Hospice Care)" ends during "Measurement Period"
  - OR: Union of:
    - "Intervention, Order: Hospice care ambulatory"
    - "Intervention, Performed: Hospice care ambulatory"
    - overlaps "Measurement Period"
- **Numerator** =
  - AND: "Physical Exam, Performed: Retinal or Dilated Eye Exam" satisfies any:
    - (result: Negative Finding) < 12 month(s) ends before start of "Measurement Period"
    - during "Measurement Period"
- **Numerator Exclusions** =
  - None
- **Denominator Exceptions** =
  - None
- **Stratification** =
  - None

To pass the initial population, the patient needs to be 18 years of age or older and less than 75 years of age.

The patient needs an active diagnosis of diabetes.

The patient needs a matching encounter at least once during the year.

To pass the numerator, the patient needs a recorded “Retinal or Dilated Eye Exam”, where result is negative and the exam was done in the previous year, or where the result was not negative and the exam was done during the year.

131v6 - Diabetes Eye Exam

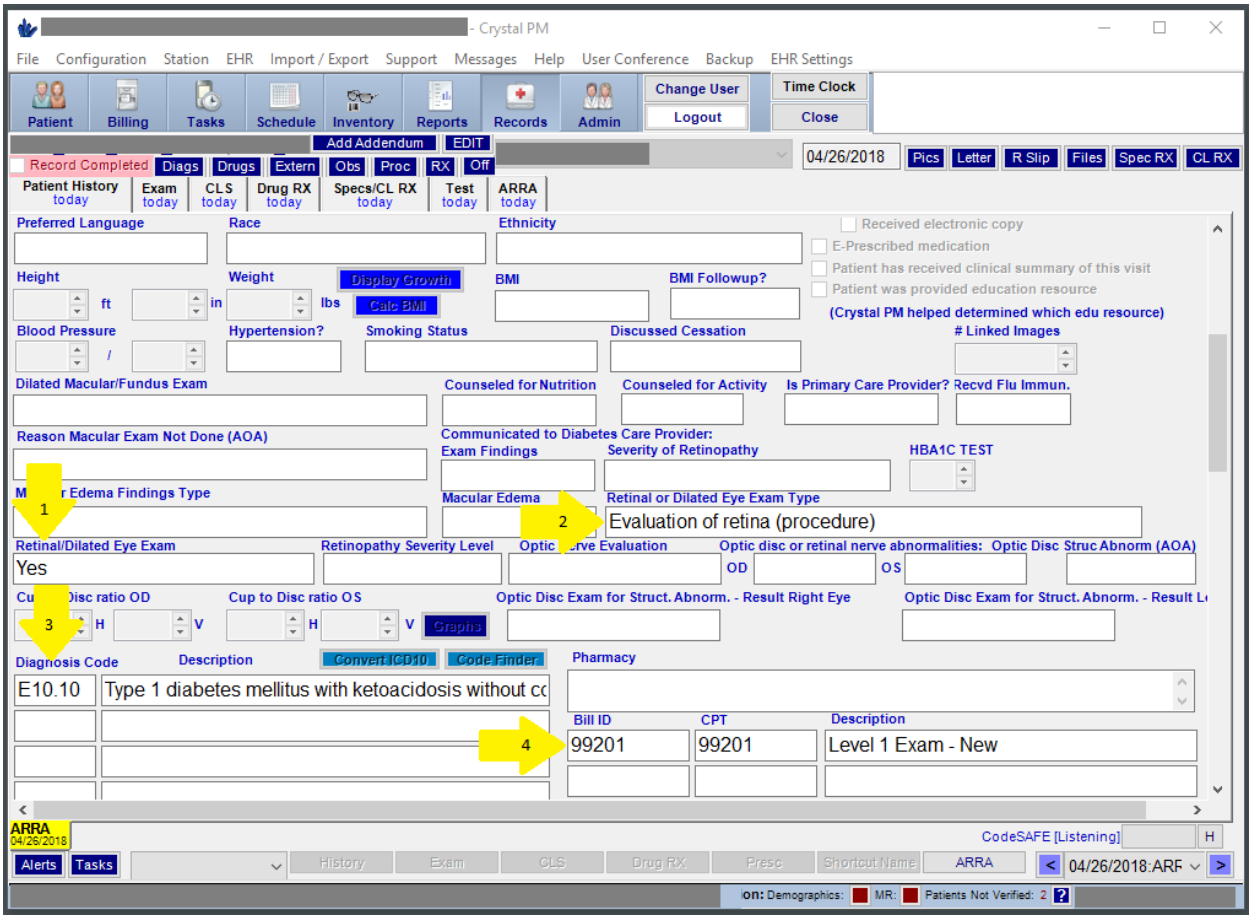
Applied

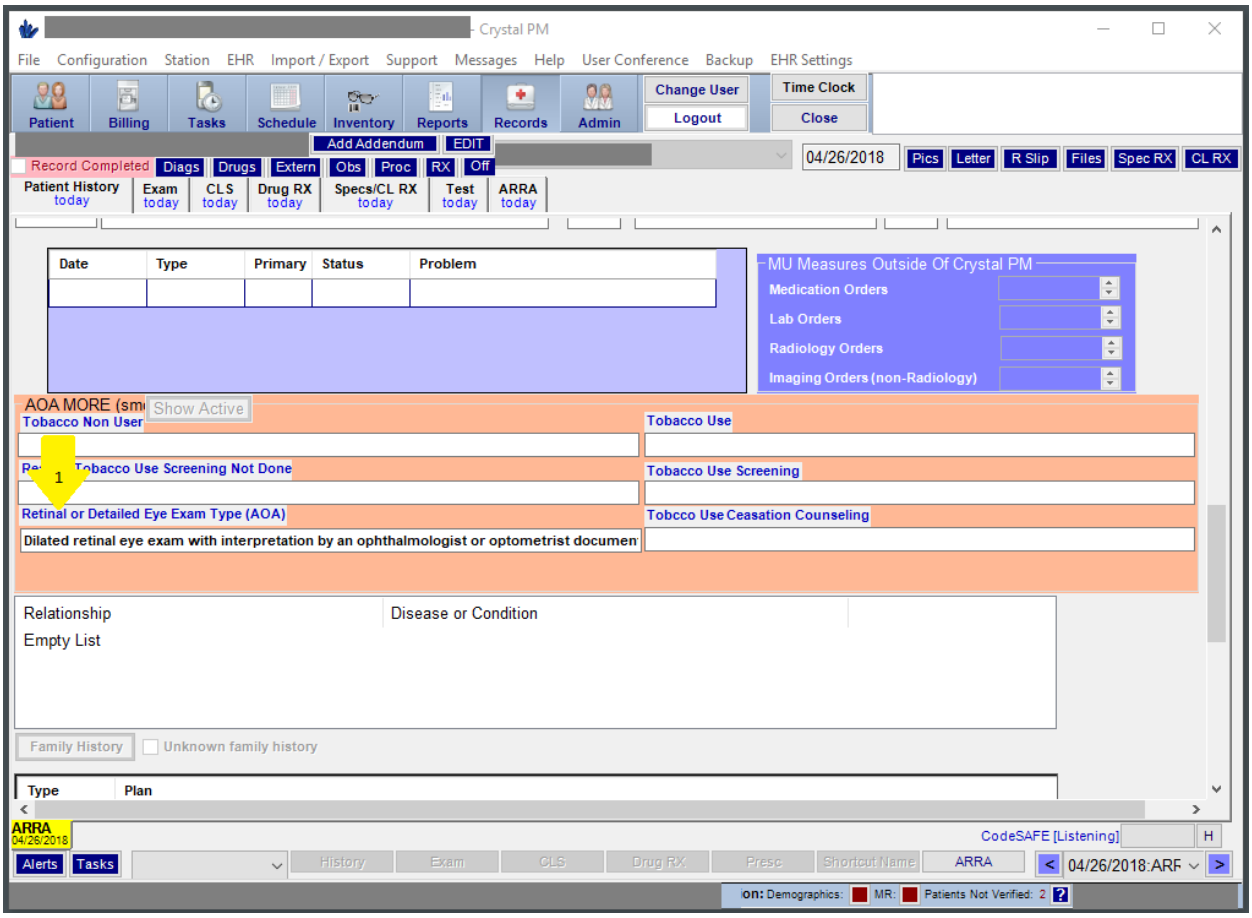
The patient needs have an encounter code (i.e. CPT 99201) set at least once, now or in a previous medical record, appointment, invoice or routing slip during this year (screenshot #1, arrow #4).

The patient needs an active diabetes diagnosis (i.e. ICD10's E10.10) (screenshot #1, arrow #3). A matching SNOMED code in the Problem List would also suffice.

In order to sufficiently document the retinal/dilated eye exam, there are three fields that need to be filled out: "Retinal/Dilated Eye Exam", "Retinal or Dilated Eye Exam Type", and "Retinal or Dilated Eye Exam Type (AOA)."

The "Retinal/Dilated Eye Exam" field (screenshot #1, arrow #1) needs a value of "Yes" or "No." To pass the numerator, it would need to be yes. For the two exam type dropdown fields (screenshot #1, arrow #2 and screenshot #2, arrow #1), pick the option that most matches the type of exam that was actually performed.




Crystal PM
File Configuration Station EHR Import / Export Support Messages Help User Conference Backup EHR Settings
Patient Billing Tasks Schedule Inventory Reports Records Admin
Change User Logout Time Clock Close
Add Addendum EDIT
Record Completed Diags Drugs Extern Obs Proc RX Off
04/26/2018 Pics Letter R Slip Files Spec RX CL RX
Patient History today Exam today CLS today Drug RX today Specs/CL RX today Test today ARRA today
Date Type Primary Status Problem
MU Measures Outside Of Crystal PM
Medication Orders
Lab Orders
Radiology Orders
Imaging Orders (non-Radiology)
AOA MORE (sm
Show Active
Tobacco Non User
Tobacco Use
Tobacco Use Screening Not Done
Tobacco Use Screening
1
Retinal or Detailed Eye Exam Type (AOA)
Tobcco Use Ceasation Counseling
Dilated retinal eye exam with interpretation by an ophthalmologist or optometrist documen
Relationship
Disease or Condition
Empty List
Family History
Unknown family history
Type
Plan
ARRA
04/26/2018
CodeSAFE [Listening]
Alerts Tasks
History Exam CLS Drug RX Presc Shortcut Name ARRA
04/26/2018:ARF
Demographics: MR: Patients Not Verified: 2

138v6 - Preventative Care and Screening Tobacco Use Screening and Cessation Intervention

Logic

https://ecqi.healthit.gov/system/files/ecqm/measures/CMS138v6_0.html

138v6 has three population criteria, so it's almost like three measures in one. The initial population logic is identical, but every other portion is different for each.

Population Criteria

------ **Population Criteria 1** ------

- **Initial Population** =
  - AND: Age>= 18 year(s) at: "Measurement Period"
  - AND:
    - OR: Count>= 2 : Union of:
      - "Encounter, Performed: Face-to-Face Interaction"
      - "Encounter, Performed: Health & Behavioral Assessment - Individual"
      - "Encounter, Performed: Health and Behavioral Assessment - Initial"
      - "Encounter, Performed: Health and Behavioral Assessment, Reassessment"
      - "Encounter, Performed: Home Healthcare Services"
      - "Encounter, Performed: Occupational Therapy Evaluation"
      - "Encounter, Performed: Office Visit"
      - "Encounter, Performed: Ophthalmological Services"
      - "Encounter, Performed: Psych Visit - Diagnostic Evaluation"
      - "Encounter, Performed: Psych Visit - Psychotherapy"
      - "Encounter, Performed: Psychoanalysis"
      - "Encounter, Performed: Speech and Hearing Evaluation"
      - during "Measurement Period"
    - OR: Count>= 1 : Union of:
      - "Encounter, Performed: Annual Wellness Visit"
      - "Encounter, Performed: Preventive Care Services - Established Office Visit, 18 and Up"
      - "Encounter, Performed: Preventive Care Services - Group Counseling"
      - "Encounter, Performed: Preventive Care Services - Other"
      - "Encounter, Performed: Preventive Care Services-Individual Counseling"
      - "Encounter, Performed: Preventive Care Services-Initial Office Visit, 18 and Up"
      - during "Measurement Period"

Population #1:

- **Denominator** =
  - AND: Initial Population
- **Denominator Exclusions** =
  - None
- **Numerator** =
  - AND:
    - OR: $TobaccoUseScreeningNonUser
    - OR: $TobaccoUseScreeningUser
- **Numerator Exclusions** =
  - None
- **Denominator Exceptions** =
  - OR:
    - AND: "Occurrence A of Diagnosis: Limited Life Expectancy" starts before end of "Measurement Period"
    - AND NOT: "Occurrence A of Diagnosis: Limited Life Expectancy" ends before end of "Measurement Period"
  - OR: "Assessment, Performed not done: Medical Reason" for "Tobacco Use Screening" <= 24 month(s) starts before end of "Measurement Period"
- **Stratification** =
  - None

Population #2:

- **Denominator** =
  - AND: Initial Population
  - AND: $TobaccoUseScreeningUser
- **Denominator Exclusions** =
  - None
- **Numerator** =
  - AND: Occurrence A of $TobaccoCessationIntervention starts after or concurrent with start of $TobaccoUseScreeningUser
  - AND: Occurrence A of $TobaccoCessationIntervention starts before end of "Measurement Period"
- **Numerator Exclusions** =
  - None
- **Denominator Exceptions** =
  - OR:
    - AND: "Occurrence A of Diagnosis: Limited Life Expectancy" starts before end of "Measurement Period"
    - AND NOT: "Occurrence A of Diagnosis: Limited Life Expectancy" ends before end of "Measurement Period"
  - OR: $CounselingNotPerformed starts after or concurrent with start of $TobaccoUseScreeningUser
  - OR: $MedicationNotOrdered starts after or concurrent with start of $TobaccoUseScreeningUser
- **Stratification** =
  - None

Population #3:

- **Denominator** =
  - AND: Initial Population
- **Denominator Exclusions** =
  - None
- **Numerator** =
  - AND:
    - OR: $TobaccoUseScreeningNonUser
    - OR:
      - AND: Occurrence A of $TobaccoCessationIntervention starts after or concurrent with start of $TobaccoUseScreeningUser
      - AND: Occurrence A of $TobaccoCessationIntervention starts before end of "Measurement Period"
- **Numerator Exclusions** =
  - None
- **Denominator Exceptions** =
  - OR:
    - AND: "Occurrence A of Diagnosis: Limited Life Expectancy" starts before end of "Measurement Period"
    - AND NOT: "Occurrence A of Diagnosis: Limited Life Expectancy" ends before end of "Measurement Period"
  - OR: "Assessment, Performed not done: Medical Reason" for "Tobacco Use Screening" <= 24 month(s) starts before end of "Measurement Period"
  - OR: $CounselingNotPerformed starts after or concurrent with start of $TobaccoUseScreeningUser
  - OR: $MedicationNotOrdered starts after or concurrent with start of $TobaccoUseScreeningUser
- **Stratification** =
  - None

Alias Definitions:

Data Criteria (QDM Variables)

- **$TobaccoCessationIntervention** =
  - Union of:
    - "Intervention, Performed: Tobacco Use Cessation Counseling"
    - "Medication, Active: Tobacco Use Cessation Pharmacotherapy"
    - "Medication, Order: Tobacco Use Cessation Pharmacotherapy"
- **$TobaccoUseScreeningNonUser** =
  - "Assessment, Performed: Tobacco Use Screening" satisfies all:
    - Most Recent: <= 24 month(s) starts before end of "Measurement Period"
    - (result: Tobacco Non-User)
- **$CounselingNotPerformed** =
  - "Intervention, Performed not done: Medical Reason" for "Tobacco Use Cessation Counseling" starts before end of "Measurement Period"
- **$TobaccoUseScreeningUser** =
  - "Assessment, Performed: Tobacco Use Screening" satisfies all:
    - Most Recent: <= 24 month(s) starts before end of "Measurement Period"
    - (result: Tobacco User)
- **$MedicationNotOrdered** =
  - "Medication, Order not done: Medical Reason" for "Tobacco Use Cessation Pharmacotherapy" starts before end of "Measurement Period"

To pass the initial population, the patient needs to be 18 years of age or older.

For certain types of encounters, the patient needs at least two encounters, represented by codes in specific value sets, during the year.

The population criteria #1 and #3, the initial population is equivalent to the denominator.

For population #2, the denominator passes if the initial population is met and a tobacco use screening was done, where patient was found to be a tobacco user, where that screening was done during the year or previous year ("<= 24 months before end of Measurement Period").

As implied above, each of the three population criteria has a different numerator logic.

For population #1, the patient would have a tobacco use screening, with the result being that they are a tobacco user or non-user, where the screening was done during the year or previous year.

For population #2, the patient would receive a tobacco use screening, with the result being that they are a tobacco user, where the screening was done during the year or previous year. In response, the patient would receive tobacco use cessation counseling or prescribed tobacco use cessation medication. The counseling would be performed or that medication would start on the same day or after the counseling was performed and would start before the end of the year.

For population #1, the patient would have a tobacco use screening, with the result being that they are a tobacco non-user, where the screening was done during the year or previous year. Or they would match the numerator logic from population #2.

138v6 - Preventative Care and Screening Tobacco Use Screening and Cessation Intervention

Applied

To pass the initial population with certain types encounter codes, such as the value set that CPT 99201 is in, there would need to be at least two entries of that type of encounter code. Not the same code, but codes in the same group of value sets (i.e. two or more encounters using codes from “Face-to-Face Interaction, Office Visit, etc..., or one or more encounter using codes from “Annual Wellness Visit”, etc…). Looking the encounter logic of the initial population logic above might make this easier to understand.

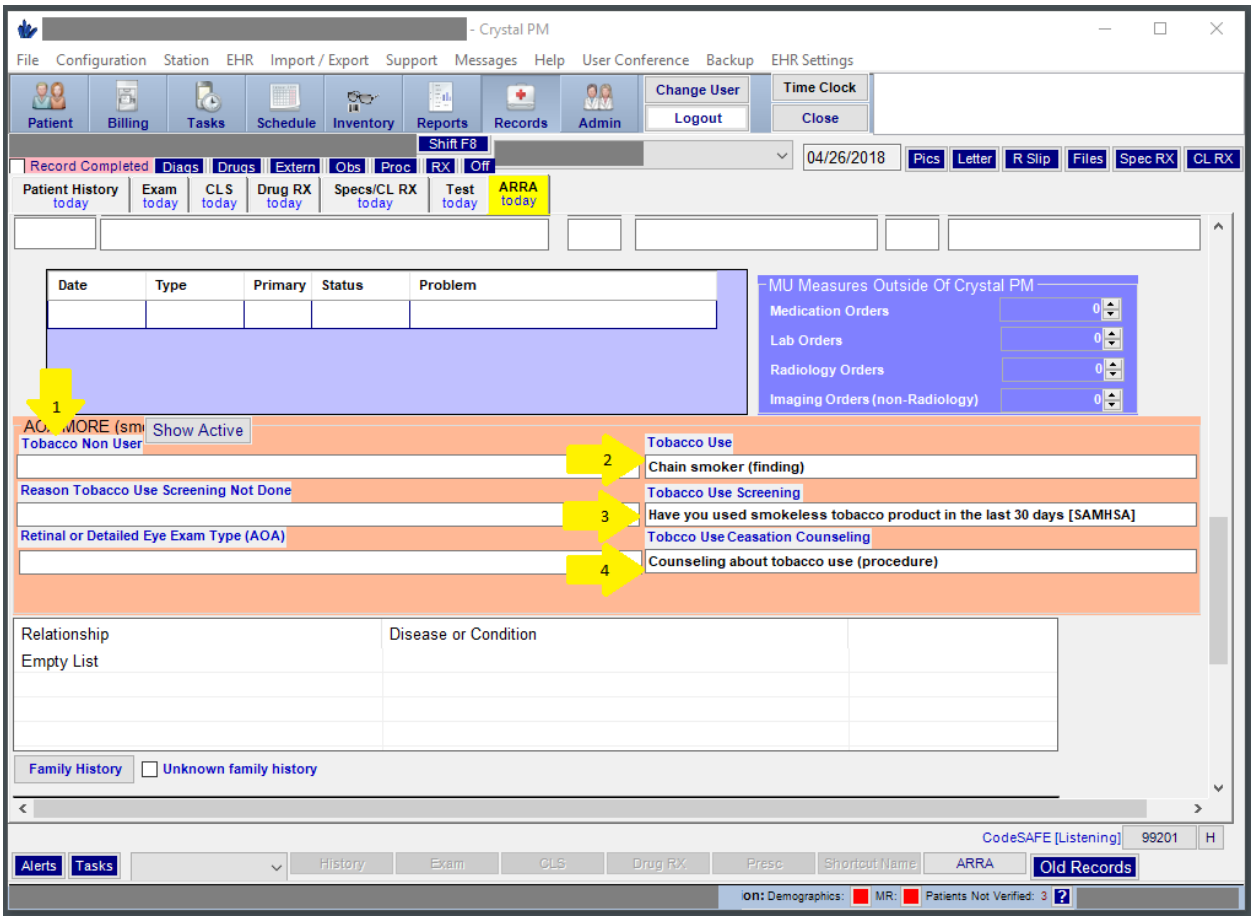
Instead of using the logic above to explain how to pass the numerator, we’ll just break down what data you should enter into branching steps (continued below).

You should always start with the “Tobacco Use Screening” field (screenshot #1, arrow #3). If the patient refuses the screening, you should not fill out the screening field and instead select an option from the “Reason Tobacco Use Screening Not Done” field (2nd field below screenshot #1, arrow #1), and you’re done.

If you completed the screening and you know whether the patient is a tobacco user or non-user, select an option from the “Tobacco Use Screening” field (screenshot #1, arrow #3), and select an option from the “Tobacco Use” (screenshot #1, arrow #2) or “Tobacco Non-User” field (1st field below screenshot #1, arrow #1). If they’re a tobacco non-user, you’re done.

If they’re a tobacco user, you have the option to perform an intervention. You can perform tobacco use cessation counseling and/or you can prescribe cessation medication. If you perform cessation counseling, select an option from the “Tobacco Use Cessation Counseling” field (screenshot #1, arrow #4). If you prescribed tobacco cessation medication, you would add that as an active medication in their medication history, just like adding a medication in 68v7.

You will be prompted for these fields if data is detected as missing.



142v6 - Diabetic Retinopathy Communication with the Physician Managing Ongoing Diabetes Care

Logic

https://ecqi.healthit.gov/system/files/ecqm/measures/CMS142v6_0.html

Population Criteria

- **Initial Population** =
  - AND: Age>= 18 year(s) at: "Measurement Period"
  - AND: "Diagnosis: Diabetic Retinopathy" overlaps Occurrence A of $EyeCareEncounters
- **Denominator** =
  - AND: Initial Population
  - AND: "Diagnostic Study, Performed: Macular Exam (result)" during Occurrence A of $EyeCareEncounters
- **Denominator Exclusions** =
  - None
- **Numerator** =
  - AND: "Communication: From Provider to Provider: Level of Severity of Retinopathy Findings" starts after start of Occurrence A of $EyeCareEncounters
  - AND: Union of:
    - "Communication: From Provider to Provider: Macular Edema Findings Present"
    - "Communication: From Provider to Provider: Macular Edema Findings Absent"
    - starts after start of Occurrence A of $EyeCareEncounters
- **Numerator Exclusions** =
  - None
- **Denominator Exceptions** =
  - OR: Union of:
    - "Communication: From Provider to Provider not done: Medical Reason" for "Macular Edema Findings Absent"
    - "Communication: From Provider to Provider not done: Patient Reason" for "Macular Edema Findings Absent"
    - "Communication: From Provider to Provider not done: Medical Reason" for "Macular Edema Findings Present"
    - "Communication: From Provider to Provider not done: Patient Reason" for "Macular Edema Findings Present"
    - "Communication: From Provider to Provider not done: Medical Reason" for "Level of Severity of Retinopathy Findings"
    - "Communication: From Provider to Provider not done: Patient Reason" for "Level of Severity of Retinopathy Findings"
    - starts after start of Occurrence A of $EyeCareEncounters
- **Stratification** =
  - None

To pass the initial population, the patient needs to be 18 years of age or older.

The patient needs an active diagnosis of diabetes, where the diagnosis starts before or on the same day as a matching encounter.

The patient needs a matching encounter at least once during the year.

To pass the denominator, the patient needs to pass the initial population, as well as having a macular exam with a result during a matching encounter.

To pass the numerator, the “Level of Severity of Retinopathy Findings” and the “Macular Edema Findings Present” or “Absent” needs to be recorded. And the “Level of Severity of Retinopathy Findings” and “Macular Edema Findings Present” or “Absent” need to be recorded as communicated to another provider. The exam, findings, and the indication of communication of the findings need to be recorded on the same day and the same day as the matching encounter.

142v6 - Diabetic Retinopathy Communication with the Physician Managing Ongoing Diabetes Care

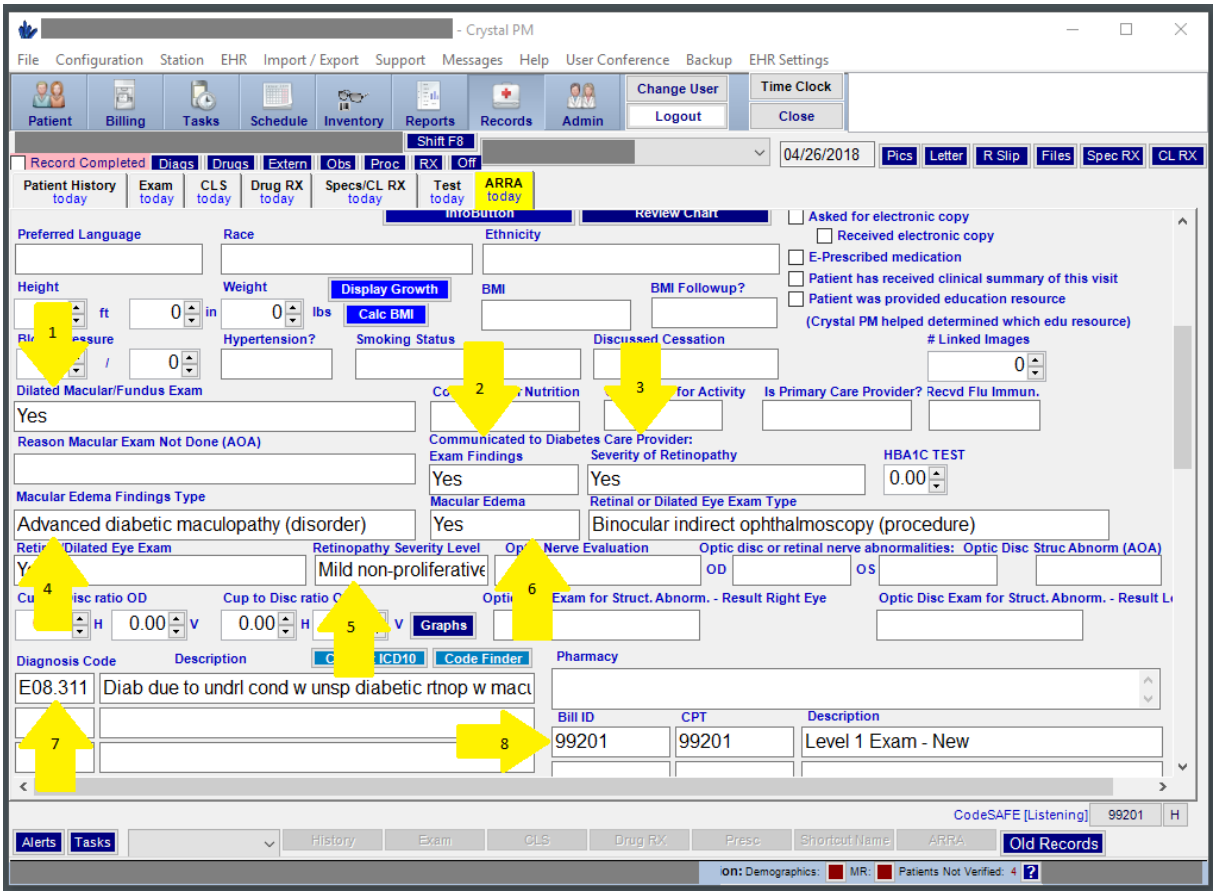
Applied

To pass the initial population, the patient has a diagnosis of diabetic retinopathy (ICD10's E08.311) (screenshot #1, arrow #7). If the patient already had an active diabetic retinopathy diagnosis from a previous medical record, this would not need to be repeated.

To pass the initial population and the denominator, the patient has a matching encounter code (CPT 99201) (screenshot #1, arrow #8), which is on the same day as the dilated/macular fundus exam, and the active diabetic retinopathy diagnosis overlaps it.

To pass the numerator, the "Dilated Macular/Fundus" exam field (screenshot#1, arrow #1) needs to have a value of "Yes." The "Macular Edema" field (screenshot #1, arrow #6) needs to have a value of "Yes" or "No." If the value for "Macular Edema" is "Yes", then an option should be selected from the "Macular Edema Findings Type" field (screenshot #1, arrow #4). An option also needs to be selected from the "Retinopathy Severity Level" field (screenshot #1, arrow #5).

For recording the communication to another provider, the "Communicated to Diabetes Care Provider: Exam Findings" (screenshot #1, arrow #2) and "… Severity of Retinopathy" (screenshot #1, arrow #3) fields both need a value of yes.



143v6 - Primary Open-Angle Glaucoma (POAG) Optic Nerve Evaluation

Logic

https://ecqi.healthit.gov/system/files/ecqm/measures/CMS143v6_1.html

Population Criteria

- **Initial Population** =
  - AND: Age>= 18 year(s) at: "Measurement Period"
  - AND: "Diagnosis: Primary Open-Angle Glaucoma" overlaps Occurrence A of $EyeCareEncounters
- **Denominator** =
  - AND: Initial Population
- **Denominator Exclusions** =
  - None
- **Numerator** =
  - AND: "Diagnostic Study, Performed: Cup to Disc Ratio (result)" during Occurrence A of $EyeCareEncounters
  - AND: "Diagnostic Study, Performed: Optic Disc Exam for Structural Abnormalities (result)" during Occurrence A of $EyeCareEncounters
- **Numerator Exclusions** =
  - None
- **Denominator Exceptions** =
  - OR: Union of:
    - "Diagnostic Study, Performed not done: Medical Reason" for "Cup to Disc Ratio"
    - "Diagnostic Study, Performed not done: Medical Reason" for "Optic Disc Exam for Structural Abnormalities"
    - starts during Occurrence A of $EyeCareEncounters
- **Stratification** =
  - None

To pass the initial population, the patient needs to be 18 years of age or older.

The patient needs an active diagnosis of primary open-angle glaucoma, where the diagnosis starts before or on the same day as a matching encounter.

The patient needs a matching encounter at least once during the year.

The initial population is equivalent to the denominator.

To pass the numerator, the patients needs a cup to disc ratio test with a result during the matching encounter. They also need an optic disc exam for structural abnormalities with a result during the matching encounter.

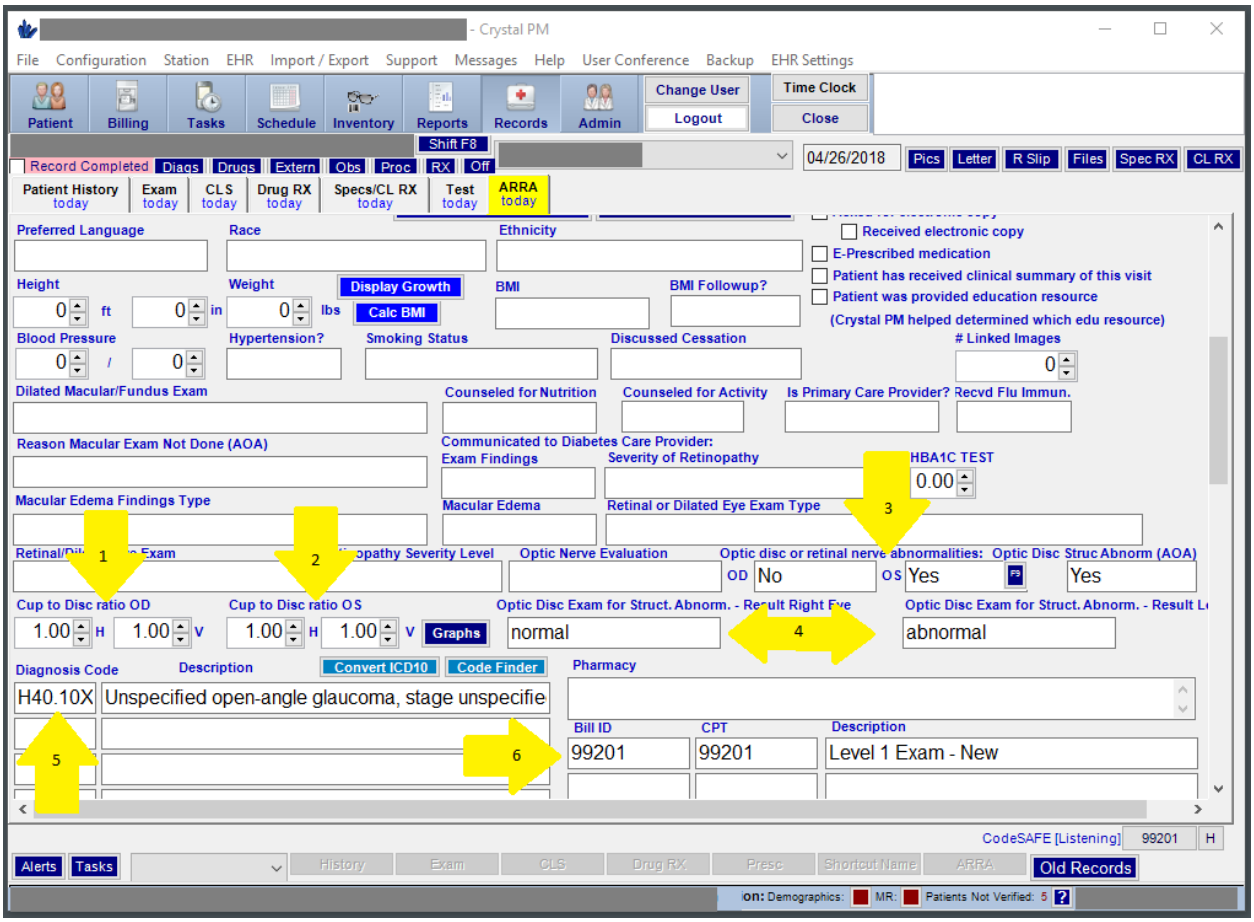
143v6 - Primary Open-Angle Glaucoma (POAG) Optic Nerve Evaluation

Applied

To pass the initial population, the patient has a diagnosis of primary open angle glaucoma (ICD10's H40.10X0) (screenshot #1, arrow #5). If the patient already had an active primary open angle glaucoma diagnosis from a previous medical record, this would not need to be repeated.

The patient has a matching encounter code (CPT 99201) (screenshot #1, arrow #6), which is on the same day as the cup to disc ratio test and the optic disc exam for structural abnormalities, and the active primary open-angle glaucoma diagnosis overlaps it.

To pass the numerator, the patient needs a cup to disc ratio result for the left and/or right eye (screenshot #1, arrow #1 & #2). They also need a result for an optic disc exam for structural abnormalities for the left and/or right eye (screenshot #1, arrow #3). If you want to specify a result other than "normal" or "abnormal", which are implied by these fields, use the other result fields to specify a free text answer (screenshot #1, arrow #4).



165v6 - Controlling High Blood Pressure

Logic

https://ecqi.healthit.gov/system/files/ecqm/measures/CMS165v6_1.html

Population Criteria

- **Initial Population** =
  - AND: Age>= 18 year(s) at: "Measurement Period"
  - AND: Age< 85 year(s) at: "Measurement Period"
  - AND: "Occurrence A of Diagnosis: Essential Hypertension" satisfies any:
    - < 6 month(s) starts after or concurrent with start of "Measurement Period"
    - satisfies all:
      - starts before start of "Measurement Period"
      - overlaps "Measurement Period"
  - AND: Union of:
    - "Encounter, Performed: Office Visit"
    - "Encounter, Performed: Face-to-Face Interaction"
    - "Encounter, Performed: Preventive Care Services - Established Office Visit, 18 and Up"
    - "Encounter, Performed: Preventive Care Services-Initial Office Visit, 18 and Up"
    - "Encounter, Performed: Home Healthcare Services"
    - "Encounter, Performed: Annual Wellness Visit"
    - during "Measurement Period"
- **Denominator** =
  - AND: Initial Population
- **Denominator Exclusions** =
  - OR: "Encounter, Performed: Encounter Inpatient (discharge status: Discharged to Home for Hospice Care)" ends during "Measurement Period"
  - OR: "Encounter, Performed: Encounter Inpatient (discharge status: Discharged to Health Care Facility for Hospice Care)" ends during "Measurement Period"
  - OR: Union of:
    - "Intervention, Order: Hospice care ambulatory"
    - "Intervention, Performed: Hospice care ambulatory"
    - overlaps "Measurement Period"
  - OR: Union of:
    - "Diagnosis: Pregnancy"
    - "Diagnosis: End Stage Renal Disease"
    - "Diagnosis: Chronic Kidney Disease, Stage 5"
    - overlaps "Measurement Period"
  - OR: Union of:
    - "Procedure, Performed: Vascular Access for Dialysis"
    - "Encounter, Performed: ESRD Monthly Outpatient Services"
    - "Procedure, Performed: Kidney Transplant"
    - "Procedure, Performed: Dialysis Services"
    - starts before end of "Measurement Period"
- **Numerator** =
  - AND: Most Recent:
    - "Occurrence A of Encounter, Performed: Adult Outpatient Visit" satisfies all:
      - during "Measurement Period"
      - overlaps "Physical Exam, Performed: Diastolic Blood Pressure (result)"
      - overlaps "Physical Exam, Performed: Systolic Blood Pressure (result)"
      - overlaps "Occurrence A of Diagnosis: Essential Hypertension"
  - AND: "Occurrence A of Diagnosis: Essential Hypertension" satisfies all:
    - starts before start of "Occurrence A of Encounter, Performed: Adult Outpatient Visit"
    - overlaps "Occurrence A of Encounter, Performed: Adult Outpatient Visit"
  - AND: "Physical Exam, Performed: Diastolic Blood Pressure" satisfies all:
    - Most Recent: during "Occurrence A of Encounter, Performed: Adult Outpatient Visit"
    - (result < 90 mmHg)
  - AND: "Physical Exam, Performed: Systolic Blood Pressure" satisfies all:
    - Most Recent: during "Occurrence A of Encounter, Performed: Adult Outpatient Visit"
    - (result < 140 mmHg)

To pass the initial population, the patient needs to be 18 years of age or older and less than 85 years of age.

The patient needs an active diagnosis of essential hypertension, which starts at the very beginning of the year, starts less than 6 months into the year, or where it starts before this year and is active.

The patient needs a matching encounter at least once during the year.

To pass the numerator, the patient needs a recorded diastolic blood pressure result that's less than 90mmHg and a systolic result that's less than 140mmgHg, and these results need to be recorded during the most recent matching encounter.

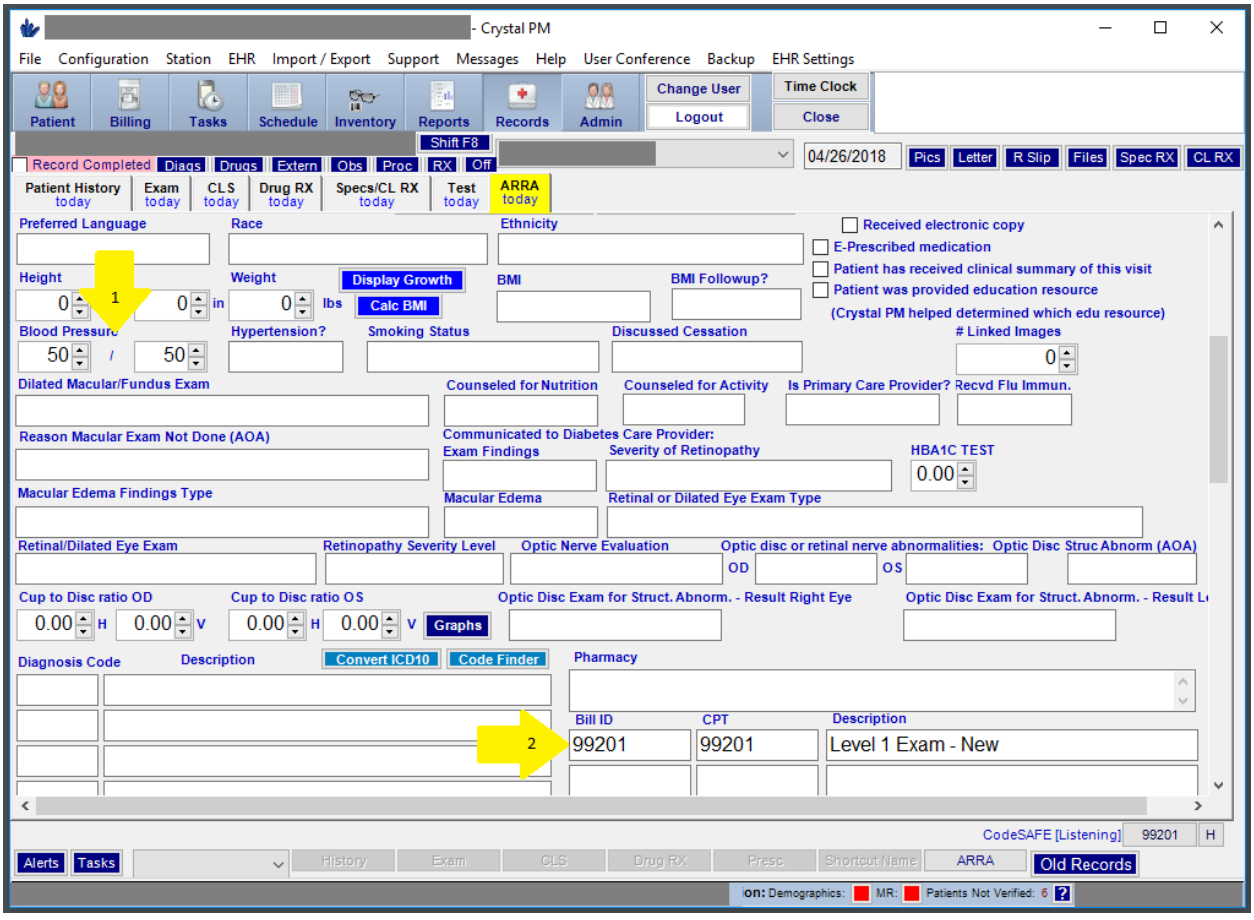
165v6 - Controlling High Blood Pressure

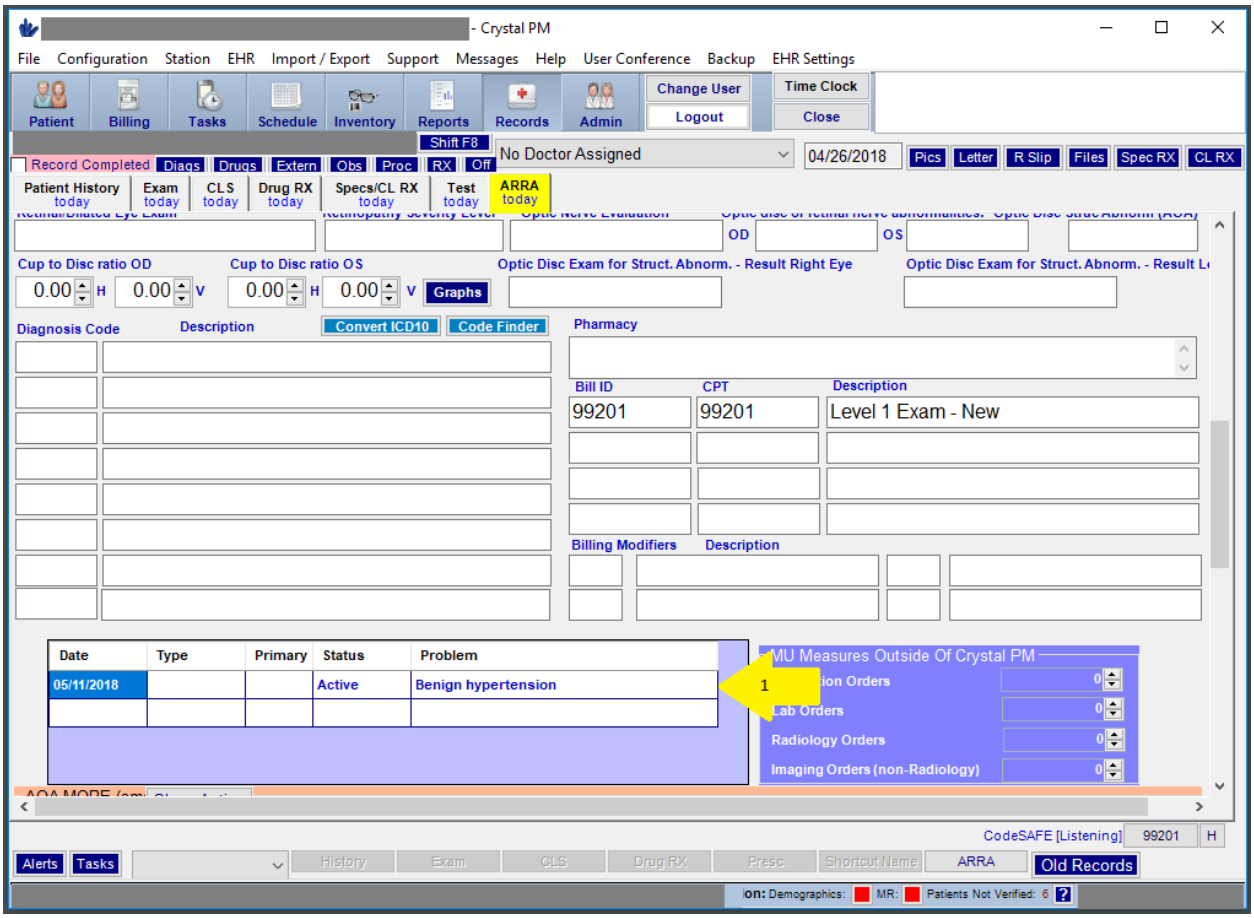
Applied

To pass the initial population, the patient has a diagnosis of essential hypertension (screenshot #2, arrow #1). If the patient already had an active essential hypertension diagnosis from a previous medical record, this would not need to be repeated. In this example, it's added in the Problem List. A matching ICD10 code in a diagnosis field would also suffice.

The patient has a matching encounter code (CPT 99201) (screenshot #1, arrow #2), which is on the same day as the when the blood pressure was taken.

To pass the numerator, the diastolic and systolic blood pressure fields (screenshot #1, arrow #1) both have a value of 50.




- Crystal PM
File Configuration Station EHR Import / Export Support Messages Help User Conference Backup EHR Settings
Patient Billing Tasks Schedule Inventory Reports Records Admin
Change User Logout Time Clock Close
Shift F8
Record Completed Diags Drugs Extern Obs Proc RX Off
No Doctor Assigned
04/26/2018
Pics Letter R Slip Files Spec RX CL RX
Patient History today Exam today CLS today Drug RX today Specs/CL RX today Test today ARRA today
OD OS
Cup to Disc ratio OD
Cup to Disc ratio OS
0.00 H 0.00 V 0.00 H 0.00 V Graphs
Optic Disc Exam for Struct. Abnorm. - Result Right Eye
Optic Disc Exam for Struct. Abnorm. - Result L
Diagnosis Code Description Convert ICD10 Code Finder
Pharmacy
Bill ID CPT Description
99201 99201 Level 1 Exam - New
Billing Modifiers Description
Date Type Primary Status Problem
05/11/2018 Active Benign hypertension
1
MU Measures Outside Of Crystal PM
Lab Orders 0
Radiology Orders 0
Imaging Orders (non-Radiology) 0
CodeSAFE [Listening] 99201 H
Alerts Tasks History Exam CLS Drug RX Presc Shortcut Name ARRA Old Records
Demographics: MR: Patients Not Verified: 6

167v6 - Diabetic Retinopathy Documentation of Presence or Absence of Macular Edema and Level of Severity of Retinopathy

Logic

https://ecqi.healthit.gov/system/files/ecqm/measures/CMS167v6.html

Population Criteria

- **Initial Population** =
  - AND: Age>= 18 year(s) at: "Measurement Period"
  - AND: "Diagnosis: Diabetic Retinopathy" overlaps Occurrence A of $EyeCareEncounters
- **Denominator** =
  - AND: Initial Population
- **Denominator Exclusions** =
  - None
- **Numerator** =
  - AND: "Diagnostic Study, Performed: Macular Exam" satisfies all:
    - (result: Level of Severity of Retinopathy Findings) during Occurrence A of $EyeCareEncounters
    - satisfies any:
      - (result: Macular Edema Findings Absent)
      - (result: Macular Edema Findings Present)
- **Numerator Exclusions** =
  - None
- **Denominator Exceptions** =
  - OR: Union of:
    - "Diagnostic Study, Performed not done: Medical Reason" for "Macular Exam"
    - "Diagnostic Study, Performed not done: Patient Reason" for "Macular Exam"
    - during Occurrence A of $EyeCareEncounters
- **Stratification** =
  - None

Data Criteria (QDM Variables)

- **$EyeCareEncounters** =
  - Union of:
    - "Encounter, Performed: Ophthalmological Services"
    - "Encounter, Performed: Care Services in Long-Term Residential Facility"
    - "Encounter, Performed: Nursing Facility Visit"
    - "Encounter, Performed: Office Visit"
    - "Encounter, Performed: Outpatient Consultation"
    - "Encounter, Performed: Face-to-Face Interaction"
    - during "Measurement Period"

To pass the initial population, the patient needs to be 18 years of age or older.

The patient needs an active diagnosis of diabetic retinopathy, where the diagnosis starts before or on the same day as a matching encounter.

The patient needs a matching encounter at least once during the year.

To pass the numerator, the patient needs a “Macular Exam” with the “Level of Severity of Retinopathy Findings” and the “Macular Edema Findings Present” or “Absent.” The exam and findings need to be recorded on the same day and the same day as the matching encounter.

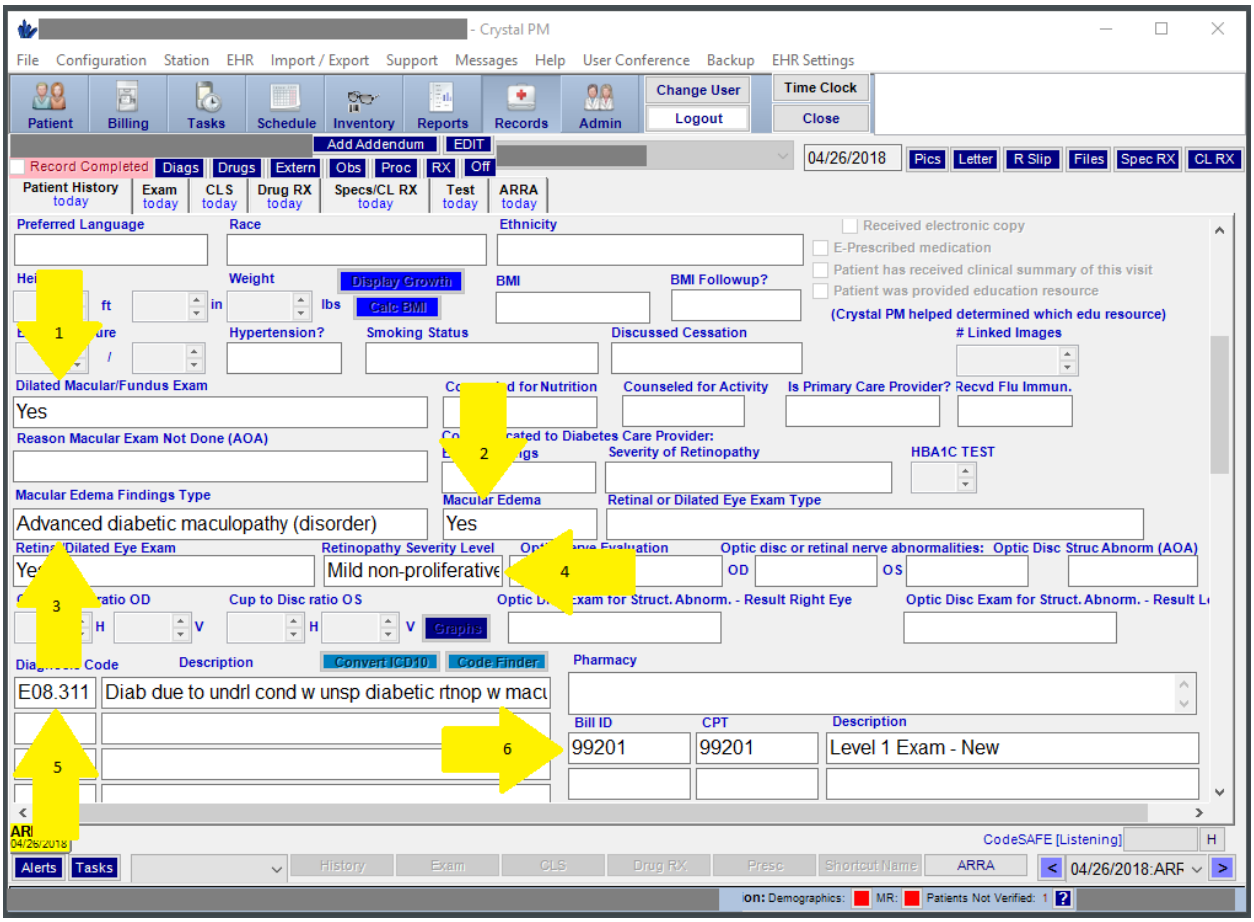
167v6 - Diabetic Retinopathy Documentation of Presence or Absence of Macular Edema and Level of Severity of Retinopathy

Applied

To pass the initial population, the patient has a diagnosis of diabetic retinopathy (ICD10's E08.311) (screenshot #1, arrow #5). If the patient already had an active diabetic retinopathy diagnosis from a previous medical record, this would not need to be repeated.

The patient has a matching encounter code (CPT 99201) (screenshot #1, arrow #6), which is on the same day as the dilated/macular fundus exam, and the active diabetic retinopathy diagnosis overlaps it.

To pass the numerator, the "Dilated Macular/Fundus" exam field (screenshot#1, arrow #1) needs to have a value of "Yes." The "Macular Edema" field (screenshot #3, arrow #2) needs to have a value of "Yes" or "No." If the value for "Macular Edema" is "Yes", then an option should be selected from the "Macular Edema Findings Type" field (screenshot #1, arrow #3). An option also needs to be selected from the "Retinopathy Severity Level" field (screenshot #1, arrow #4).



Value Sets:

At the bottom of each of the CQM specification sheets is a list of value sets that are referenced.

For example, let's look at the specification sheet for 50v6. One of the value sets referenced is for "Encounter, Performed: Office Visit", and it's value set is "2.16.840.1.113883.3.464.1003.101.12.1001." One of the codes in this value set is CPT "99201."

To find out what all of the codes are in this value set, go to:
https://ushik.ahrq.gov/ValueSets?&system=mu&filterLetter=O&resultsPerPage=50&sortField=100&sortDirection=ascending

Right above the list view on this page, there's a field for OID. Copy and paste that OID (i.e. "2.16.840.1.113883.3.464.1003.101.12.1001") into the OID field and hit the search button (magnifying glass).

Now you'll just see available versions of that value set. Select the link (i.e. "Office Visit") from the "Value Set" column on the last row, since the last row will be the most up-to-date version of the value set (i.e. Version: "eCQM Update 2018 EP-EC and EH").

To access the list of codes in the value set, you need UMLS login credentials to be able to look at the individual codes in the value set.

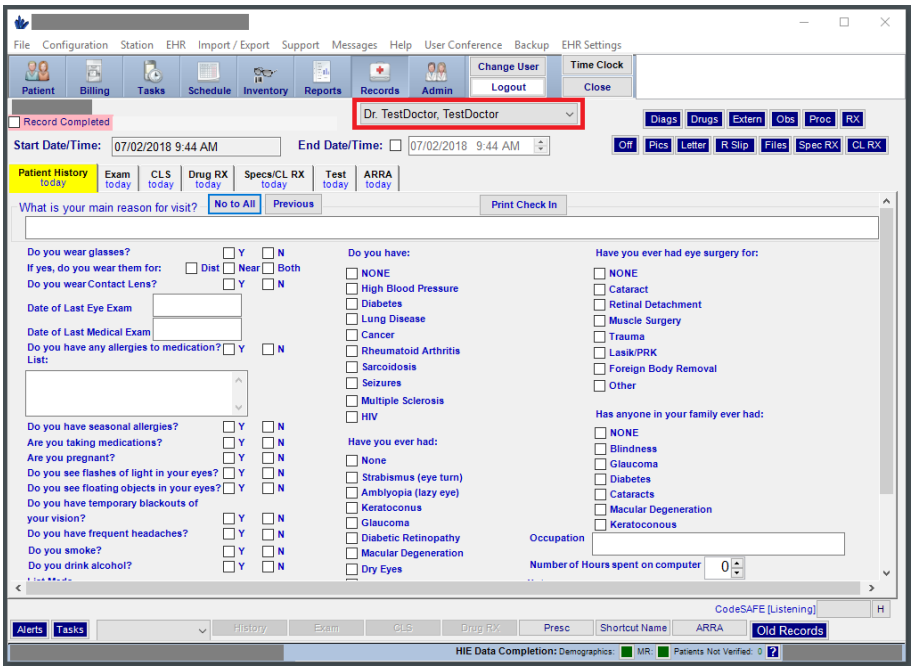
Go here to sign up for a UMLS account:
https://uts.nlm.nih.gov//license.html

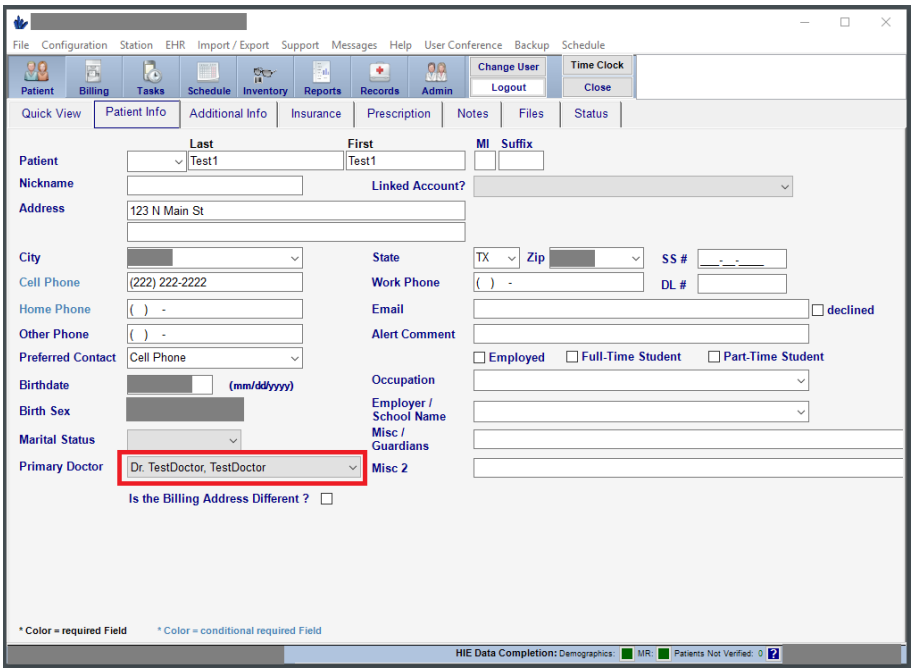
When you eventually get the login credentials, you'll be able to sign in on the ushik.ahrq.gov so you can view the codes.

Assigning Doctor to Patients:

It’s important that you specify what doctor is responsible for a patient and/or a patient’s medical record, especially if you plan to do individual MIPS reporting instead of group reporting.

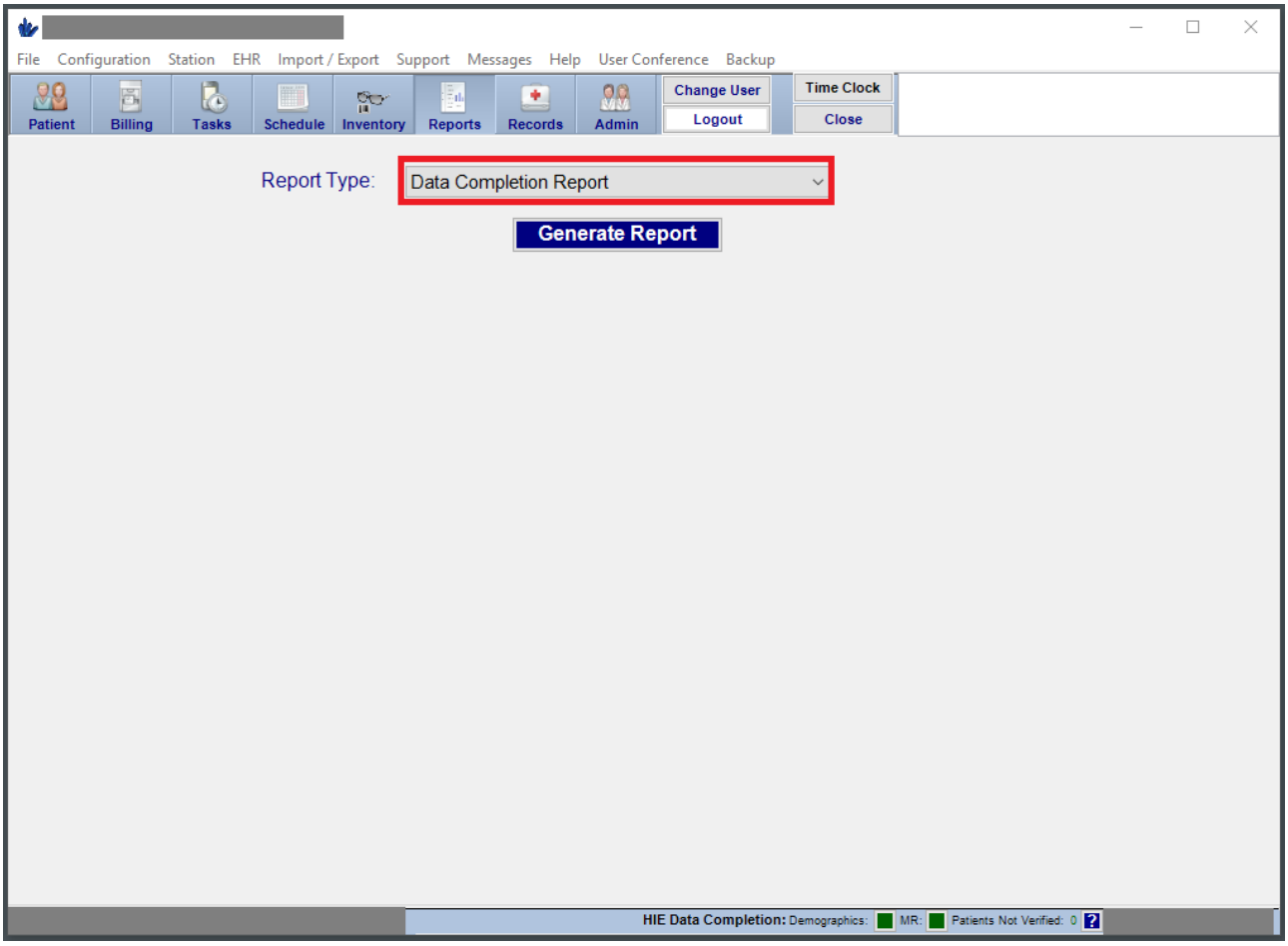
The doctor assigned in the medical record will always override the doctor set for the patient. If a doctor is not assigned in the medical record, it will be interpreted as being assigned to the doctor set for the patient.





Data Completion Report:

This report will tell you what patients are potentially missing data that had a medical record, appointment, invoice, or routing slip during a specified period.



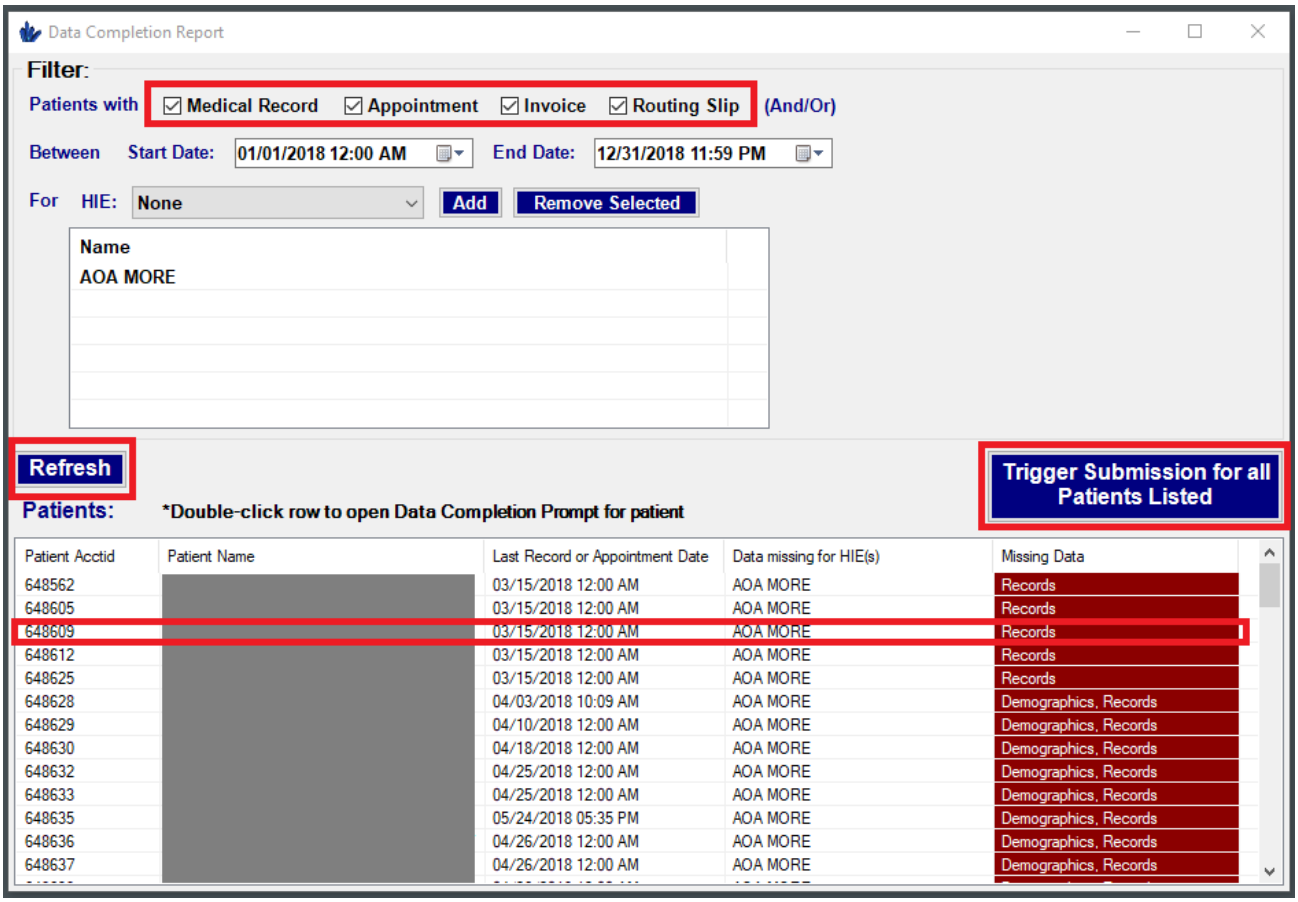
Clicking the refresh button will retrieve and evaluate the patient data based on the criteria in the filter options.

Even if a patient is not missing data, it will still appear in the results, but it's "Missing Data" cell will be empty and green.

You can sort by any of the columns by clicking on the column headers.

Double-clicking on any of the rows will show the Data Completion window with the patient selected represented as a tab. Unlike the traditional prompting, which is based on the medical records you've viewed and/or modified at the time, all medical records with missing data will be included in the list of fields.

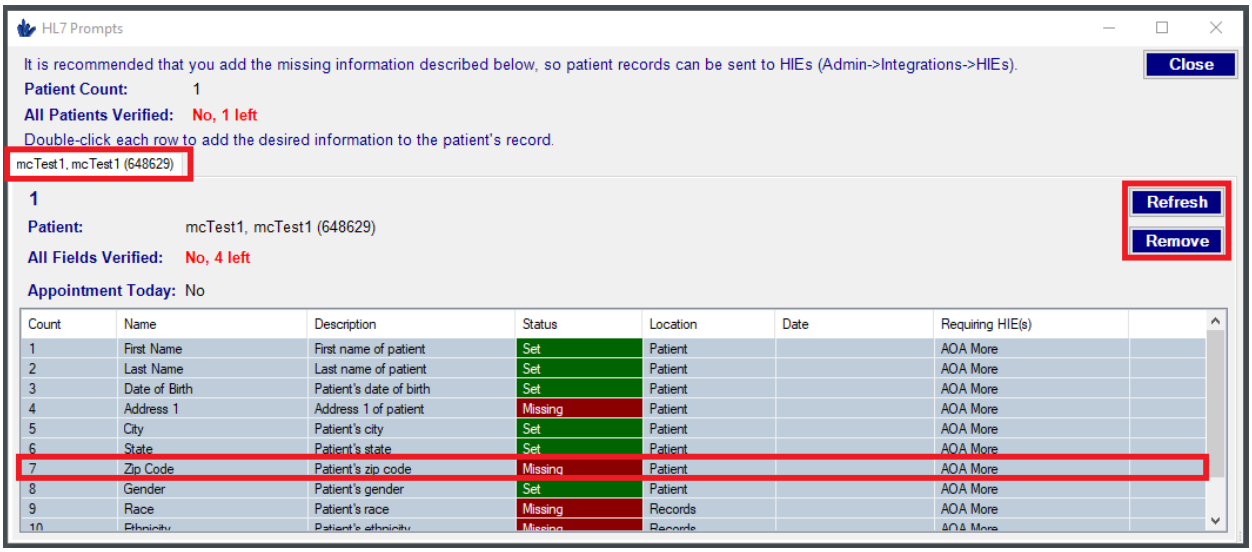
Clicking the "Trigger Submission for all Patients Listed" button is there for emergency cases, so it is not recommended you use this unless it is absolutely necessary. If you're going through each of these patients and modifying records to satisfy the prompts, there's no need to press this button, because an equivalent action is taking place. Just modifying a patient's data triggers submission.



If a field has a date in the “Date” column, that field is in a specific medical record. Double-clicking the row will take you directly to that medical record and that field.

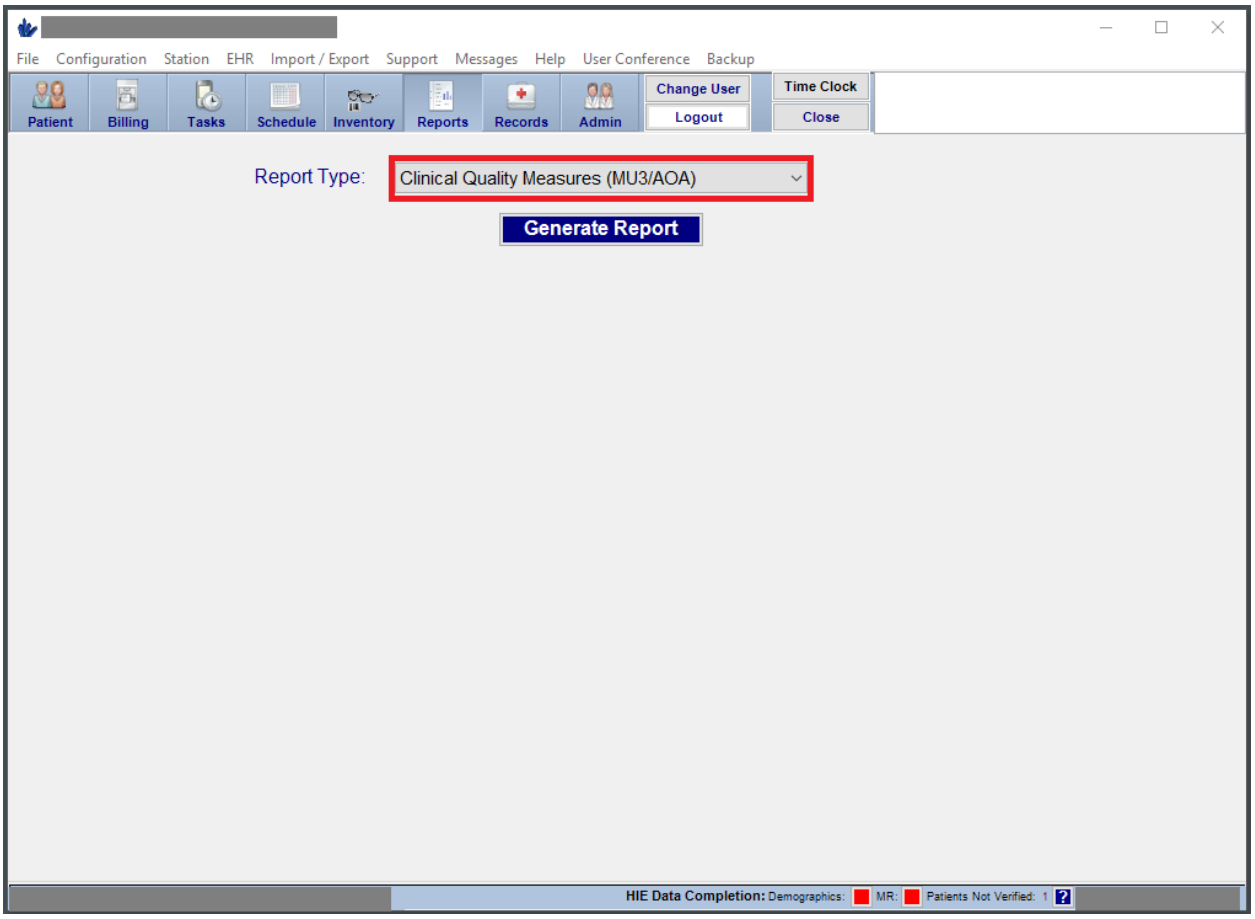
Clicking the “Refresh” button will reload and re-evaluate the data and reload the prompts, but this is done automatically when you select this window.

Clicking the “Remove” button will remove the patient’s tab from the window. Double-clicking the patient’s row in the results of the Data Completion Report, or modifying or viewing the patient’s data, will re-add a tab for the patient in the window. If modifying or view a patient’s data manually, a tab will only be added for patient if they’re missing required or optional data, and it will only be based on the most recent medical record or the one you were modifying or viewing.



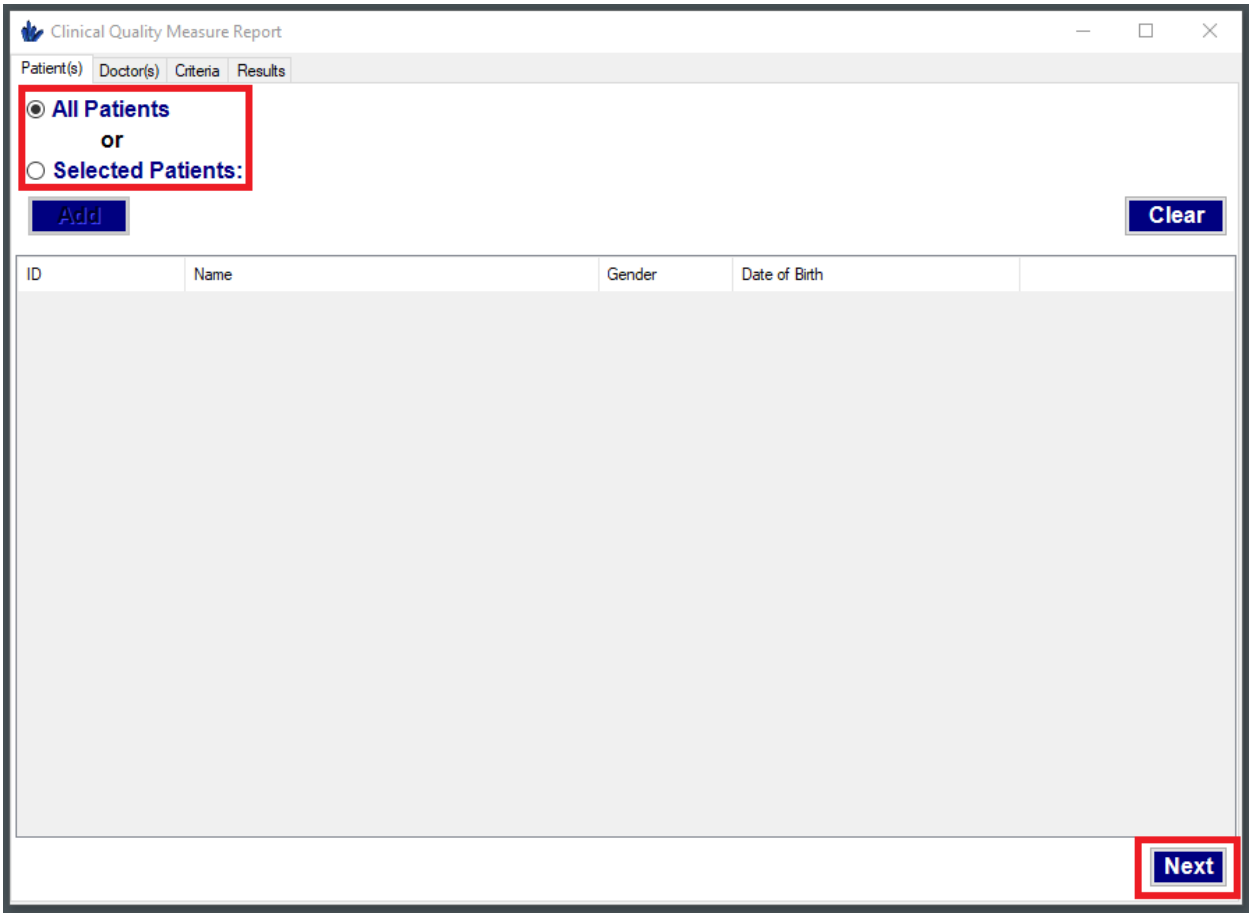
Clinical Quality Measures (MU3/AOA) Report:

This newer version of the CQM report is more up-to-date in terms of the CQM logic, more thorough, faster, flexible, and customizable. And it can give you a better idea of what's actually automatically submitted to AOA MORE.



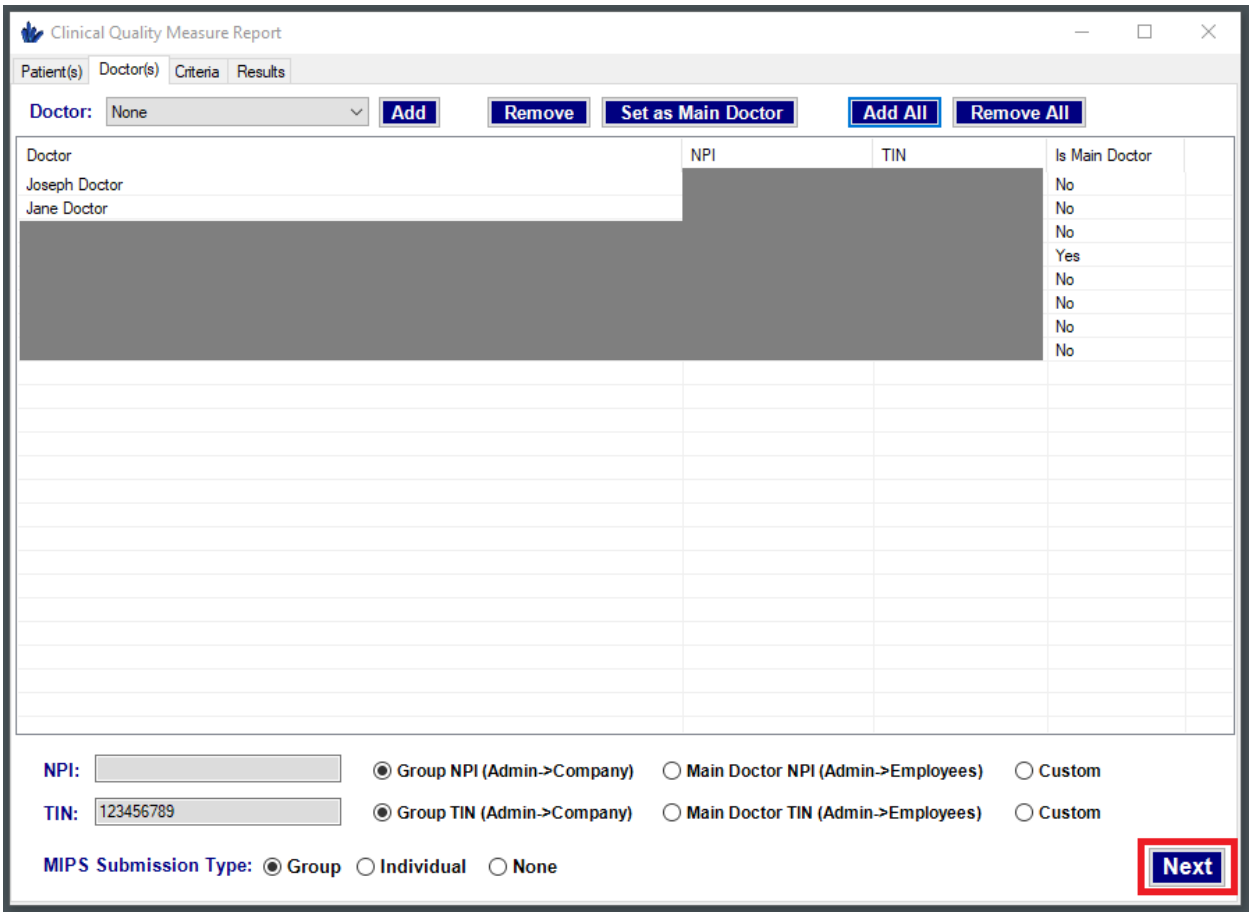
The first tab lets you run the report for all patients or any number of manually selected patients.

Clicking the “Next” button will take you to the doctor selection tab.



Most of the controls on the lower area of this tab can be ignored for now. In this case, I just clicked the "Add All" button, to include patients under all doctors in the results.

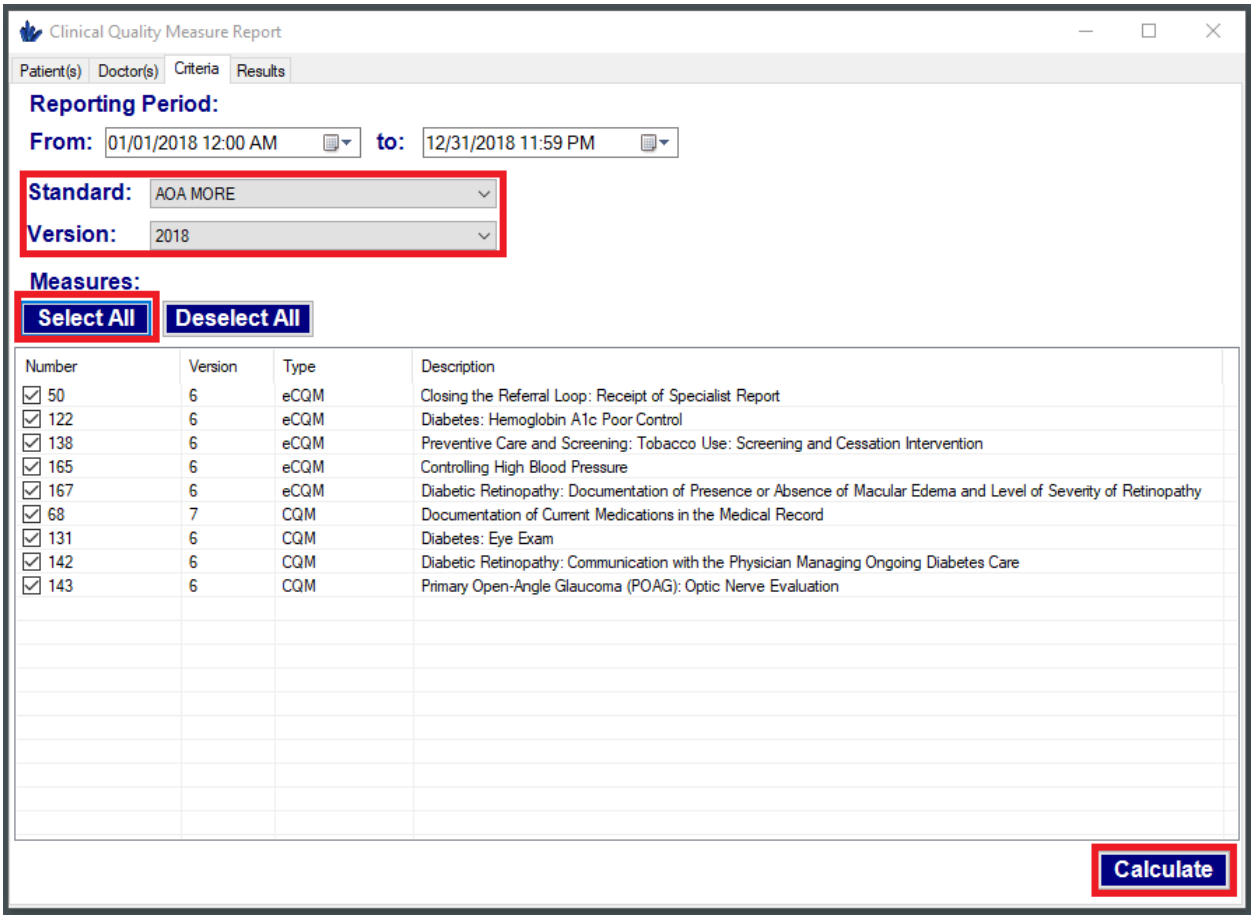
Click the "Next" button to continue and select the CQM criteria.



For the standard, I selected “AOA MORE.” Under that, I selected “2018” as the sub-version. This is the version of the CQM logic being used to generate QRDA Category 1 CCDs to be submitted to AOA MORE.

I clicked the “Select All” button to include all of the supported CQMs in the results.

Clicking the “Calculate” button will run the report and display the results in the “Results” tab.

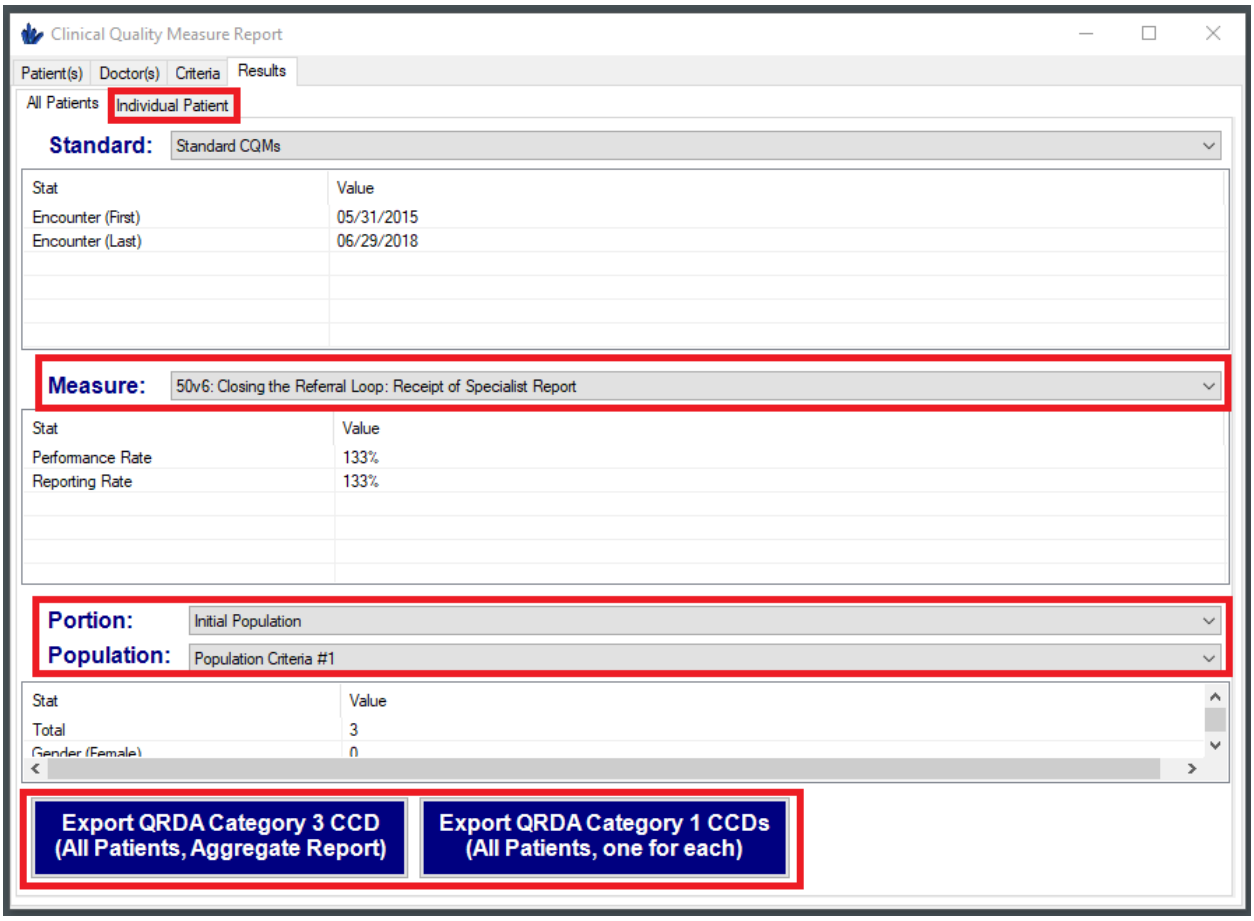


Selecting a measure will show the specific results for that measure. Under that, you can select the logic portion ("Initial Population", "Numerator", "Denominator", etc…) and the Population Criteria, if a measure has multiple populations.

Clicking the "Export QRDA Category 3 CCD" button will export a single QRDA Category 3 CCD to a specified folder. The QRDA Category 3 CCD is a statistical summary of all or the selected patients, based on all of the selected CQMs.

Clicking the "Export QRDA Category 1 CCDs" button will export a QRDA Category 1 CCD for each qualifying patient to a specified folder. The data will include demographics, procedures, diagnoses, etc... This is the type of message that's generated and submitted to AOA MORE automatically at an integrated office.

Continue by clicking on the "Individual Patient" tab.



This tab let's you look at the statistical results and generate messages for individual patients.