EMR Guide for the Patient's Medical Home

2023 Update

This document has not been updated since originally published. The principles remain valid, but some important changes are:

1) AMA Accelerating Change Transformation Team (ACTT) has replaced Toward Optimized Practice (TOP) and the website is: https://actt.albertadoctors.org/ . The Patient's Medical Home (PMH) web page is: https://actt.albertadoctors.org/PMH and information on the PMH and Health Neighbourhood change packages is found at: https://actt.albertadoctors.org/pmh/capacity-for-improvement/change-packages-for-primary-care-clinics/

   The PMH Practice Assessments are located here: https://actt.albertadoctors.org/PMH/capacity-for-improvement/PMH-Assessments/Pages/default.aspx

2) Panel identification and panel maintenance processes are key for participating in both screening (ASaP) and the Central Patient Attachment Registry (CPAR). These are key documents:
   - Panel Process Change Package: https://actt.albertadoctors.org/file/panel-process-change-package.pdf
   - STEP Checklist: https://actt.albertadoctors.org/file/step-checklist.pdf
   - CPAR Panel Readiness Checklist: https://actt.albertadoctors.org/file/CII-CPAR_Panel_Readiness_Checklist.pdf

3) The Alberta Screening and Prevention (ASaP) maneuvers, intervals and ages are updated when the evidence changes. Please refer to the latest documentation for the most recent update for the maneuver, interval and age population before developing or editing a preventive screening EMR search/notification/alert at: https://actt.albertadoctors.org/PMH/organized-evidence-based-care/asap, NOT the intervals and ages in the following document.

4) The EMR Supports page at ACTT is: https://actt.albertadoctors.org/EMR/Pages/default.aspx

Updated March 2023

Microquest Healthquest EMR Guide for Patient's Medical Home

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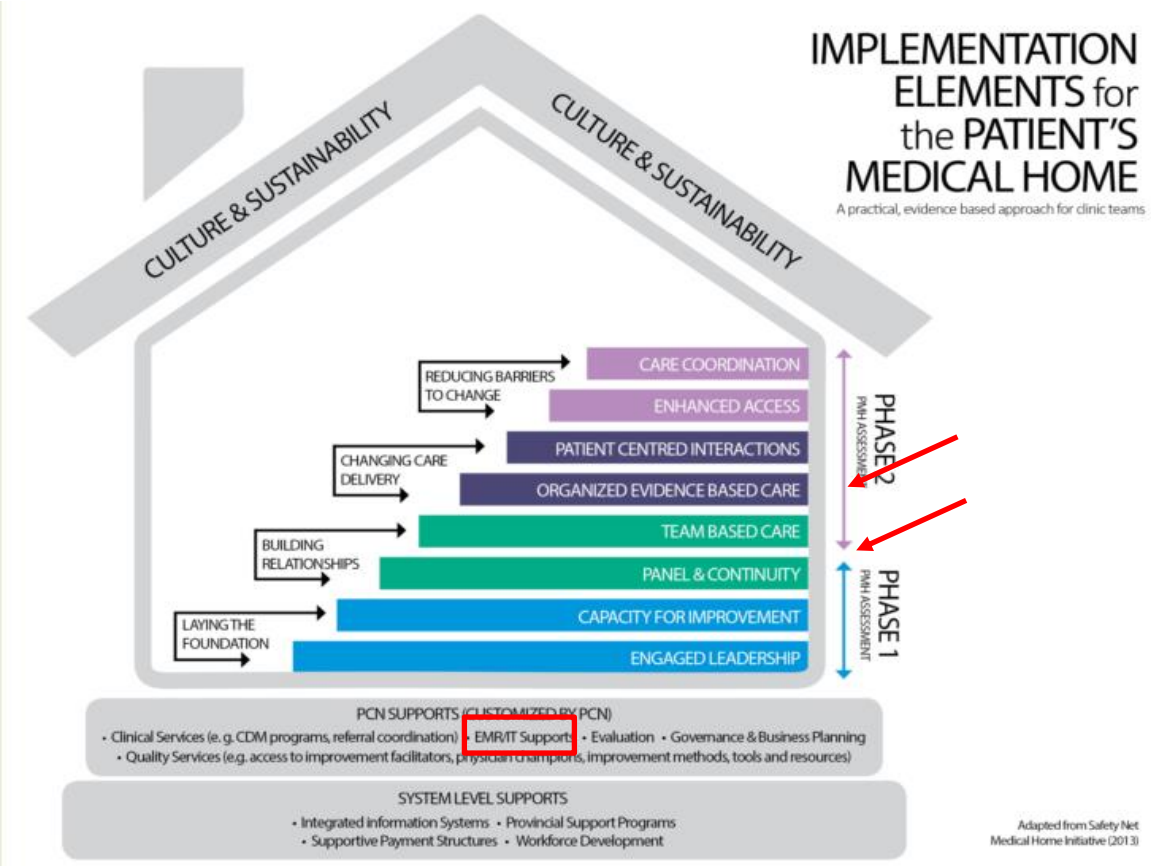
Introduction

Patient's Medical Home



When an EMR is used in a meaningful way within the Patient's Medical Home (PHM) model it supports effective patient panel identification, panel maintenance, panel management and will enable proactive panel-based care for patients in a practice.

Meaningful use of the EMR for 'Panel & Continuity' involves knowing which patients are actively attached to each provider and using this information for scheduling purposes and to monitor supply, demand and continuity with the provider. This work is **foundational for success**, and must be discussed with the entire practice, arriving at agreed upon policies and procedures on **what, why** and **how** data is to be captured and maintained with the EMR.

'Organized Evidence Based Care' for preventive screening is a logical place to start to learn how to use the EMR for panel management, or in other words, proactive panel-based care. Once EMR processes have been successfully implemented for preventive screening, they can be adapted for disease management and care of patients with complex health needs. Finally, 'Care Coordination' processes will leverage those developed for panel, continuity and organized evidence based care.

Foundation for Success - Commitment to Standardization in the EMR

Successful **standardization of data entry** for improvement or change, apart from leveraging the inherent functionality of the EMR, relies heavily on three "people and process" principles in conjunction with the use EMR functionality.

These are:

1. Team

   - Includes having 'engaged leadership' and inclusive team representation within each clinic or organization; a clinic champion for EMR standardization can be named
   - EMR improvements or changes do not happen in isolation, and require commitment of time and resources for improvement to happen
   - Combining EMR improvement with enhanced use of team, process improvement with a clinical goal in mind and practice facilitation is the ideal strategy in working toward adoption of the PMH
   - Leverage PCN supports where they exist (i.e. Improvement Facilitators, Panel Managers/Coordinators, etc.)
   - Team sets aside time to meet to agree on processes that enable proactive panel-based care and documents them to keep everyone on the same page (e.g., job aid and/or standard operating procedure manual)

2. Data Quality

   - Data Standardization – for the main areas of data input, the entire clinic team should discuss and agree upon:
     - use of fields in a standardized way, create structured exam forms or templates for the consistent capture of patient information; if the team wants to find it later or be able to search a population for the information, it helps to know where it was entered and if the EMR search/query tool can search it
     - utilizing standardized text or macros (common repeated text) whenever possible instead of free text
     - verification processes to ensure over time that data recording is reliable (e.g., BP is always in the BP field and not in a text box)
     - job aids for staff to assist with consistent patient data chart entry (e.g., scanning and attaching documents to patient charts)
     - processes to record patient problems with the appropriate ICD9 identifier (highly recommended) See Sample Problem List
   - Roles and responsibilities for charting (e.g., does the person who rooms the patient always chart BP, height and weight). When making changes to information outside of chart notes (e.g.to patient demographics or when making bulk /batch changes) it is recommended that the individual making the change enter their initials in an appropriate area."
   - It is advised that one person or a small group provide direction for patient data entry to ensure high quality in the clinic and minimize data inconsistency. Creating 'Good in, Good out' processes at the practice
   - Documentation of Standard Operating Procedures (Policies, Procedures and Processes) assists a clinic team in having a common understanding of workflow; these should be reviewed periodically

- Communicate with the practice team the linkage between data entry and the ability for a point-of-care reminder (e.g. Notifications, Rules, Alerts, etc.) to function and inform reporting

3. Incremental Change

- A key recommendation is to take baby steps in EMR changes, especially when it concerns practice-wide point-of-care reminders. These can be managed to make the changes small and sustainable for the practice team
- Use the simple but effective 'Model for Improvement' method including applying plan-do-study-act (PDSA) cycles to identify and test small incremental changes toward the desired and clearly identified improvement goal
- When a new point-of-care reminder is put in place an associated, documented 'people process' needs to be developed and implemented; thus, making the change effective and sustainable, by embedding it into the work process and clinic culture

Help Files

Along with this EMR Guide and Videos made available on the TOP website, the embedded EMR Help Files from the vendor can be a great untapped resource with detailed instructions on how to optimize EMR functionality.

Additional opportunities exist with many EMRs through the vendor external (community) portals or websites to get technical support or provide ideas to promote future functionality.

Please refer to your Microquest resources: http://www.microquest.ca/training/help.aspx

PMH Resources

Patient's Medical Home

http://www.topalbertadoctors.org/change-concepts/introduction/patientsmedicalhomeinalberta

Patient's Medical Home Implementation Field Kit

http://www.topalbertadoctors.org/patients-medical-home-implementation-field-kit/

Patient's Medical Home Assessments:

Readiness

http://www.topalbertadoctors.org/file/pmh-assessment-for-practices--readiness.pdf

Phase 1

http://www.topalbertadoctors.org/file/pmh-assessment-for-practices--phase-1.pdf

Phase 2

http://www.topalbertadoctors.org/file/pmh-assessment-for-practices--phase-2.pdf

TOP Healthquest EMR Videos

http://www.topalbertadoctors.org/tools--resources/emrsupports/#2

Searchable Data:

https://www.youtube.com/watch?v=PAB3K8VAHyM&feature=youtu.be

Panel Identification

Patient Panel Definition

A patient panel is a set of patients that have established relationships with a primary provider. There is an implicit agreement that the identified physician or nurse practitioner and team will provide comprehensive, longitudinal primary care. Relational continuity, or an ongoing relationship between a primary provider and a patient, is enabled by a patient identification process.

Panel vs. Caseload

A **panel** is the set of patients attached to a specific primary provider. A primary provider is a physician or nurse practitioner mainly responsible for providing comprehensive primary health care longitudinally over time to a panel of patients.

A **case load** is a group of patients under the care of a provider for a limited scope of care. A specialist will have a case load as will some family physicians, general practitioners or nurse practitioners working in the areas of maternity care, women's health and other areas. For example, a PCN has a maternity clinic where family doctors who specialize in obstetrics offer care to low-risk patients during their pregnancy. In this case each family doctor will have a case load of patients not a panel of patients. In another example, a pediatrician is a member of a PCN. The pediatrician may have a handful of patients for whom she provides their comprehensive, primary care but for most of her patients she is a consultant and these patients have a family doctor to provide primary care. In this case the pediatrician has a small panel and a large case load of patients.

Panel Resources

Panel Guide
http://www.topalbertadoctors.org/file/guide-to-panel-identification.pdf

Supportive Tools for Every Panel (STEP) Documents
Developed and shared by the Calgary EQuIP (Elevating Quality Improvement in Practice) Team, these documents outline the activities and outputs for panel identification and panel management screening for use at both the practice and PCN levels.

STEP Checklist: a summary of the activities and outputs for panel identification and panel management screening in a checklist format.
STEP Toolkit: the activities and outputs of panel identification and panel management screening with suggested tools and related links
STEP Workbook: for use at the practice level to guide clinic teams through the activities and provide a means to record outputs for future reference
STEP Reference Page on the TOP website contains webinars that support the documents.

Demographics

Basic Demographic Information

In the demographic area of the patient chart the basic information that is needed for patient panel identification is:

- Full Name
- Date of Birth
- Gender
- Complete address
- Phone number(s)
- Primary provider (Default PRAC)
- Patient status (Active or Inactive)
    - Status Date
- Confirmation[1] date (Verified date)
- Alberta Patient Healthcare Number (PHN)

Other demographic/attachment fields exist by individual EMR. These other fields may also support patient panel identification and maintenance processes.

TOP website video:

Basic Patient Demographics
https://www.youtube.com/watch?v=1qWN4aUwdZ8&list=PLf486cdx9WgLSa6UEly3HQG09Nd3xGFMZ&index=2

Confirmation

Most EMRs have a designated field for patient demographic data confirmation (also commonly called **verification or validation**). Marking this field/box indicates that the primary provider attachment, address, phone, and patient status are confirmed directly with a patient and up to date. The field also applies a date stamp so that all team members know when it was last done.

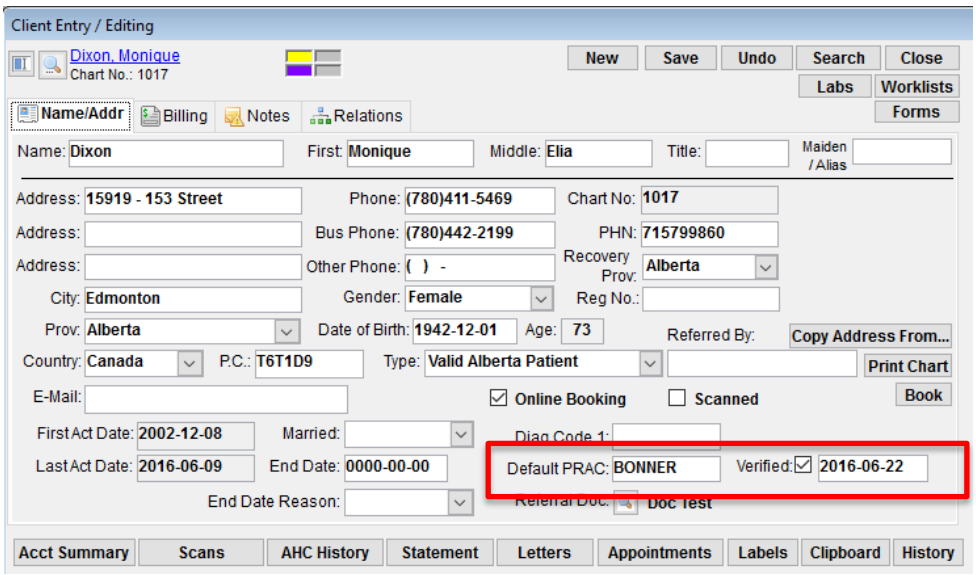
Confirmation is a crucial process for patient care. When a critical result arrives at a clinic, it is essential that the patient's contact information is up-to-date so that they may be contacted in a timely way.

Calculating the **confirmation rate** which may also commonly be called verification rate is an important process check that indicates how often patient data and attachment is verified by the team. The confirmation rate calculated over a longer period of time, such as year, should be higher for clinics with established processes than a confirmation rate calculated over a shorter period of time such as three months. A team may choose to calculate a confirmation rate over an appropriate timeframe that will give them feedback on their process improvements. See Confirmation/Validation Rate

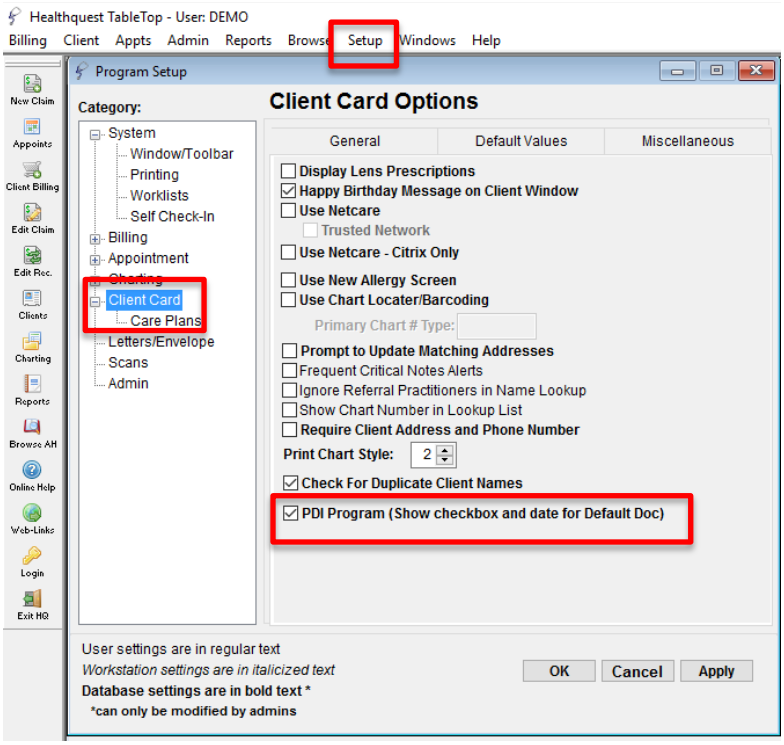
[1] Team members mark a field in the EMR to indicate the basic demographic information and attachment to a primary provider is correct. The name of this field varies by EMR.

Patient attachment and Confirmation/Verification

Marking the Verified box indicates that the address, phone, Type, End Date Reason (status) and Default PRAC (attachment) are up to date. The field applies a date stamp so that all team members know when it was last done. This field can be a query parameter when conducting searches and will appear in the Default Doc report.

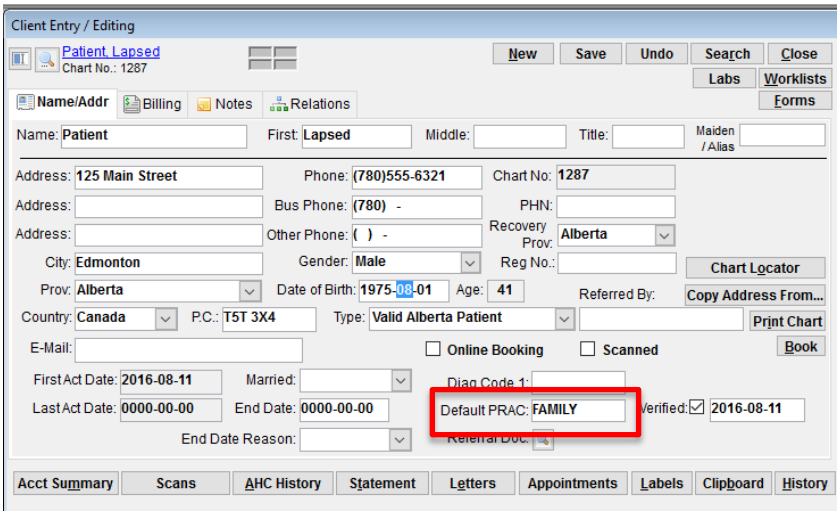


If the Verified field does not appear on the client card at the practice a clinic EMR administrator can add it in **Setup > Program Setup > Client Card**. In the screen below ensure that the PDI Program is checked off and choose **Apply**. Note: When adding the verified field to the client card the "Hospital Admin Date" field will be viewed on the billing tab.



Default PRAC – Blank or "Clinic name"

If a patient is not attached to a provider as an active patient, some clinics leave the Default PRAC field blank. Alternatively, other practices have created a PRAC with the clinic name, e.g., "Family Medical Clinic" or "Walk-in", and attach patients that are NOT part of any provider's paneled patients to this Default PRAC field. Clinics that have this protocol often do not end-date records of patients that have lapsed (have not been in for 3 years or more) but are sure to change their Default PRAC field to blank or the clinic name.



TIP: Clinic protocol in using the Default PRAC, end date and the Verified fields are key to effective patient panel identification and maintenance processes.

End Dating Client Cards

End-dating a client card signifies that the patient is no longer active at the practice. The client record is maintained in Healthquest but "goes behind a veil" so that the chart doesn't sit with the active records. The client card is NOT deleted.

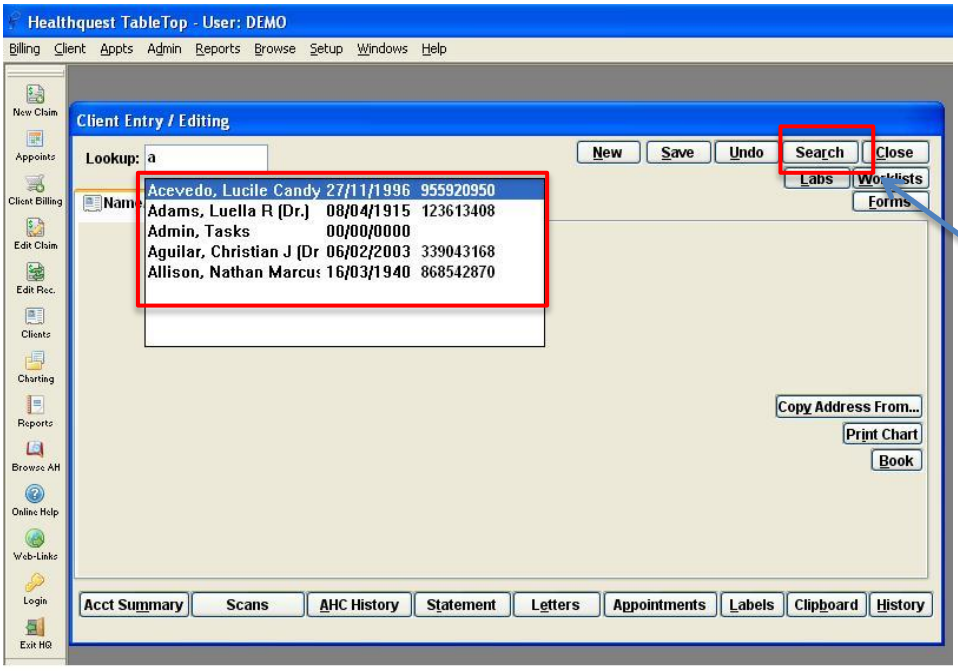
To end-date a client card:

1. Right click the End Date field in the client card. The calendar will appear.
2. Click the Today button (or appropriate date)
3. Enter the End Date Reason by selecting from the list in the drop-down box (Deceased, Moved, Fired, Duplicate, etc.).
4. If Deceased is selected the age of the client will be calculated appropriately.
5. Click on Save
6. There is a prompt to delete future appointments if applicable.

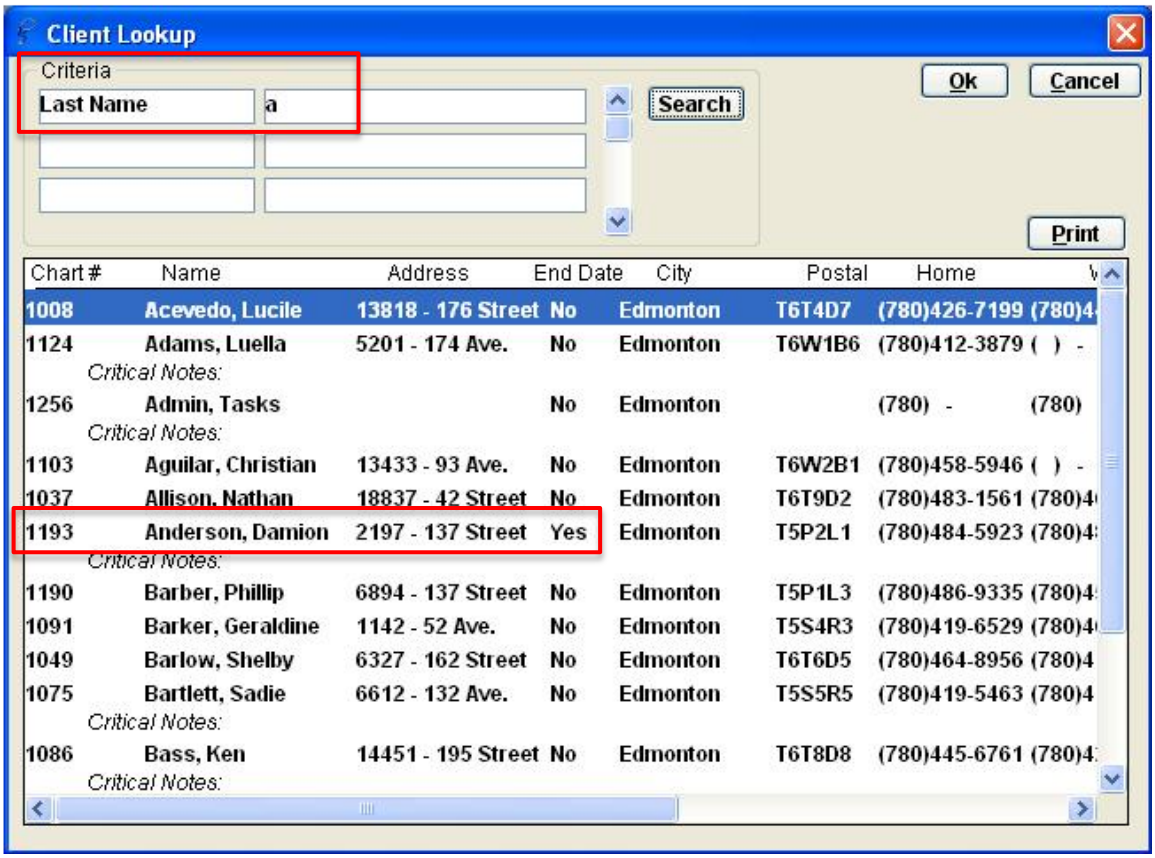
If a patient leaves the practice and then returns, the Client Card can be re-activated by simply removing the end date (changing back to 00/00/0000) on the client card.

When a patient's Client Card is end dated, you will no longer be able to quickly pull up the patient in the Lookup window but can pull them up in the Search window (Client Lookup). If the clinic has never end-dated records before, front office staff needs to be shown how to find end-dated patient records.

Example: Patient "Damion Anderson" was made inactive by end-dating his record. In the Lookup window, his name does not appear.



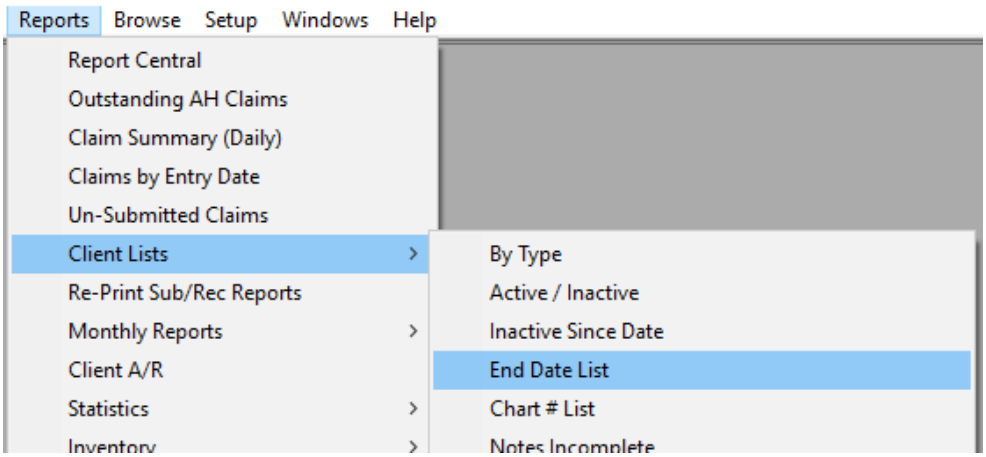
But by searching in the Search/Client Lookup window, using his last name:



This screen will appear, and you can see his name, and his record and end-date. This will be the way to lookup end-dated patients. This process is also useful to look up deceased patients to add scans to the record.

NOTE: Because referring doctors have client cards in Healthquest, the inactive referring doctors may also appear in your lists. One criterion that may help identify a doctor client card is that there may not be date of birth associated with the record.

To produce a list of all patients that have had their client card end dated, go to Reports > Client Lists > End Date List. The report lists the client cards and the date the card was end dated.

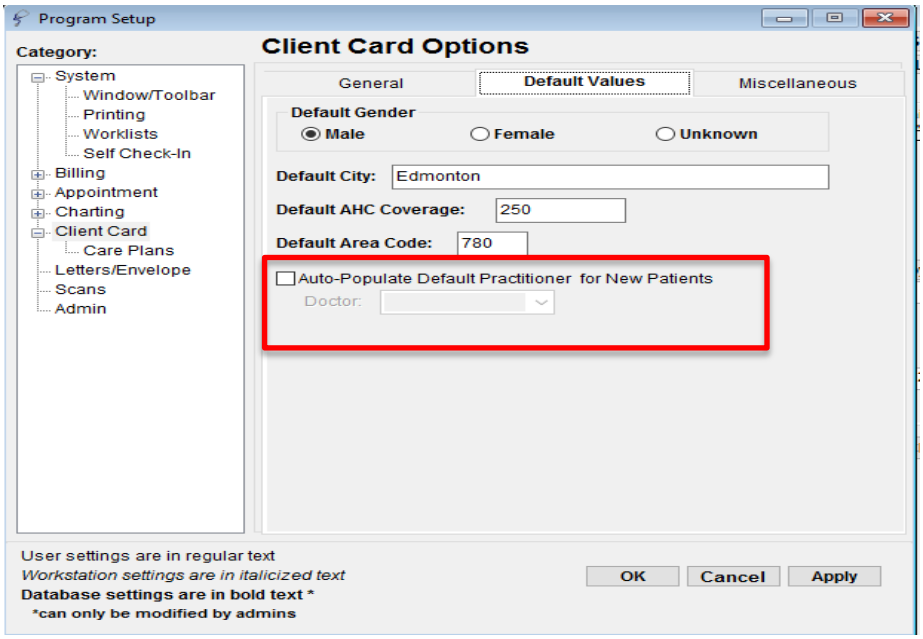


Client Card Set-up

Other configuration settings in the client card may support effective panel identification purposes. Setting the Default Practitioner for New Patients is also at **Setup > Program Setup > Client Card Options > Default Values.**

Consider your options:

- The clinic may un-click "Auto-Populate Default Practitioner for New Patients so that front staff will need to actively choose a primary care provider
- The clinic may have Default Doctor to be set to a specific practitioner, leave blank or by adding a place holder for unattached patients called "Walk-in" or the name of the clinic



TIP: Labels - Some practices have the clinic labels auto-fill from the Default Prac field instead of the provider from appointments. All labels should be configured to auto-fill from the appointment scheduler (of the provider seeing the patient that day). Call Microquest for assistance if this is the case.

Central Patient Attachment Registry (CPAR)

CPAR is a centralized database that captures the attachment of Primary Care Physician or Nurse Practitioner and their patients. CPAR is a joint project between The Alberta Medical Association, Alberta Health (AH), and Alberta Health Services (AHS). The registry will enable improved relational and informational continuity in primary care across Alberta. Participating providers will have their panel lists submitted through a secure electronic portal to the registry that will look to see if other primary providers are paneling the same patients. Participating providers will receive 'conflict reports' listing names of their patients who also appear on the confirmed panel lists of other providers. Another report will identify when a patient on a provider's confirmed panel has information that does not match the patient client registry, including if the patient is deceased.

Teams will confirm at the practice that a patient is attached to a provider and record this in the EMR. What CPAR can do is verify that patients are not attached to other providers. When a patient appears on a provider's conflict report, it signifies that the patient has been attached to another provider's panel outside the practice and it will need to be addressed with the patient to confirm which provider (of those they are paneled to) they wish to consider their primary provider.

Five Key Changes in Behaviors at the Practice

1. At every interaction ask who the patient identifies as their primary provider
2. Record it in the EMR & Date Stamp It
3. Maintain & Review the panel List
4. Utilize the panel list to plan care delivery
5. Submit the Panel List to CPAR

TOP Website CPAR Link:

http://www.topalbertadoctors.org/CPAR/

Configuring Status

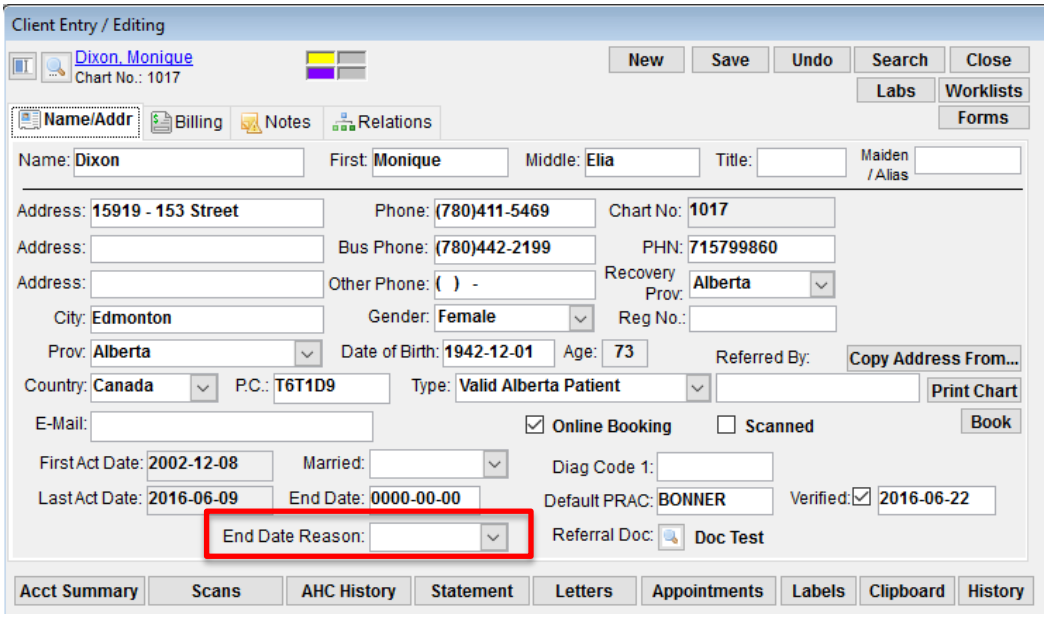
Many EMRs have the ability for a system administrator or user to customize patient statuses for the practice in addition to what is available in the EMR at 'Go Live'. This will allow the practice to specify various types of active and inactive patients in patient lists, reports or for setting up population-wide point-of care reminders.

Status/End Date Reason

The End Date Reason, because it can be applied without an end date, may be useful to practices using this field to distinguish types of patients that may present in the clinic, like a status field.

In Healthquest use the End Date Reason field for patients that are NOT attached to a primary provider. For the CPAR data uploads from Healthquest clinics, any patient with an End Date Reason with not be uploaded as part of the panel to the provincial registry.

> **TIP**: Do NOT use an End Date Reason for patients that are active and attached to a primary provider as part of their panel.



Please consider the following uses from options in the End Date Reason field for patient panel maintenance:

Options for use of the End Date Reason		
Status	**Status Name**	**Additional Information**
Active	[field Is blank]	Active office patient attached to a provider in the practice
	Specialty Service	This patient may be active in the practice but only for a given service (e.g., vasectomy, aesthetic, maternity care, aviation medical, circumcision, IUD). Some clinics give a status to each type of specialty service.
	Temporary	Applied to a patient seeking walk-in care. These patients are not considered part of the provider's panel.
	Hospital	Mainly in rural centres, where a patient record exists for a visit that occurred in ER of a non-clinic patient.
	Long term care	For a group of patients seen in a long-term care site but not the practice.
	Other	Some clinics need a unique field to suit the needs of their practice.
Inactive	**Inactive**	Includes formerly active patients with no clinic visits in a period of time defined by the practice, (e.g.,3 years.)
	Deceased	Patient is deceased.
	Duplicate	When a patient has accidentally been registered more than once and the EMR does not have the ability to merge duplicate records the archived record has this unique status.
	Fired	Patient no longer at the practice
	Moved	Patient no longer at the practice and informed clinic that they moved.

Producing a Provider's Panel List

During the panel identification process the first step is to produce a list of all active patients attached to a provider using the report/search functionality of the clinic EMR. It is useful if the panel list includes the following columns of information:

- Name (first, last)

- Gender
- Date of birth (or age)
- Last visit date
- Last verification date (last date the primary provider and attachment were confirmed)
- PHN or ULI (this will be useful for CPAR[2] purposes)

Sorting by the column headers in the panel list in the EMR or a spreadsheet is a quick way to get an impression of:

- Older patients that may be deceased
- Patients with no visits to the clinic within the last 3 to 5 years
- Patients that have never had their attachment or primary provider confirmed
- ULIs that indicate out of province patient

Last Visit Date may assist to identify active patients:

- Patients with a visit in clinic during an agreed-upon, predetermined period (e.g., last 3 years)

These lists usually create awareness for initial panel clean up. Confirmation of the data produced on the lists with the primary provider and team will help to determine validity of the information. Further panel clean-up is assisted by additional searches in the EMR.

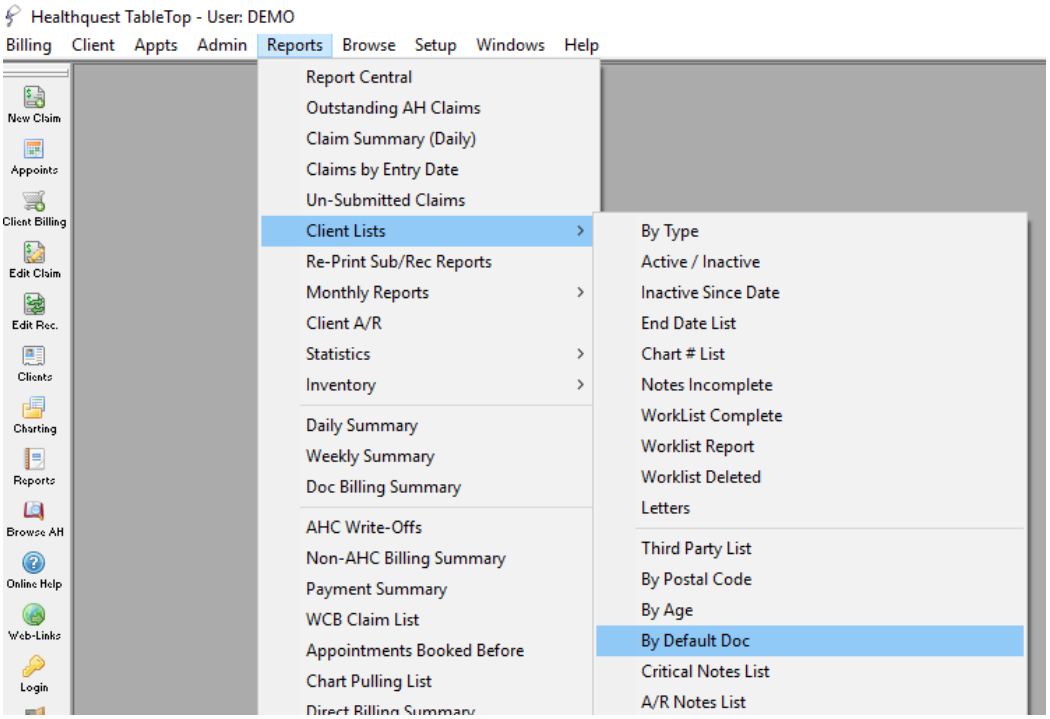
> TIP: Many EMRs will produce the list with the EMR report/search functionality but also offer exporting the list for further sorting and analysis in Microsoft Excel or Open Office Calc. Basic spreadsheet training is recommended.

Healthquest has a number of ways to approach producing a list of patients by provider, the Default Doc report, using queries in Client List Manager or a query in CDS Notifications.

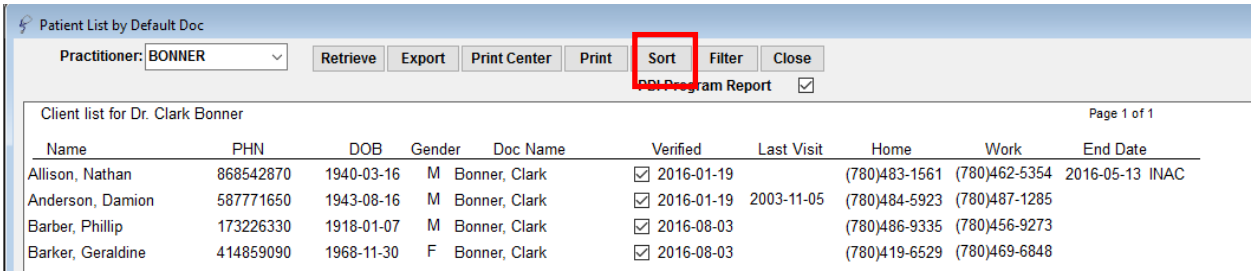
1) Default Doc Report

The Default Doc report, which lists ALL patients attached to a Default PRAC, is available from **Reports > Client Lists > By Default Doc**. Select the Practitioner, click the box "PDI Program Report" and click **Retrieve**.

[2] Central Patient Attachment Registry (CPAR) is a centralized provincial database, going live in 2018, which captures the attachment of Primary Care Physician or Nurse Practitioner and their paneled patients.

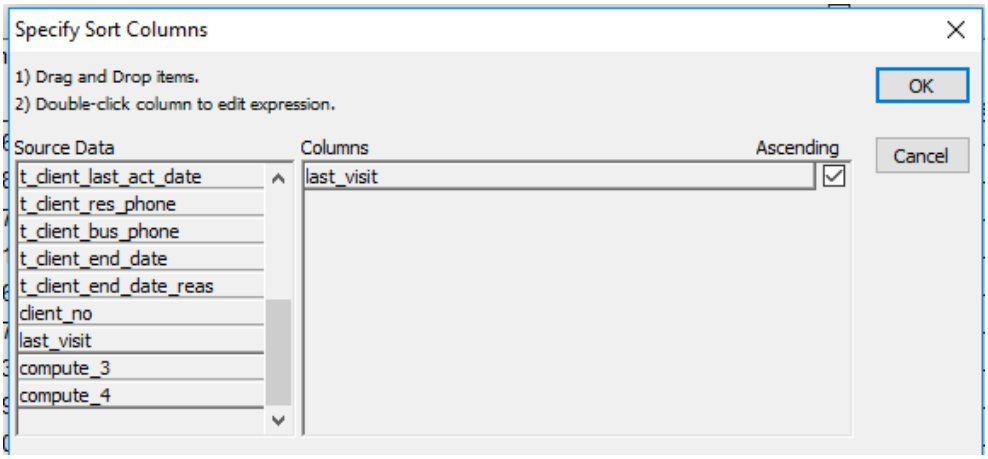


This report includes all patients and needs to be sorted to be useful.



To sort the list in Healthquest, use the Sort button. It is useful to sort by:

- Last visit date
- Client dob (date of birth)
- Last Act Date



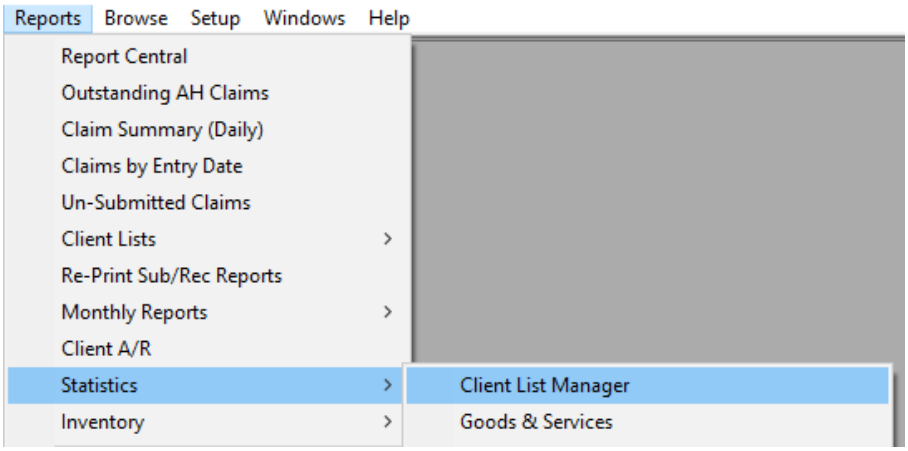
Click on any name in the list and the client card will appear for that record.

Export to Excel

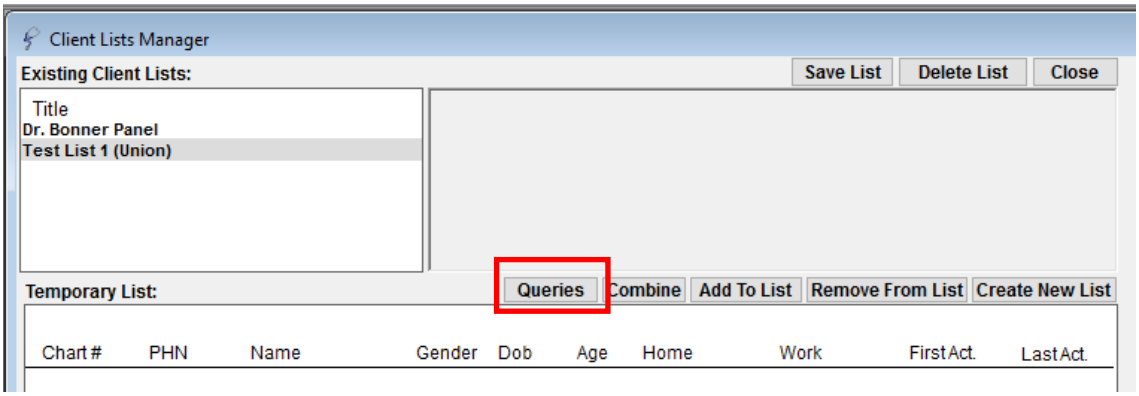
For further analysis, exporting this file to a spreadsheet can be useful for counting and analysis based on visit date, verification date, last visit date. Basic spreadsheet experience is required.

2) Queries in Client List Manager

Custom queries can be created in the Client List Manager. This is accessed from **Reports > Statistics > Client List Manager.**

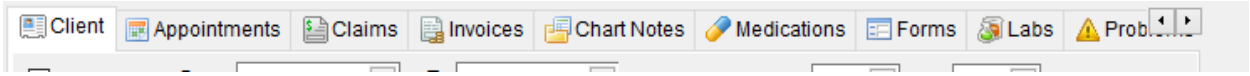


In the Client Lists Manager window, click on **Queries**.

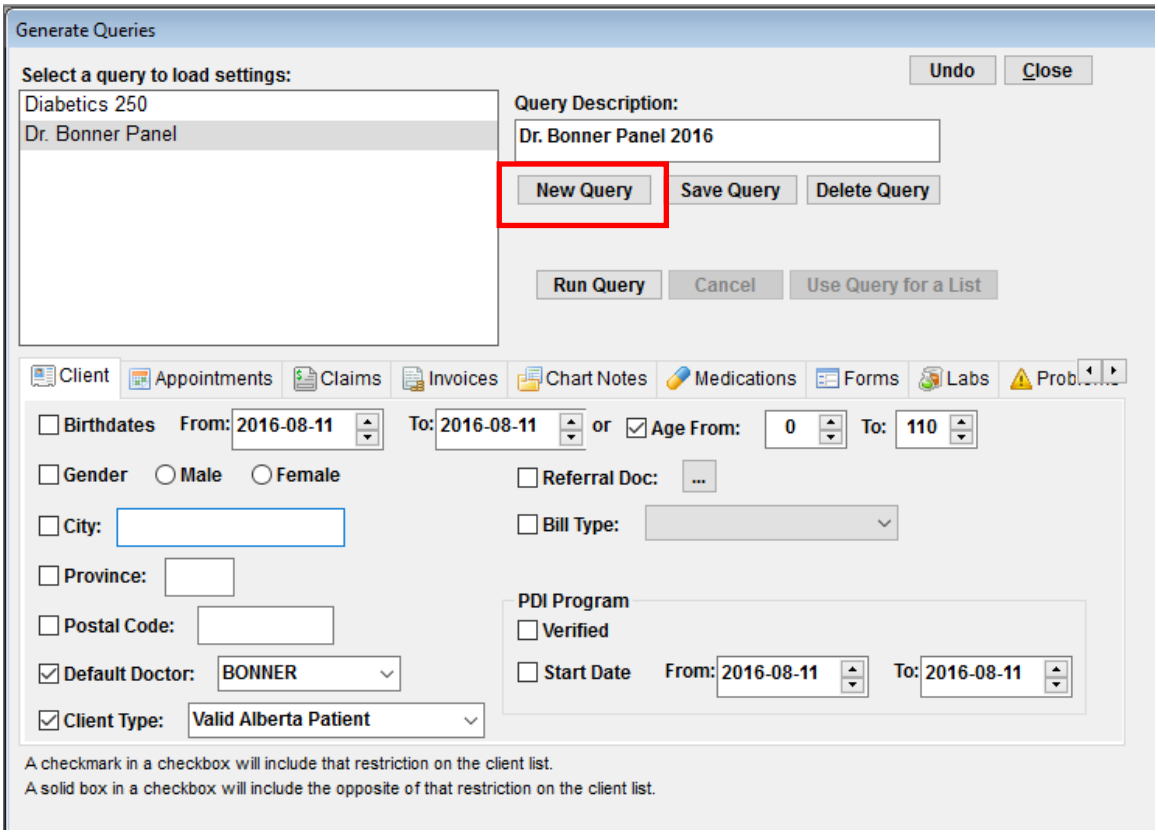


- Select **New Query**

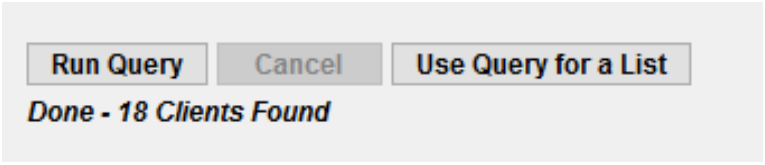
Queries can be an excellent tool for creating lists of patients that meet selected criteria. Each Tab in the query builder allows the user to select criteria for a search.



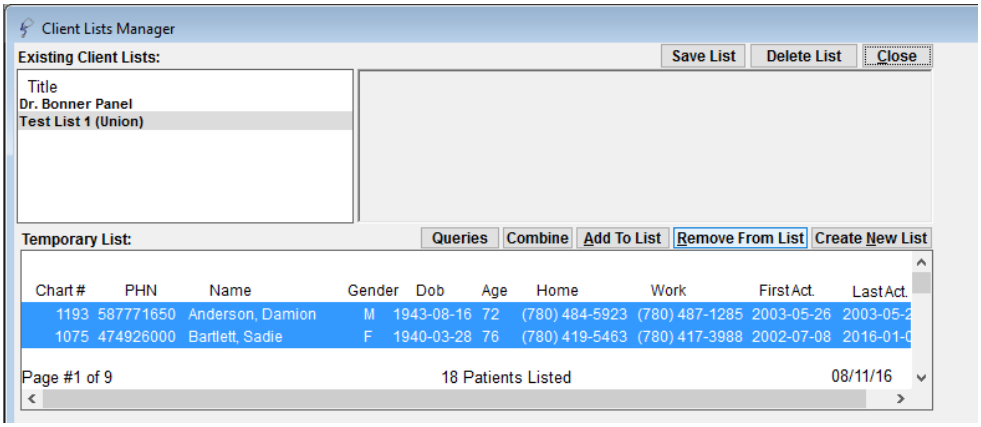
- Give your query a name in the Query Description. E.g., “Dr. Bonner Panel 2016”
- Select your data to query: Default Doctor, Age from 0 to 110, Client Type “Valid Alberta Patient”



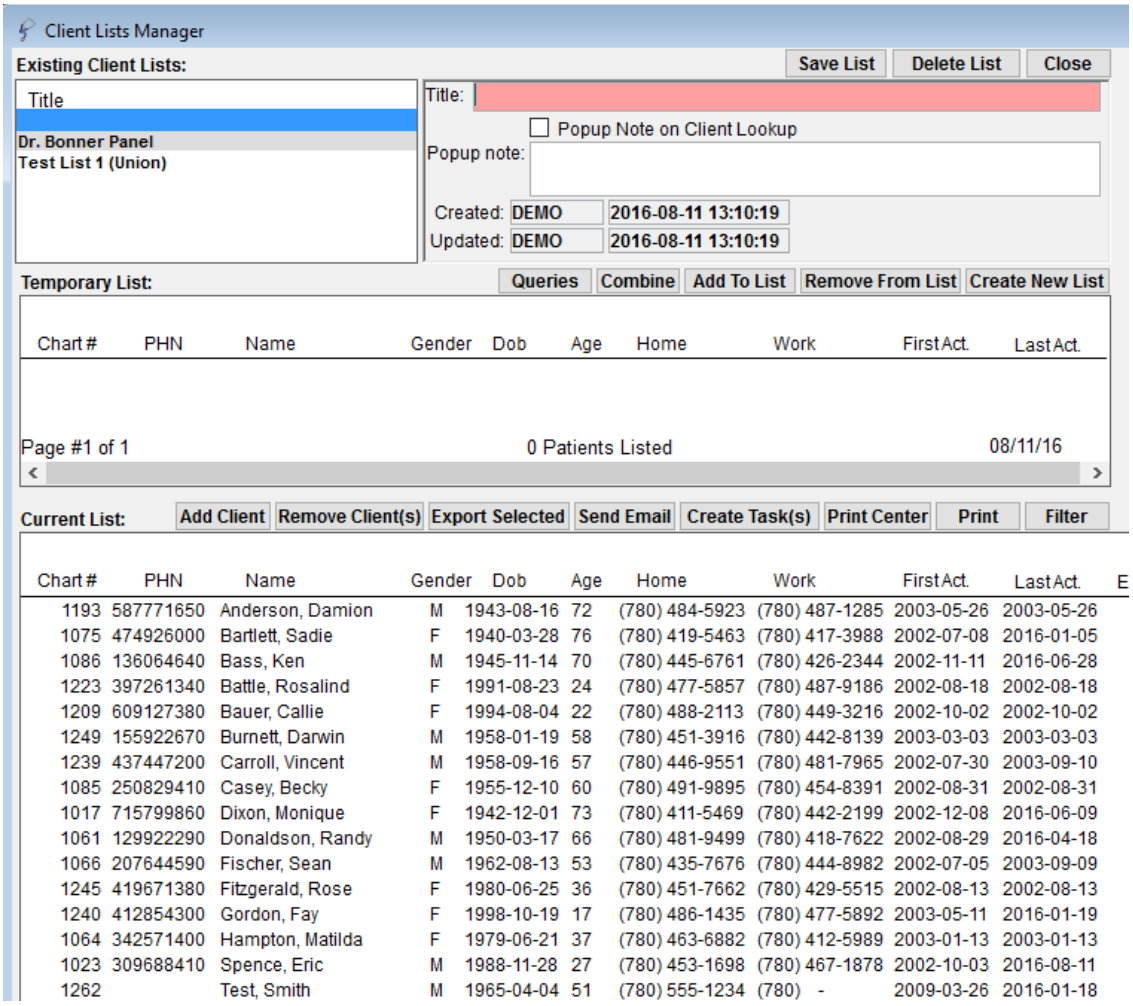
Click **Run Query** and the number of patients found is counted (in this case 18 Clients).



To see the list, click **Use Query for a List** and a Temporary List Appears.



Click **Create New List** and the list moves to Current List:



In this window the list can be reviewed, clients can be removed, the list can be Saved, printed and it can be exported to Excel. Teams can use it for have a count of a provider's panel. Other features that are useful in this area for panel management later include Creating Tasks. Click on any patient name in the list to go to that patient's record.

3) Clinical Decision Support Queries

The Clinical Decision Support Queries/Notification tool can also be used as a search tool in Healthquest. It offers more search logic than the query tool in Client List Manager and can be used to build more complex searches that can be used for notifications or simply for searching. See the section **CDS Query Setup**.

Queries – General Tips to Getting Started

When learning to create queries the following tips will assist in obtaining accurate data:

- Be informed on how data is recorded at the clinic; this will provide direction on which fields to search
- Build the search one parameter at a time
- Validate as each line of the search is created that the results are correct before adding another parameter to the search (this can be done by viewing 3 – 5 patient records)

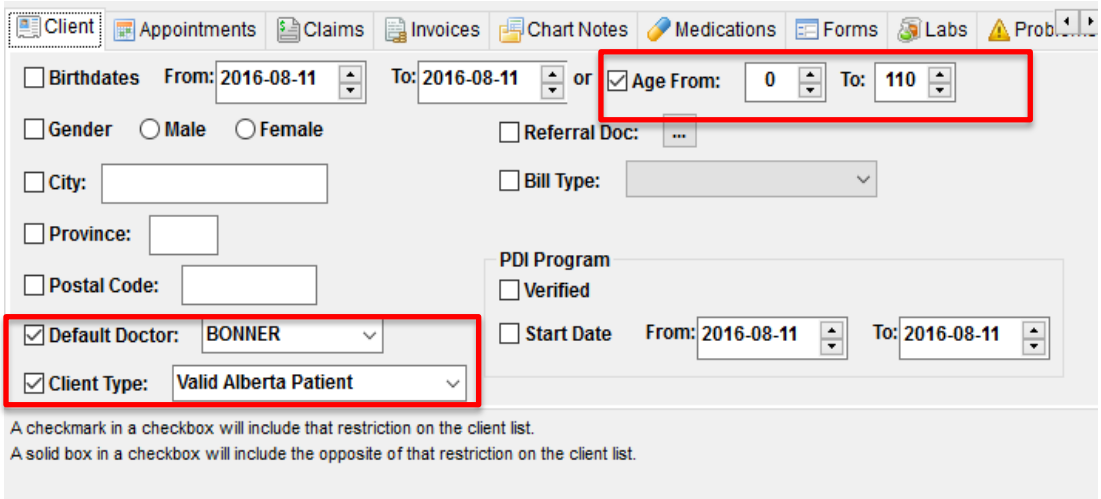
- Search for the positive first then search for the negative
    - E.g., if you are searching for female patients 50 – 74 y that have not had a mammogram in the past 2 years first identify all patients that have HAD a mammogram in the past 2 years. Once you have validated that your search criteria are correct it is easy to search for patients that have NOT had a mammogram.
- Verify that your results are correct before taking action

Query Tips in Healthquest:

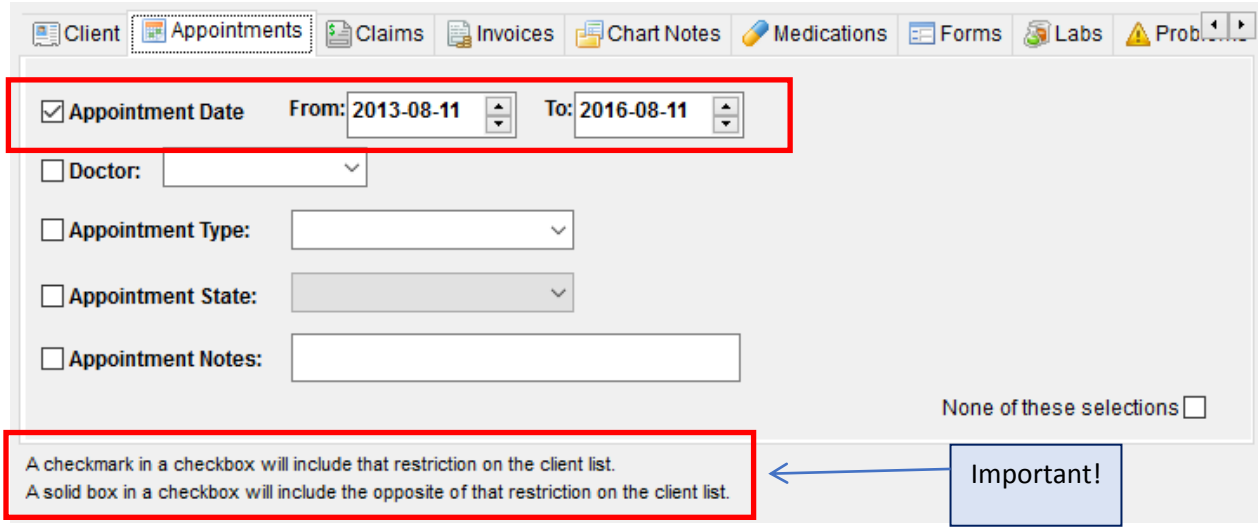
- Take some time to learn how to build queries as they inform panel identification, assist in panel maintenance and are crucial for panel management.
- Start with a new query each time to ensure the fields are blank to begin with (with experience, working from and editing saved queries will make things more efficient)
- For panel identification and maintenance use the Client and Appointment Tabs
- Criteria on each tab "builds" and adds to the search parameters
- A checkmark in a checkbox will include that restriction (criteria) on the client list
- A solid box in a checkbox will include the opposite of the restriction on the client list
- Data in queries in Healthquest is "inclusive" meaning that if the search is from age 50 – 74 years of age it "includes" people age 50 (it doesn't start at 51) through to and including 74 years of age

Example: To create a query to identify patients of all ages attached to Dr. Bonner with an appointment in the last 3 years (list of Active patients):

On the Client Tab select Age, Default Doctor, and Client Type.



On the Appointments Tab select and Appointment Date that is 3 years back from the current date.



Note: do not select "Doctor" on this tab as only pts with an apt with Dr. Bonner in the last 3 years will appear. If a clinic patient attached to Dr. Bonner only had one apt in the past 3 years and saw another provider in the practice, that patient would be excluded from the results.

Click **Run Query** and **Use Query for a List** to see the results.

Appointment Date may assist with determination of which patients are active:

- Patients with a visit in clinic during an agreed-upon, predetermined period (e.g., last 3 years)

These lists usually create awareness for initial panel clean up. Verification of the data produced on the lists with the primary provider and team will help to determine validity of the information. Further panel clean up is assisted by additional queries in the EMR.

> **TIP**: Healthquest will produce the list with the EMR query functionality but also offer exporting the list for further sorting and analysis in Microsoft Excel or Open Office Calc. Basic spreadsheet training is recommended.

TOP website videos

Active Patient Panel
https://www.youtube.com/watch?v=tHlAVsa8oso&feature=youtu.be

Active Patient Panel in Last 3 Years
https://www.youtube.com/watch?v=09ihoPkbXfE&feature=youtu.be

Patient Panel Not in the clinic for Last 3 Years
https://www.youtube.com/watch?v=iasDjLkkuEw&feature=youtu.be

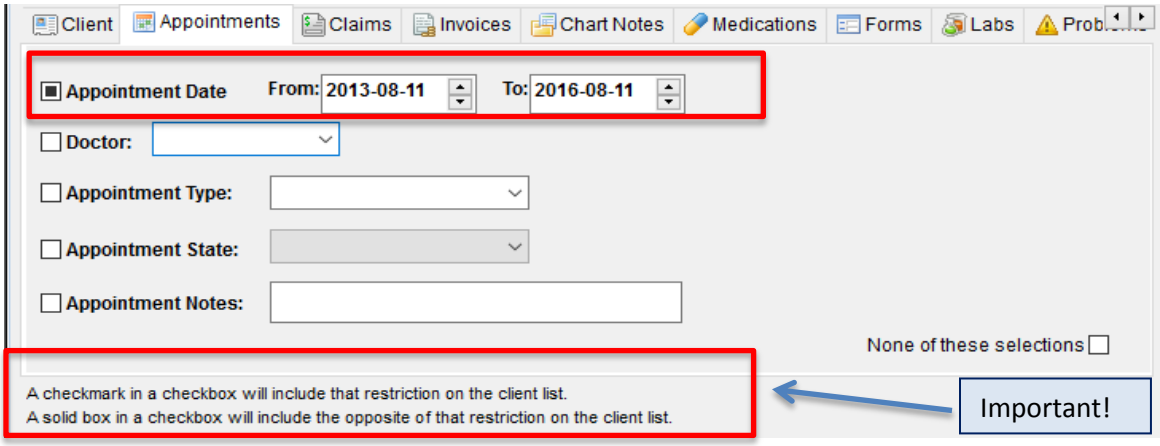
Initial Panel Clean-Up

Searches/reports that assist initial panel clean up include producing a list of active patients attached to a provider, with the additional search parameters of:

- **Last visit date** (and no future appointments)
- **Age:** Sorting the list of active patients by age is valuable. In viewing the list of active patients over the age of 90 years, a provider is usually able to indicate if there are patients on the list who should be marked as deceased

- **No visits** to the practice (and no future appointments) – producing a list of patients that are attached to a provider will identify patients that registered but may have never shown up to the practice. This search may also identify registrations of patients where lab results were received to the practice but the patients were never seen at this practice

  This search criteria below identifies patients with **No appointments in the last 3 years** (the client tab would identify the Default Doc and the Client Type):



  Note: The solid box next to Appointment Date indicates NO appointments in the dates indicated.

- **Appointment Type/Reason** – If the practice uses the appointment type or reason when scheduling visits, searching by this information my produce lists of patients that are not family practice panel patients such as 'aviation medical' or 'Botox injection'

- **Billing code (Claims)** - If the clinic offers specialty services to patients that are not members of the physician's family practice, they may be identifiable by billing code from the Schedule of Medical Benefits

    - Ask the providers if there are any billing codes that they routinely use for patients that are not members of their family practice panel

- **Procedure codes** –

    - E.g., searching by procedures offered at the practice, but all the patients may not belong to the practice, such as vasectomy (75.64)
    - Long term care patients are billed with an 03.03E billing code

- **Address or postal code**

    - Sorting of active patients by the address or postal code searches can be valuable in identifying groups that may not be part of the family practice panel due to their place of residence; temporary workers to an area may be identified this way

- **Last Name is Test –** each clinic has test patients that were created for training or practice purposes, for reporting and analysis they should not be included in the family practice panels.

IMPORTANT: The primary provider and/or the practice team need to review the data from reports to ensure that the correct information is being pulled into them. Due to unique protocol at a practice, fields may be used in a specific way and this may impact the accuracy of reports.

These need to be managed individually.

TOP website videos

Panel identification and clean-up
https://www.youtube.com/watch?v=FmEq0jN5aSQ&feature=youtu.be

Bulk/Batch Actions

Once a list is produced and sorted, applying a bulk change to the entire list or a group within the list is helpful. Making bulk changes makes the process of initial clean up and ongoing panel maintenance faster and easier. To make a bulk change in Healthquest create the desired list in the **Client List Manager** and call Healthquest support to make the bulk change.

> **TIP:** Carefully verify data with the primary provider and/or care team before making a bulk change.

Panel Maintenance

Once an initial clean-up is complete there are several processes that support maintaining a clean confirmed patient panel list for each primary provider. Those processes include:

1. Ongoing phone/address data, physician attachment and status verification at patient check in. Developing and monitoring a process for all staff that works the front desk with expectations for data verification is required.

- This process can be checked using the EMR reporting. Run a search to produce a list of patients with visits in a given period of time and determine what percentage of patients was verified during that time frame.
- Standard operating procedures should be in place for front desk staff for:
    - Patients no longer part of the clinic
    - Patients not seen in the clinic (e.g., records created for patients where lab work was received or seen at another facility like the local ER)
    - Patients seen at your clinic but not your family practice patients (e.g., walk-in or temporary patients)
    - Patients scheduled for a "meet and greet" appointment

2. Conducting queries at regular intervals and applying bulk actions to patients that are no longer active at the practice. The regularity of the intervals varies by practice. It may be monthly for the first year and then every six months thereafter. Reports that assist identifying these patients include searches by:

- Last visit date (and no future appointments)
- Age
- No visits to the practice (and no future appointments)
- Appointment Type/Reason
- Billing code
- Address or postal code
- Last Name is Test (first be sure there are no actual practice patients with the surname Test)

3. Patient outreach. Some practices identify patients with no visits in the past 3 years (and no future appointments), prioritizing those overdue for preventive screening care, then reaching out proactively to determine if they are still paneled to a provider at the practice. The outcomes of the outreach involve updating the patient demographics, physician attachment and offers of preventive screening care.

TOP website videos

Healthquest Search Using Billing Code

https://www.youtube.com/watch?v=KsEMeeaVuq0&feature=youtu.be

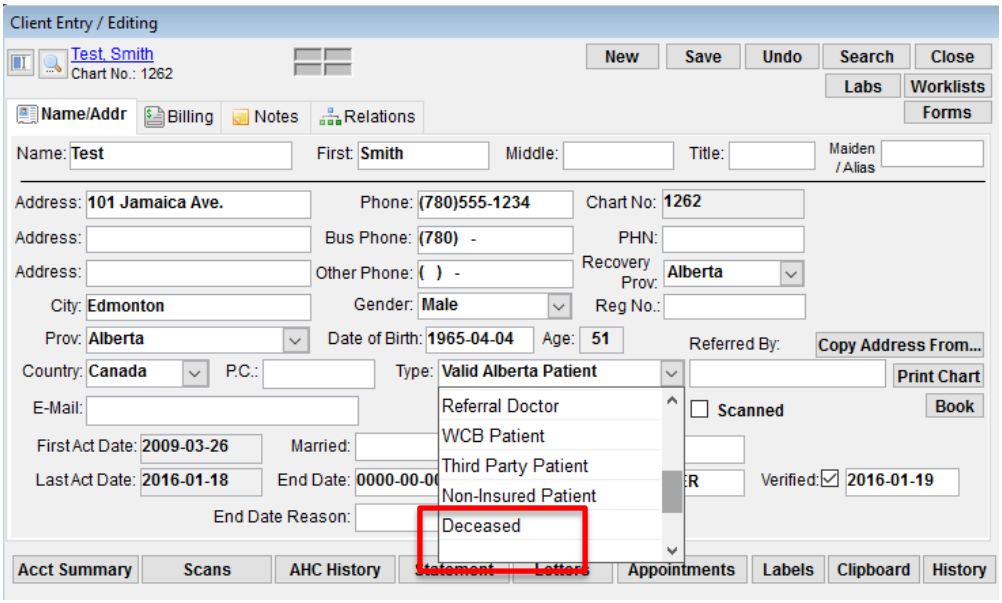
Panel ID and maintenance creating Dr as holding space in Healthquest

https://www.youtube.com/watch?v=X8eLhMcYhmU&index=28&list=PLf486cdx9WgLSa6UEly3HQG09Nd3xGFMZ

Deceased Patients

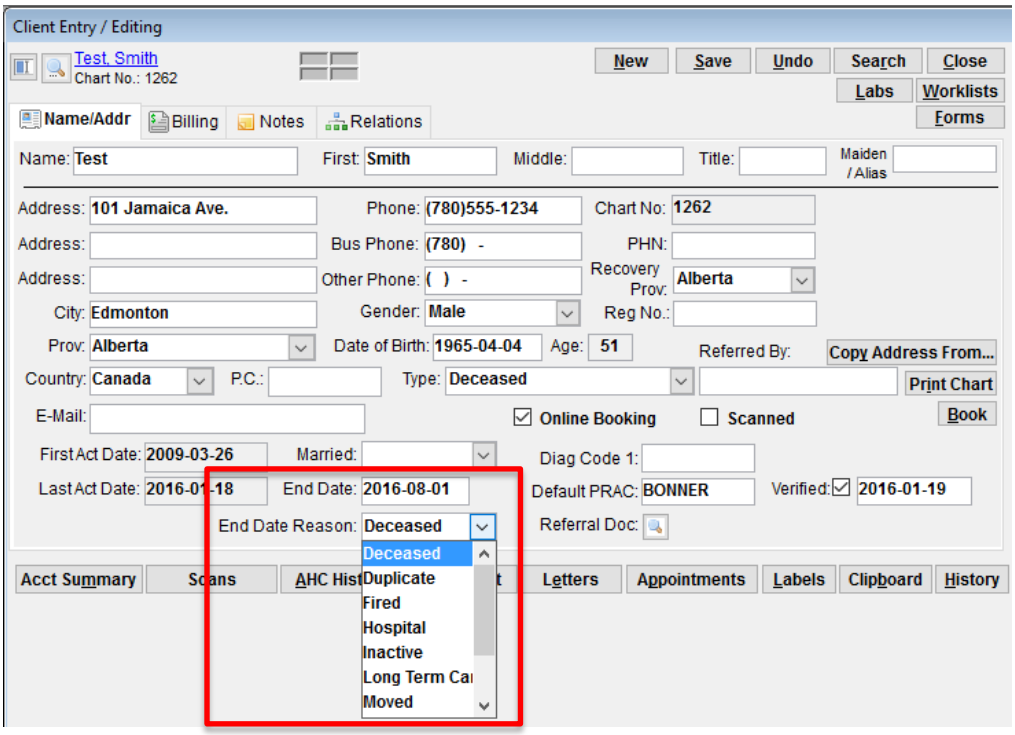
When a patient is deceased a number of steps need to be taken.

1) The Type on the Client Card needs to be changed to “Deceased”



2) The card needs to be **End Dated**. Double click in the End Date field and select the date the patient was deceased.

3) The **End Date Reason** needs to be changed to **Deceased**. See Page 11 on how to look up end-dated records.



Panel Management

Panel management, also known as population management is a proactive approach to health care. Population means the panel of patients associated with a provider or care team. Population-based care (or panel-based care) *means that the practice team is concerned with the health of the entire active population of attached patients at the practice, not just those who come in for visits*.[3]

The Patient's Medical Home implementation element of 'Organized Evidence Based Care' involves embedding evidence-based guidelines into daily clinical practice where each encounter is designed to meet the patient's preventive and chronic illness needs. Setting up population-wide point-of-care reminders supports these planned interactions and EMR functionality supports appropriate follow-up care.

Approaches to Panel Management

Opportunistic

When approaching panel management opportunistically, it means catching a patient while they are in the practice or calling on the phone with a team member, to offer care.

> For example, a 52-year-old female is in the practice for an appointment to inquire about the vaccine for shingles. While in the office her blood pressure is taken and she is offered requisitions for a FIT test, plasma lipid profile, fasting glucose and mammogram because they are all overdue.

Methods to identify patients that are overdue for clinical services may involve:

- Setting up population wide point-of care reminders that alert a team member that a patient is due for a clinical service
- Setting follow-up or another type of alert at the individual patient chart to proactively set up for the next intervention
- A team member that combs through the charts of patients meeting certain criteria, who have an appointment, to identify clinical services that are due and marking the chart to indicate this

Outreach

An outreach method to panel management involves identifying active and confirmed paneled patients overdue for clinical services that do not have appointments and '*reaching out*' to offer care. This process involves using the search/reporting tool in the EMR to produce lists of patients.

> For example, a 58-year-old male was last in the clinic 2.5 years ago for a knee injury. The panel care coordinator (PCC) at the practice has run a report that shows this patient is overdue for a plasma lipid profile, a FIT test and a fasting glucose. The PCC phones the patient and confirms that he is still a patient of the practice attached to his paneled physician. ***** As per clinic protocol,

[3] Module 20. Facilitating Panel Management. May 2013. Agency for Healthcare Research and Quality, Rockville, MD. http://www.ahrq.gov/professionals/prevention-chronic-care/improve/system/pfhandbook/mod20.html

the PCC makes an offer that the patient can come by the clinic and just pick up the lab requisition to get the overdue screening done and the clinic will follow-up as necessary. The patient agrees.

*Note: such protocols vary from practice to practice. It is an important process that must have provider agreement before implementation.

> TIP: It is recommended that a practice initiating outreach complete panel identification and maintenance processes first then begin with patients that have been confirmed as attached, active patients. This will prevent the experience of contacting patients that are deceased or no longer active at the practice.

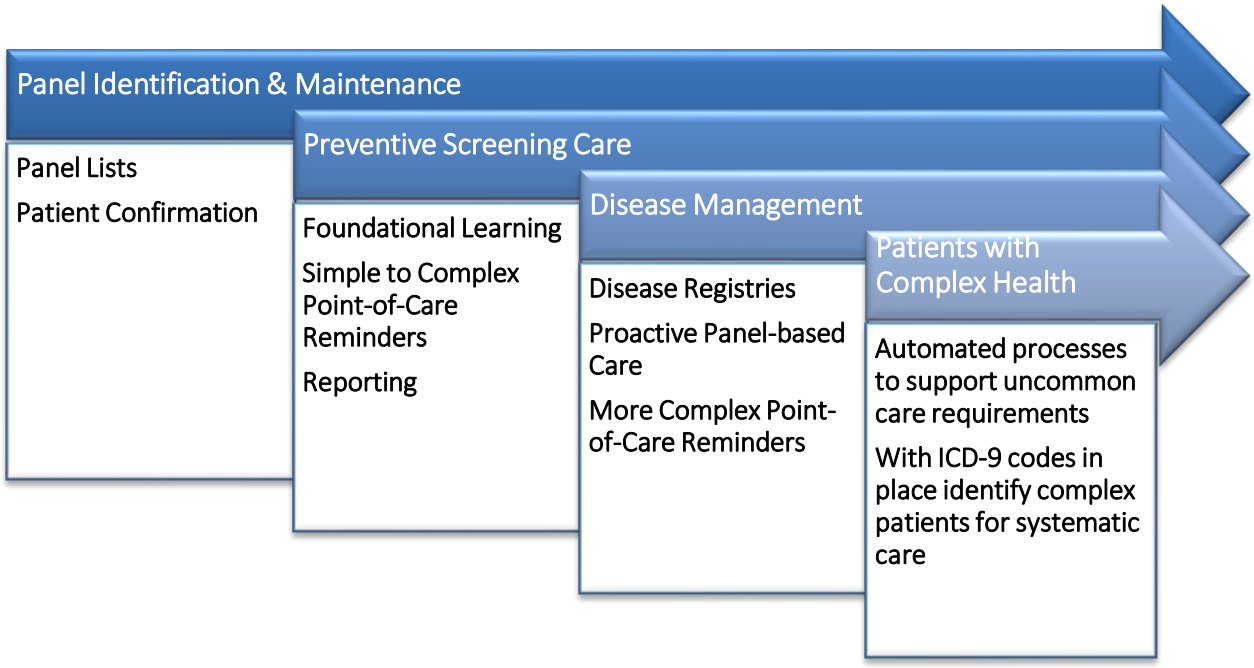
Prioritizing Patients for Outreach

For practices that are beginning outreach for the first time, identifying where to start can be a challenge. Consider using searchable criteria in your EMR that can guide you to reaching out to patients that may have the most to gain by offers of care. Consider the following criteria:

- Last visit date close to 3 (or more) years ago
- Age (older patients are at higher health risk than younger patients)
- Number of screening maneuvers due, e.g., consider starting with patients over 60 years of age with no colorectal cancer, diabetes or lipid panel screening complete
- Patients with chronic conditions

Panel Management: How to Get Started

Once patient panel identification and maintenance processes are in place, it is recommended to begin proactive panel-based care with the following approach:



Preventive Screening Care

- Preventive screening care involves a small number of data elements compared to disease management
- There is a benefit to starting with some clean sources of data like electronic lab feeds compared to information that maybe inconsistently charted in the clinic
- Clinic team will learn:
  - the importance of and begin standardization of naming protocols for scanned documents (e.g., mammograms and colonoscopy reports)
  - from this experience about patterns in their data entry and can make correction for future meaningful use of EMR
  - practice standard operating procedures that enable proactive panel-based care
- The searches and population-wide point of care reminders should start simple and can build to the more complex
- Practices can build on:
  - the number of screening maneuvers they are addressing and/or
  - the population of patients at the practice that point-of-care reminders are set for (e.g., gender and age)
- Provides a foundational experience for process improvement

Disease Management

- Clinic team take lessons learned from less complex preventive screening care processes that can then be applied to disease management
- Involves more complex searches with more data elements than screening
- A dependency exists on reliable registries of patients with a given disease
    - Providers will learn the importance of consistent coding in the Problem List of the EMR
- Clinic team will build on the benefits of standardized data entry
- Building of more complex point-of-care reminders with increased reliability of planned, prioritized care

Management of Patients with Complex Health Needs

With a solid foundation in preventive screening care and disease management, patients with complexities and multiple co-existing conditions will have visits that address many predictable health issues by using available EMR resources to more efficiently and reliably meet patient's important needs

TOP website videos

Complex Health Needs in Healthquest
https://www.youtube.com/watch?v=jWvZSfpR-5E&index=20&list=PLf486cdx9WgLSa6UEly3HQG09Nd3xGFMZ

Tools for Panel Management

For the following areas it is recommended that when a team agrees on the processes that they are documented as standard operating procedures so that when a staff member leaves and a new staff member starts there is documentation.

Charting for Team-Based Patient-Centered Care

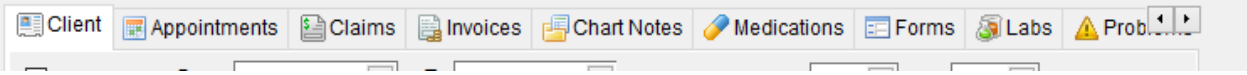
For a team to provide care that is patient-centric and takes care of the whole patient, a single provider in the practice can no longer document in an ad hoc manner. The team needs to know where to find pertinent information and know that the information can inform proactive, panel-based processes (such as searches or reminders) that can act as a safety-net around the individual patient care.

EMR users need to be aware of the search capabilities of their EMR. **Where information is entered matters!** In general, fields that can inform a search or report include:

- Drop down lists
- Radio buttons
- Boxes only designed to record specific information like blood pressure or weight
- Templated fields in an exam template

Even in an area where free text can be entered, if certain information is entered with a consistent term, it may be searched. Where common repeated text (macros or auto-replace) is used, it may be uniquely searched.

The tabs in the Client List Manager queries provides an indication of what is searchable:



Notable areas of the chart that are searchable in Healthquest include:

- Client card fields (for panel ID and maintenance)
- Appointment types and Appointment Notes
- Claims by Diagnostic Code (informs registries)
- Chart notes, chart fields
- Medications
- Forms
- Labs: Types, Value and Description
- Problems: Types, diagnostic code, status (active, etc.) and Doctor
- Scan Type and Notes (Description)

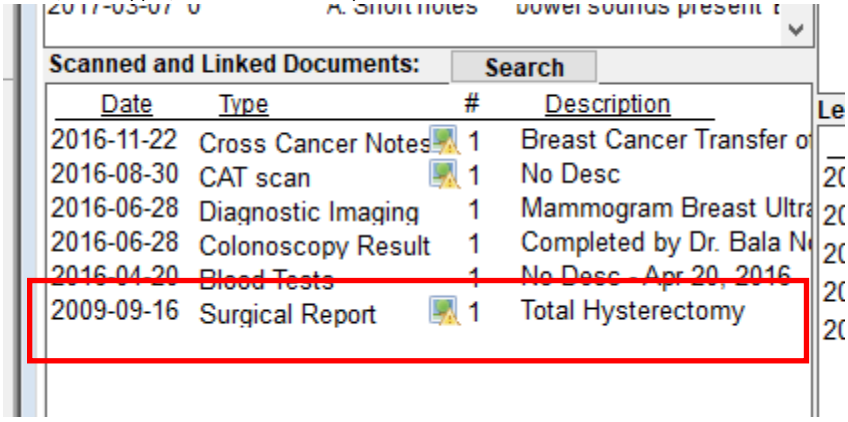
Chart in a way that the team can help care for the patient:

- Care team members know where to find information
- The patient's data may be included in CDS Queries population-wide reminders that helps to prevent patients "falling through the cracks"
- Monitoring and management can be done systematically

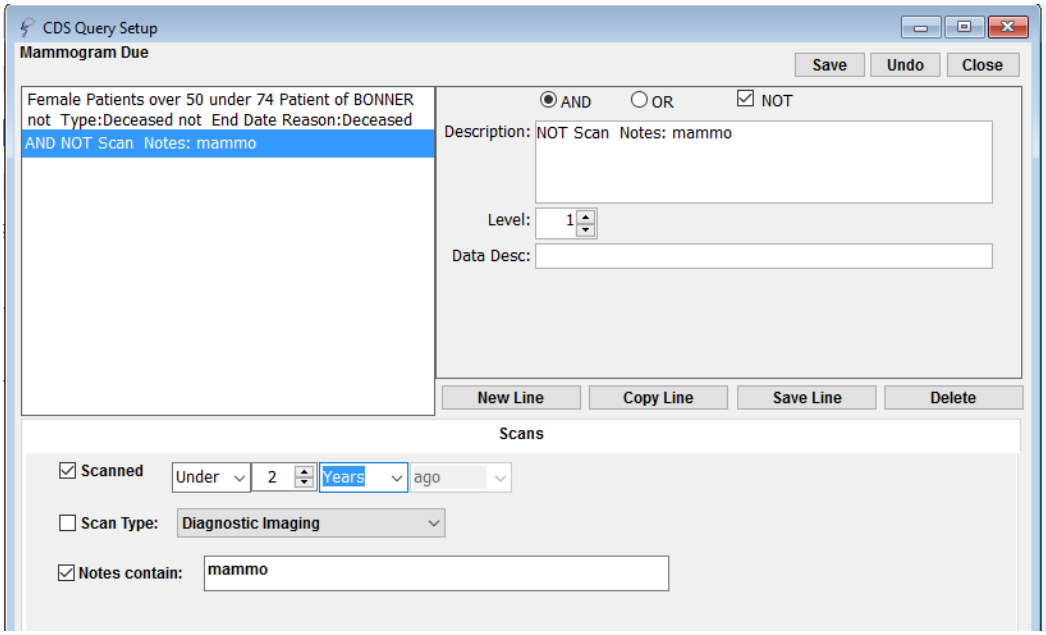
Scanned Documents

Every clinic receives electronic faxed documents which get linked to individual patient records. The naming or indexing of these documents as they are attached must enable two processes:

1) When a provider is viewing the patient chart they should easily identify the information and be able to find it quickly. Healthquest can search for a document name at the individual patient level, the type, and the description.



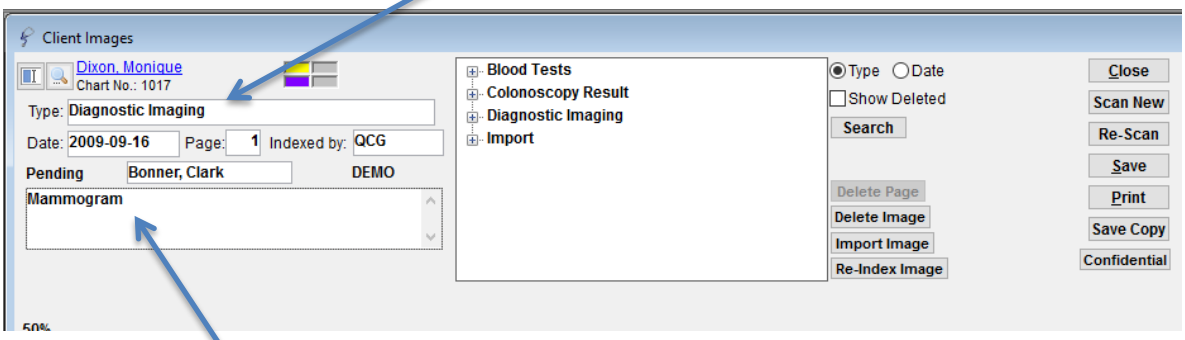
2) In the EMR search /query tool it is possible to produce a list of patients that have a type of linked document within a period of time. These same document names can be used to create a population-wide point-of-care reminder (i.e. CDS Notification). See example below where it is searching for female patients (50-74y) that have not had a diagnostic imaging document with the notes "mammo" in the last 2 y.



Key principles for linking scanned documents

- Create a list of acceptable document words that can be used at the practice that is agreed upon by the clinic team (clinicians and team members). See Appendix C for examples
- Use the drop-down list for indexing. Put some thought into the index word list.

This word is selected from a drop-down



Team members need training on practice protocol for typing free text in the description box. This text appears in the Description field in the patients chart and should be meaningful to the provider. The text is also searchable in Queries and CDS Queries (by word or phrase) so team members need to type it as per practice protocol and not write a description ad hoc.

- Scanning protocol is assisted with physician sponsorship to explain the value toward proactive panel-based care

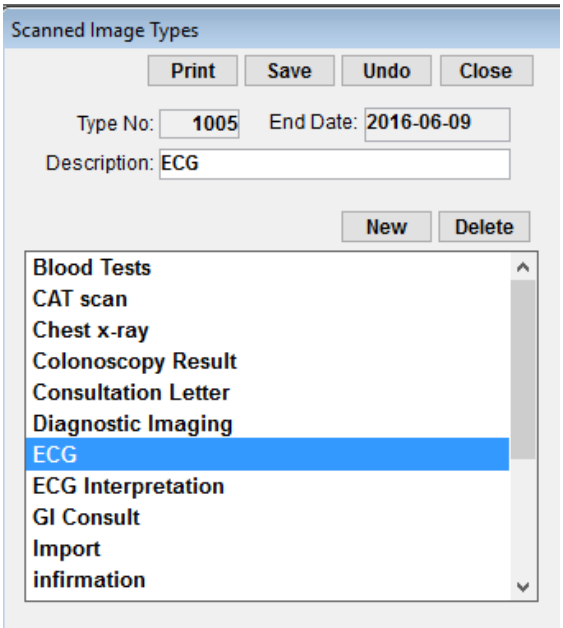
- Certain clinical reports need to be distinguished to enable panel management
    - Distinguish mammogram results from all diagnostic imaging
    - Some consult reports need consistent naming:

        - Colonoscopy reports
        - Flex sigmoidoscopy report
        - Colposcopy report
- Provide training to staff and place a printed list of acceptable scan words with indexing tips at every workstation where documents get linked to patient charts
- Name based on type of consultation rather than the name of the consultant
    - E.g., If a referral is for gastroenterologist consult, name the letter "Gastroenterology consult" not "Dr. Black consult"
- Only central clinic EMR administrator(s) should be allowed to add, delete or modify the main list
- Scanning protocol is assisted with physician sponsorship to explain the value toward proactive panel-based care
- Discuss as a team the scans that must be named the same way every time. E.g., Mammogram, Prenatal US, Colposcopy Report, Colonoscopy Report, Pap
- Only central clinic EMR administrator(s) should be allowed to add, delete or modify the main list.
- Each phrase in the description field is searchable

Managing Scanned Image Types

In **Setup > Scans > Scan Types** an EMR administrator can End Date index words that should be no longer available for attaching to scans. When an index word is end dated it will remain attached to the records in the past but no longer be available to attach to future scans.

Example: This clinic has the words "ECG" and "ECG Interpretation" as two possible index words. This duplication of words makes it possible to have two words that mean the same thing.



The word "ECG" is **end dated** to remove it from the drop-down list for staff indexing scans to patient charts.

Save changes before closing.

Scanned Image Types may be deleted if no patient records have a scan with that attached to their chart. Otherwise the word must be end dated.

TOP website Video

Scan Types in Healthquest

https://www.youtube.com/watch?v=-AjkynC6WgM&feature=youtu.be

Indexing Scans in Healthquest

https://www.youtube.com/watch?v=hxT2F6JcRnw

Manual Entry of Lab Data

In Healthquest, you can manually enter lab data that may be received by fax or completed within the clinic. Data may be received this way due to the lab originating from a source outside the lab region. If this lab data is entered as a "Manual Result" rather than a scanned document it can usually be trended and searched. Manual labs completed in clinic such as a random glucose test should be entered in manual labs. Some clinics use Manual Labs to enter singular results that were ordered from a provider outside the clinic from Alberta Netcare that the provider wants to see in the lab results sections and so that the results can be graphed with other investigations received electronically.

Example 1:

A provider is opening a new practice. After the first appointment and the patient is accepted into the practice, on the visit for the first comprehensive medical, the provider wants the last three pap results entered in the patient's chart. A team member looks up the results and dates from Netcare in the chart with the manual labs feature careful to note the dates, results and that the source is Alberta Netcare.

Example 2:

A patient with diabetes is also under the care of an internal medicine specialist at a diabetes clinic outside of the area where the primary care practice is. The clinic gets copied on the patient's lab results ordered by the other clinic and they are received as a fax. So that the lab values can be trended with the lab results ordered at the primary care office, the faxed results are entered as manual lab results and appear in the patient's lab investigation section of the EMR not just as a document stored in their chart.

Useful Applications of Manual Lab Entry

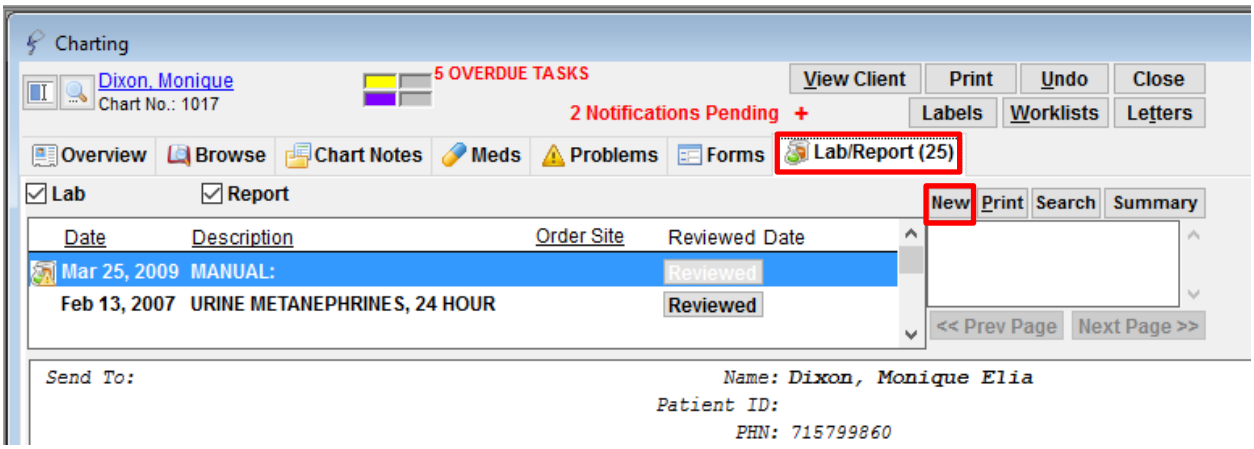
The manual lab result feature of EMRs offers a clinic flexibility to store results or information in a way that they can be trended and searched. Some ways in which clinics are using this feature:

- Preventive screening care offers are all documented as manual lab results – they are searchable and assist the clinic team in monitoring offers and measuring screening care. This requires some set-up and is very effective where it is the team that does preventive screening care work
- Pain Disability Index is a score that is tabulated at the clinic that documents the level of pain a patient has. For practices that have a chronic pain clinic, manual lab entry allows them to record the score and trend against medications over time. It can also assist in quality improvement measurement.
- A clinic is tabulating frailty scores of their older patients. Recoding the scores in manual labs allows them to trend these scores over time, determine which patients in the practice have or have not had a frailty assessment and allows population based measures.

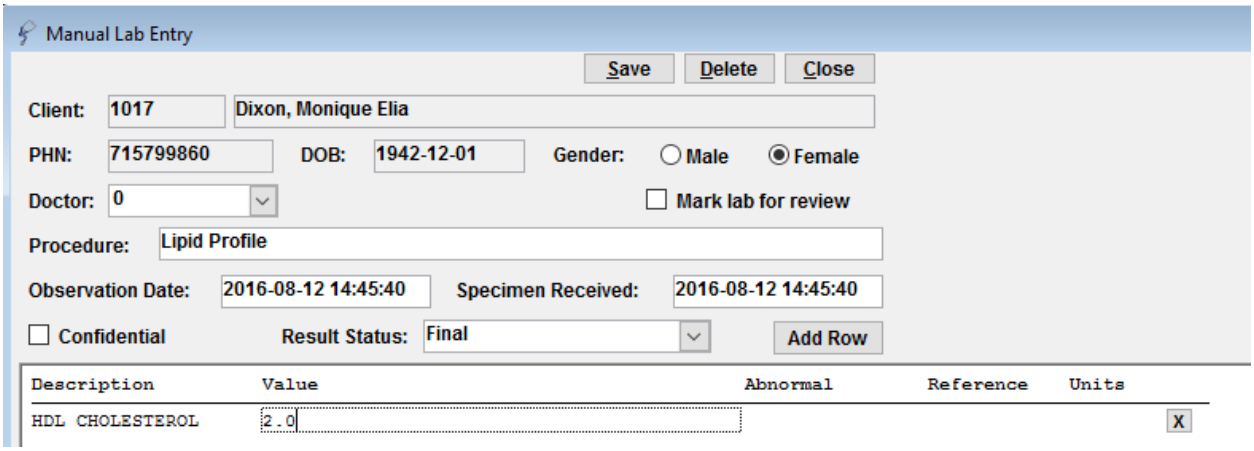
IMPORTANT:

Use of manual entry of lab data needs to be planned and consistent with the format that the labs are received from e-delivery the format entered by the first person who enters a value will remain in the drop down menu moving forward. Do this carefully and ideally get one person to set it up. If manual labs is used for non-lab data, be consistent with a standard format when entering data; always pick from the drop-down after the first entry.

To manually enter lab data, while in Charting, click on the **Lab/Report tab**, and choose **New**



In the Manual Lab Entry Window, complete the various field including the Procedure name. Under description for each lab in the procedure a new row is added. Complete the values. The lab description must match **EXACTLY** the description received on electronic reports.



TOP website videos

Manual Lab Entry in Healthquest:

https://www.youtube.com/watch?v=MMq59endSS4&index=7&list=PLf486cdx9WgLSa6UEly3HQG09Nd3xGFMZ

Searches/Queries – Getting Started

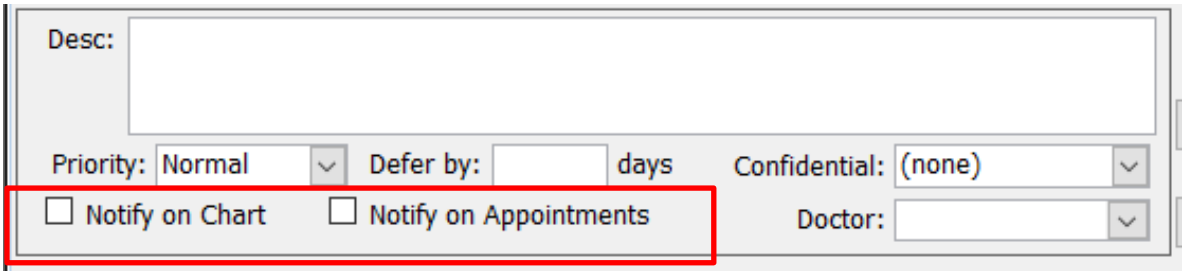
When learning to create searches the following tips will assist in obtaining accurate data:

- Be informed on how data is recorded at the clinic; this will provide direction on which fields to search
- Build the search one parameter at a time

- Validate, as each line of the search is created, that the results are correct before adding another parameter to the search
- Search for the positive first then search for the negative
    - E.g., if you are searching for female patients 50 – 74 y that have not had a mammogram in the past 2 years first identify all patients that have HAD a mammogram in the past 2 years. Once you have validated that your search criteria are correct it is easy to search for patients that have NOT had a mammogram.
- Verify that your results are correct

Getting Started:

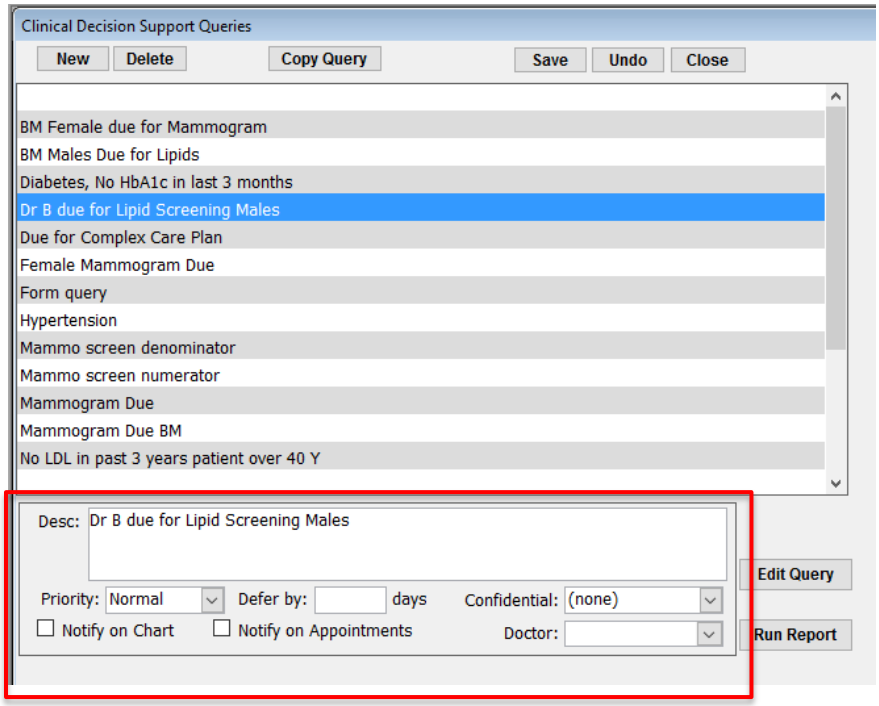
- Use the **Clinical Decision Support Manual** (available through Healthquest Help files) as a reference.
- As you are new to using CDS Queries, build them line-by-line and validate that the logic is building correctly as you create it.
- Use the title "TEST" in your query description until you have validated the reliability of your query and then remove it to finalize the query. E.g., "TEST Due for Framingham CV Risk, Male". Inform the clinic team you are making test queries.
- Do NOT click "Notify on Chart" and "Notify on Appointments", until the query is verified as pulling the correct information.



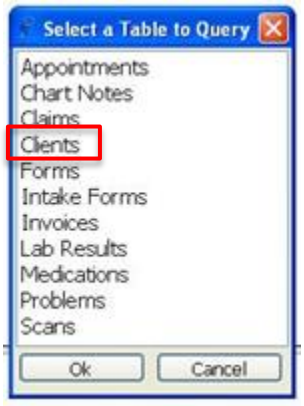
CDS Query Setup & examples

Example 1: we will look for Dr. Bonner's male patients age 40-74 that has not had a lipid profile completed in the last three years.

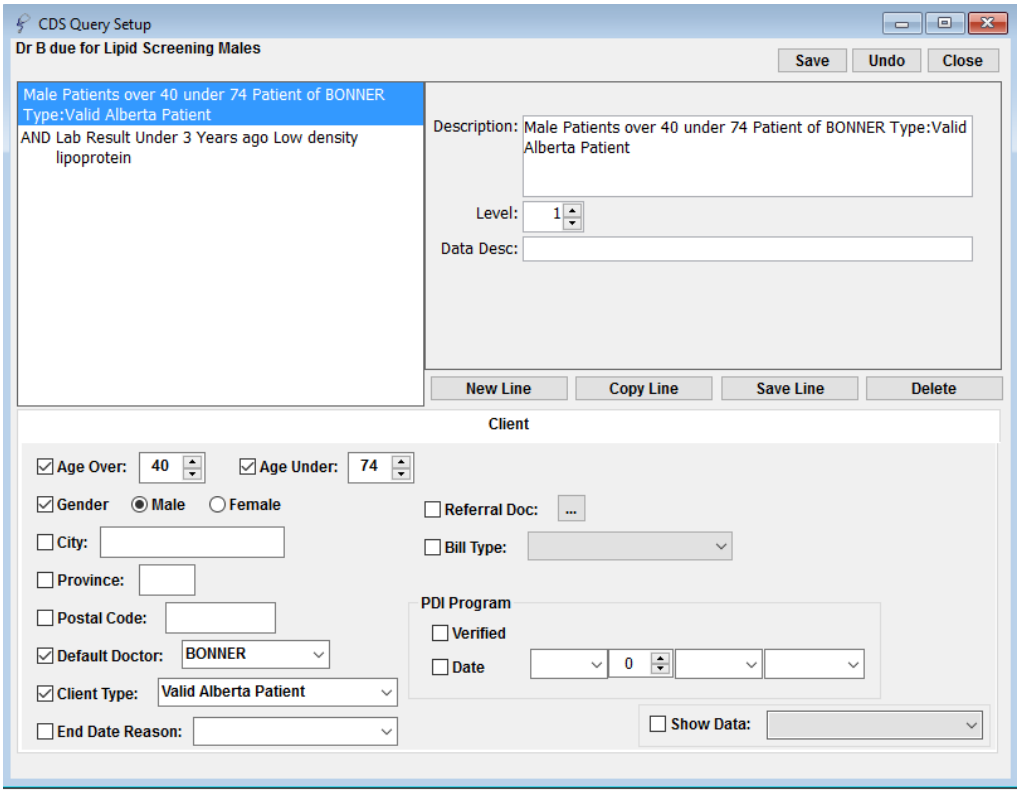
1. Go to **Setup** > **Charting Setup** > **CDS Query Setup**
2. Select **New**
3. In the Desc box write the title of the query: "Dr. B Due for Lipid Screening Males"



4. Ensure that "Notify on Chart" or "Notify on Appointments" do not have a check mark; if this is a desired it will be done at the end.
5. Click **Save**
6. Click "Dr. B due for Lipid Screening Males" in the list of queries
7. Select **Edit Query**
8. The CDS Query Window appears
9. Select **New Line**. The window appears to Select a Table to Query

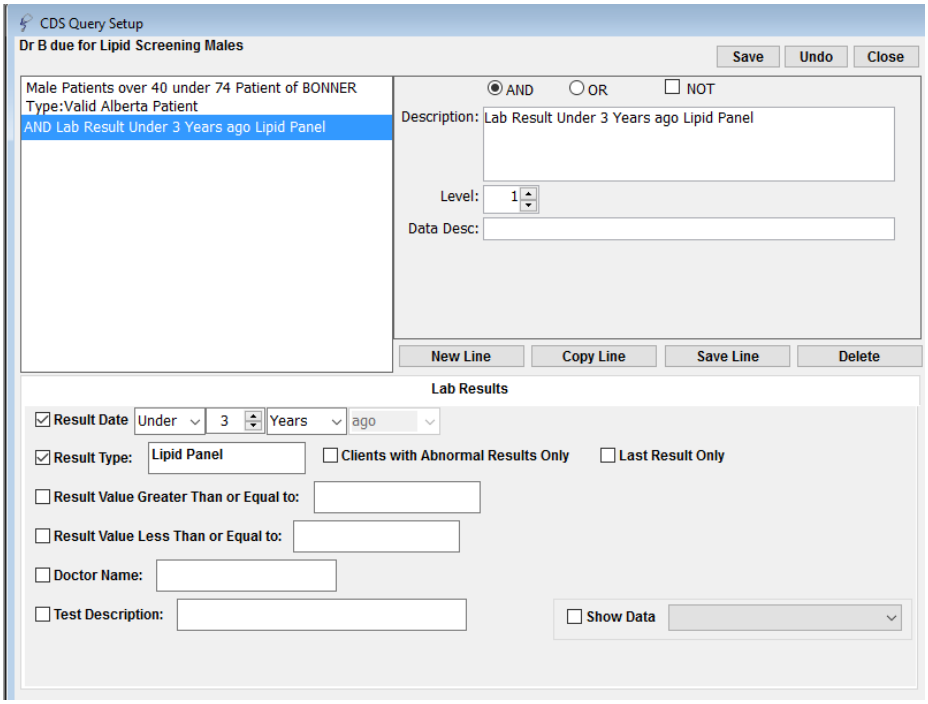


10. Select "Clients" and OK. In the window below add the criteria for the first line of the query. Age, Default Doctor and client type.



> Stop. At this point it is advised to validate. Did you find the 40-74 y males of the physician? To do this Save the query, close, and click "Run Report" on the main page. If the list contains only the 40-74 y males of that physician, close the report and move on. Click Edit Query.

11. **Save** Line
12. **New** Line
13. The **Select a Table to Query** window appears
14. Select **Lab Results** and add the criteria to the query. "Results Date Under 3 years" and "Result Type Lipid Panel". The words "Lipid Panel" must be customized to your region. It may also be called a "Lipid Battery" or "Low Density Lipoprotein"

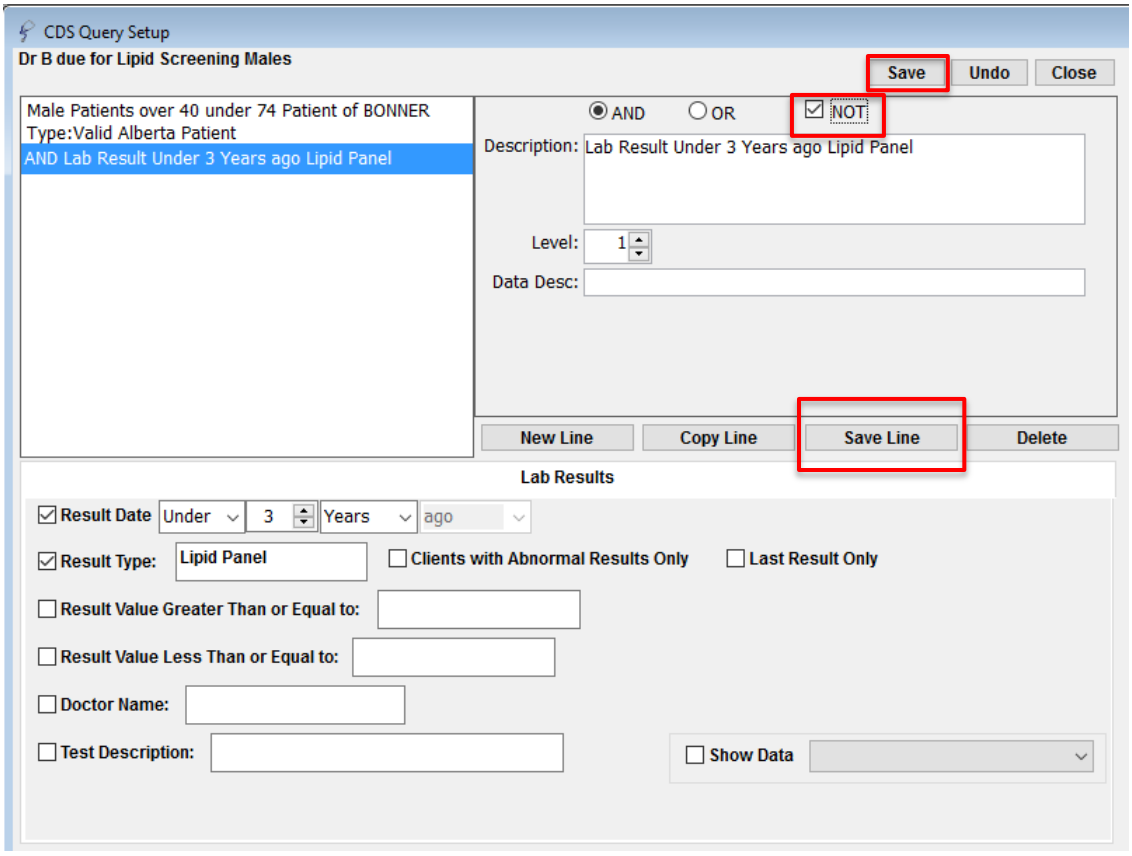


Stop. At this point it is advised to validate. Did you find the 40-74 y males of the physician with a Lipid Panel in their chart in the last 3 years? To do this Save the query, close, and click "Run Report" on the main page. If the list contains only the 40-74 y males of that physician with a lipid panel in the last 3 years, close the report and move on. Click Edit Query.

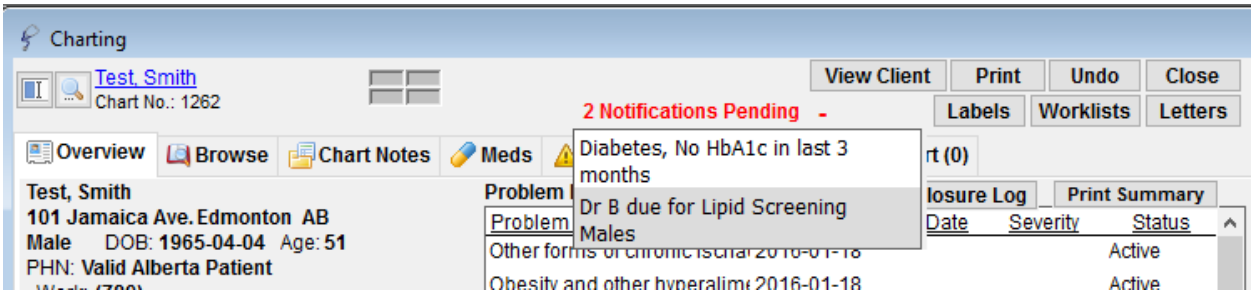
Save Line

Now that the query has found patients with a lipid panel, a "NOT" criteria will be added to find the patient records WITHOUT a lipid panel in the past 3 years.

15. Click the NOT box as shown below, Save Line and Save. Close the query.

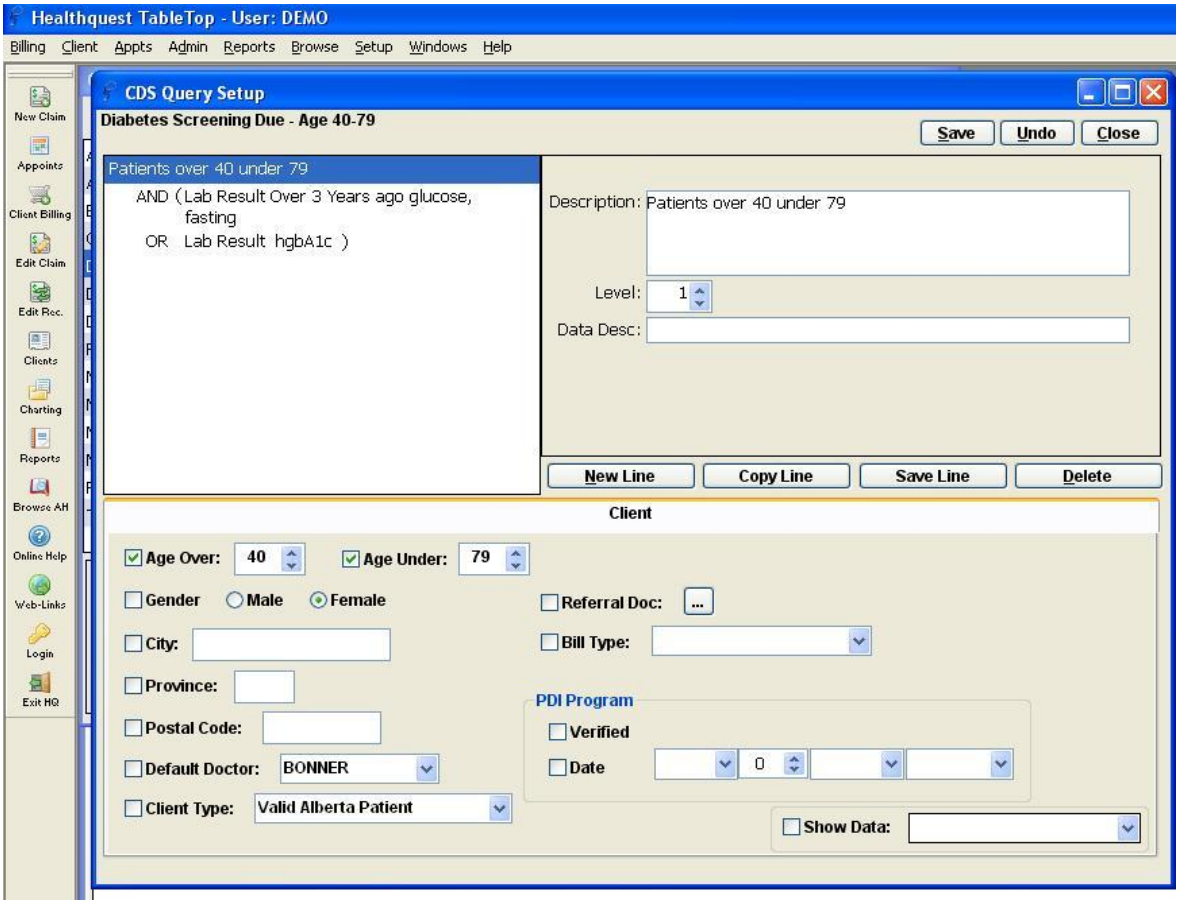


16. Back on the main page, Run report. Verify the data is correct. If the data is correct click "Notify on Chart" and/or "Notify on Appointment" for a notification to appear in a patient's chart.
17. Run Report and select a patient on the list. Open the patient's chart. Does the notification appear?



Tips on Building CDS Queries:

- Use TEST at the beginning of your queries when you are building a new query and testing. When you are certain that the query is verified and valid, edit the title to remove the TEST. Do not click "Notify on Appointments" nor "Notify on Chart" until valid, tested and ready for use.
- Validate each line of the query as you build it (by saving and then run report) and click on a patient record to see that it has the information you are seeking.
- Try the reverse of criteria – can you create a list of that have had a Framingham Risk Calculation? If so, try the NOT button for the reverse.
- Clicking "Show Data" when building the report; if you do not want the data to show in the notification remove "Show Data" for the line in the final version. Can only select "Show Data" on one line of the report.
- Remember to save when editing each line and before closing
- To create "OR" between lines set the "Level" to 2. For example, to identify adult patient 40 to 79 due for diabetes screening you are looking for patients that have not had a fasting glucose or a hemoglobin A1c in the last 3 years.



Beneficial Searches for Care Planning

When patients have been documented as having complex health needs (e.g., Problem List includes "Complex Health" as an active problem, monitoring frequency of care planning as well as follow-up is key. Useful searches are:

- Patients with complex health needs with no care plan in the last year
- Patients with complex health needs with a care plan but no specific appointment type designating a care plan follow-up in the last 6 months
    - This search depends on the practice having a unique appointment type designated as a care plan follow-up.
    - Alternatively, a panel manager could create a search that identifies the patients with a care plan completed within a given time (e.g., 1 year) and then looks for specific types of appointments since then to identify patients that may need follow-up

Follow-up with Worklists

EMRs have features for individual patient follow-up where a task is created to remind a team member to follow-up with a patient at a specific time for a specific reason. In Healthquest this feature is Worklists and it is indispensable for chronic disease management and care of patients with complex health needs. Importantly, worklist tasks can be future dated so that the person who needs to action the follow-up need only see it when it is timely. It is also important to document when a worklist task is closed. Worklist tasks remain documented in a patient's chart for record. In comparison, messaging is more immediate and is usually acted on in a short time frame, often while the patient is in the clinic. Messaging is often used for many non-patient purposes.

See the Healthquest help file on Worklists, the Worklist Windows including Tasks.

Clinical Decision Support: Population-wide point-of-care reminders

Most EMRs have a tool that will search the database for specific criteria to identify patients due for clinical service. Population-wide point-of-care reminders may be called 'rules', 'triggers', 'alert', 'notification' etc., and these are really just searches that run in the background of the EMR and provide notifications when a patient meets the criteria. In Healthquest these are called Clinical Decision Support (CDS) Notifications.

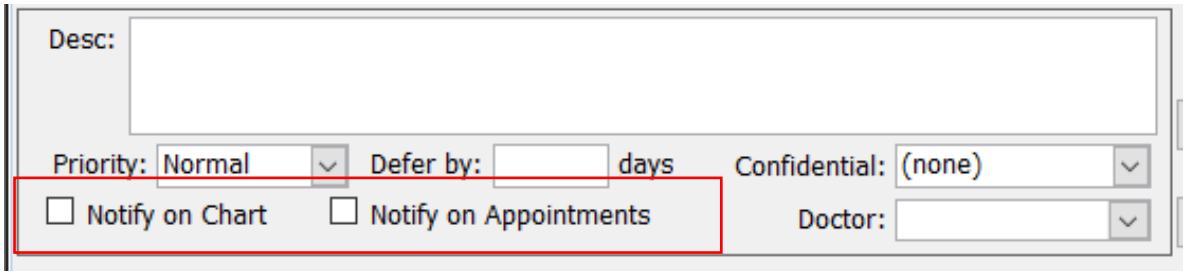
These can be created based on internal clinic information such as charting, scanned documents, billing or external information such as incoming lab or imaging data. These point-of-care reminders will automatically go away when the search criteria are met. CDS Notifications are key enablers of proactive panel-based care. The higher the data quality in a practice, the more reminders a practice team are able to create and use reliably.

Recognizing that individual patient care will be tailored and that there are exceptions to the rules, CDS notifications generally have the ability to be individualized for patients and modes of documenting exemptions may exist.

Clinical Decision Support Queries can be created to both generate a notification on the chart and/or in appointments that a patient is due for a clinical maneuver as well as to run a report of a list of patients for panel management. Healthquest has several pre-built queries.

Getting Started:

- Use the **Clinical Decision Support Manual** (available through Healthquest Help files) as a reference.
- As you are new to using CDS Queries, build them line-by-line and validate that the logic is building correctly as you create it.
- Use the title "TEST" in your query description until you have validated the reliability of your query and then remove it to finalize the query. E.g., "TEST Due for Framingham CV Risk, Male". Inform the clinic team you are making test queries.
- Do NOT click "Notify on Chart" and "Notify on Appointments", until the query is verified as pulling the correct information.

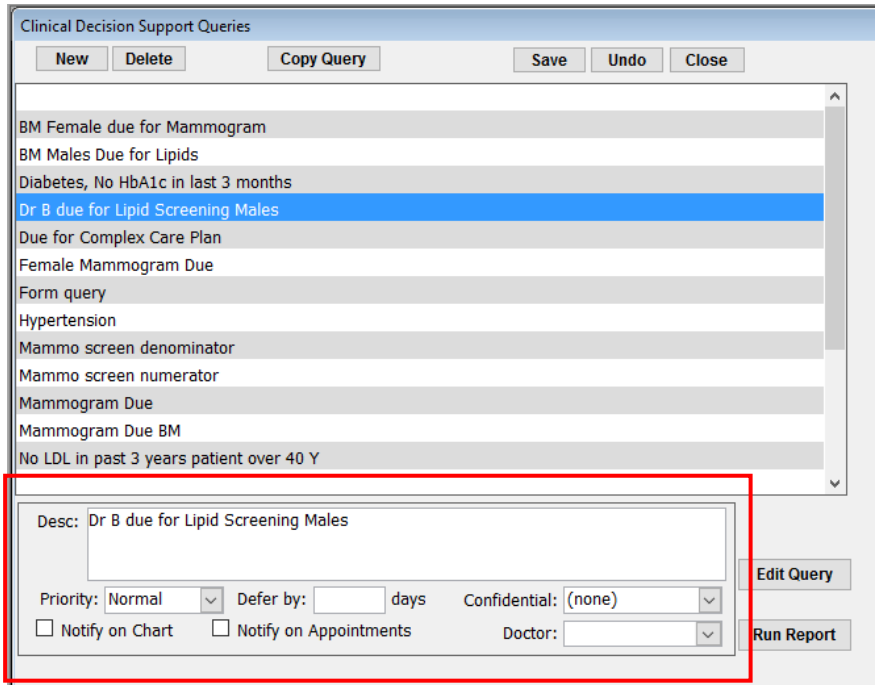


CDS Query Setup: Creating a Simple Notification

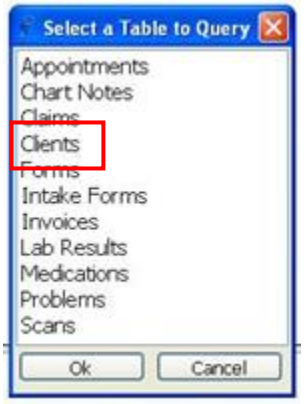
Goal: Create a notification to identify active adult male patients have not had a Framingham Risk Assessment in the last 3 years.

In this example, we will look for Dr. Bonner's male patients age 40-74 that has not had a lipid profile completed in the last three years.

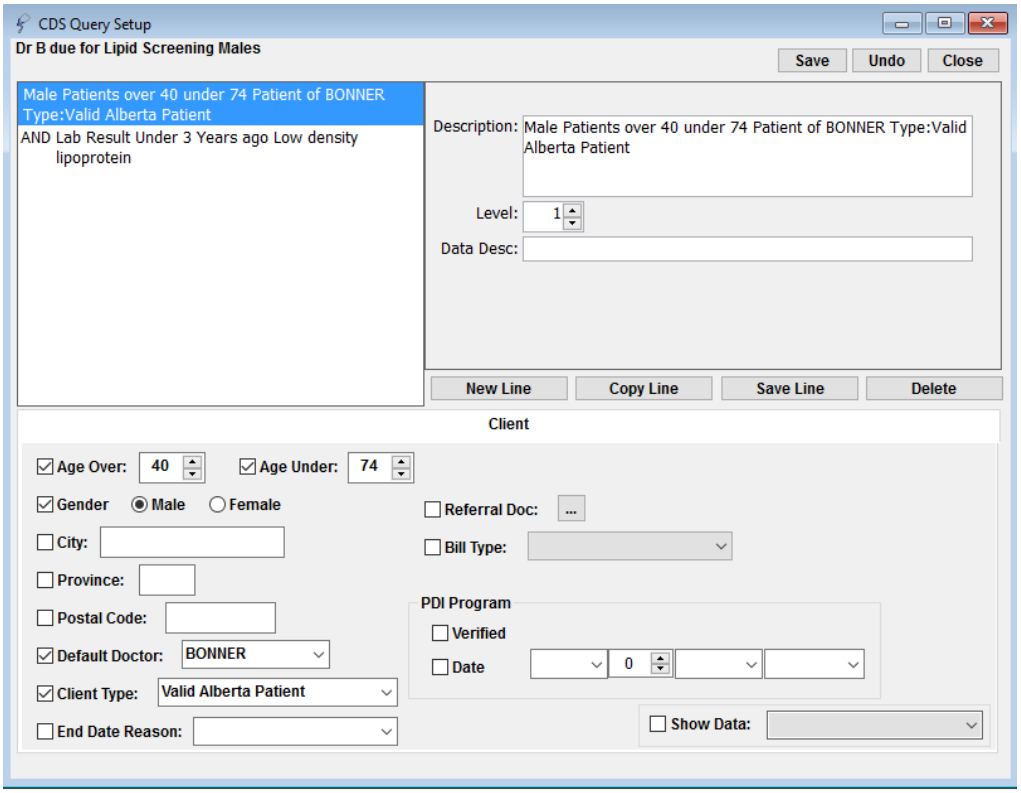
1. Go to **Setup** > **Charting Setup** > **CDS Query Setup**
2. Select **New**
3. In the Desc box write the title of the query: "Dr. B Due for Lipid Screening Males"



4. Ensure that "Notify on Chart" or "Notify on Appointments" do not have a check mark; if this is a desired it will be done at the end.
5. Click **Save**
6. Click "Dr. B due for Lipid Screening Males" in the list of queries
7. Select **Edit Query**
8. The CDS Query Window appears
9. Select **New Line**. The window appears to Select a Table to Query



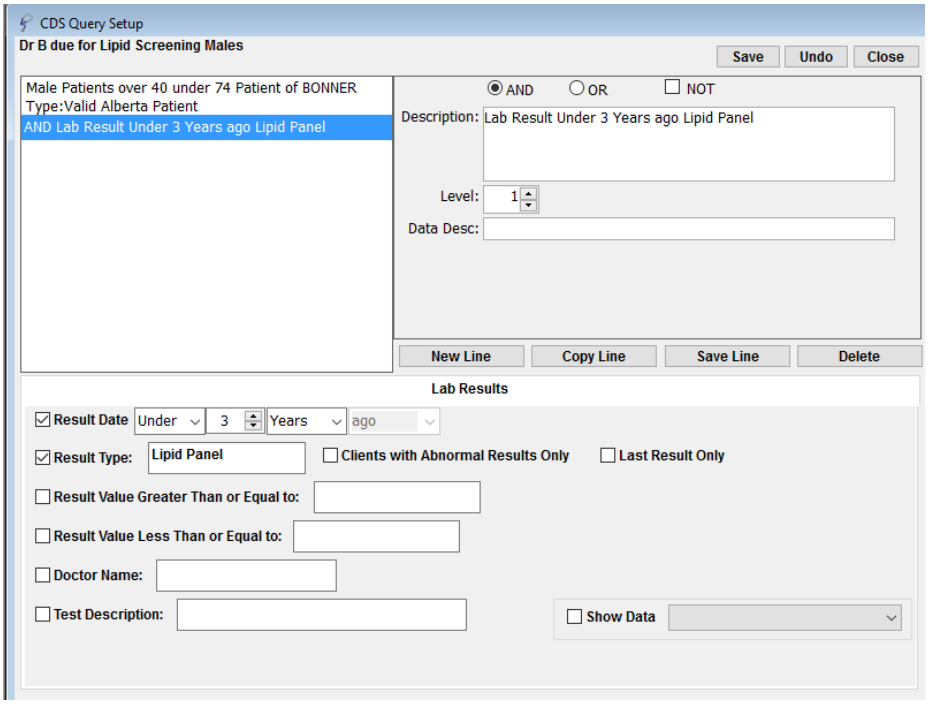
10. Select "Clients" and OK. In the window below add the criteria for the first line of the query. Age, Default Doctor and client type.



11. **Save** Line

> Stop. At this point it is advised to validate. Did you find the 40-74 y males of the physician? To do this Save the query, close, and click "Run Report" on the main page. If the list contains only the 40-74 y males of that physician, close the report and move on. Click Edit Query.

12. **New** Line
13. The **Select a Table to Query** window appears
14. Select **Lab Results** and add the criteria to the query. "Results Date Under 3 years" and "Result Type Lipid Panel". The words "Lipid Panel" must be customized to your region. It may also be called a "Lipid Battery" or "Low Density Lipoprotein"

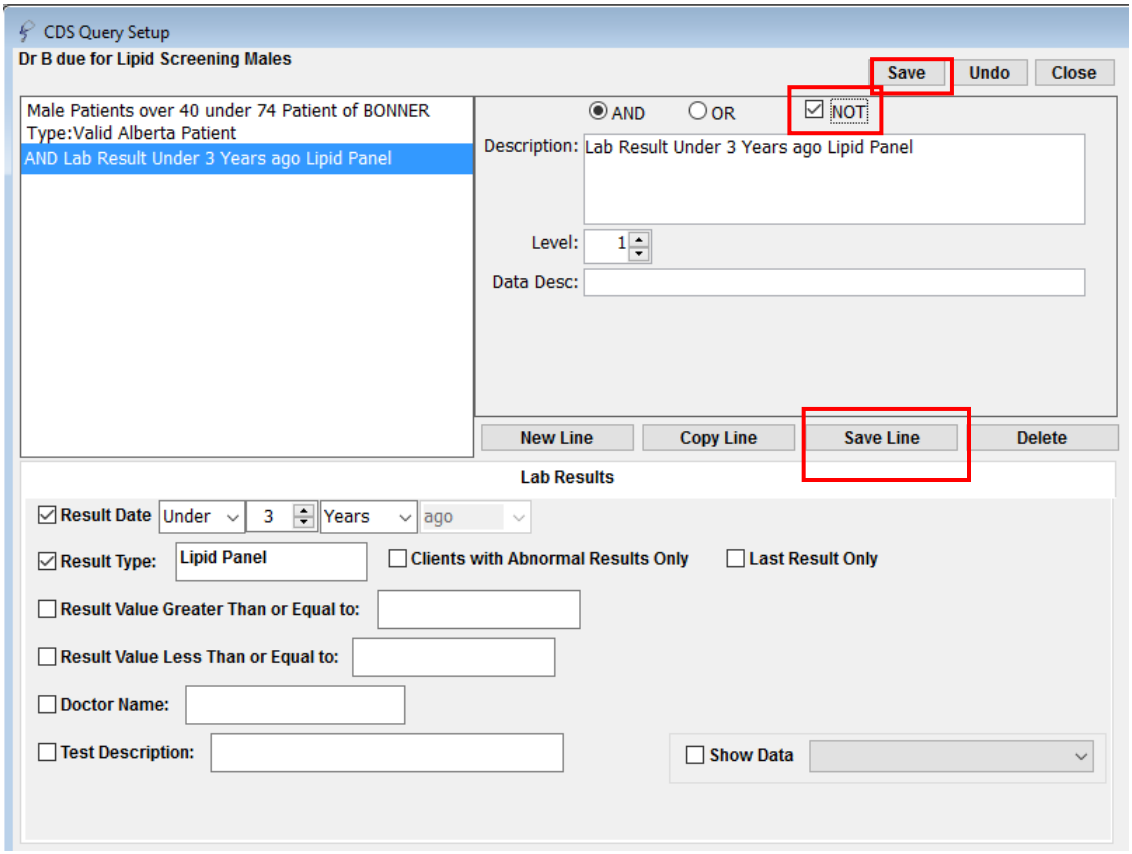


Save Line

Stop. At this point it is advised to validate. Did you find the 40-74 y males of the physician with a Lipid Panel in their chart in the last 3 years? To do this Save the query, close, and click "Run Report" on the main page. If the list contains only the 40-74 y males of that physician with a lipid panel in the last 3 years, close the report and move on. Click Edit Query.

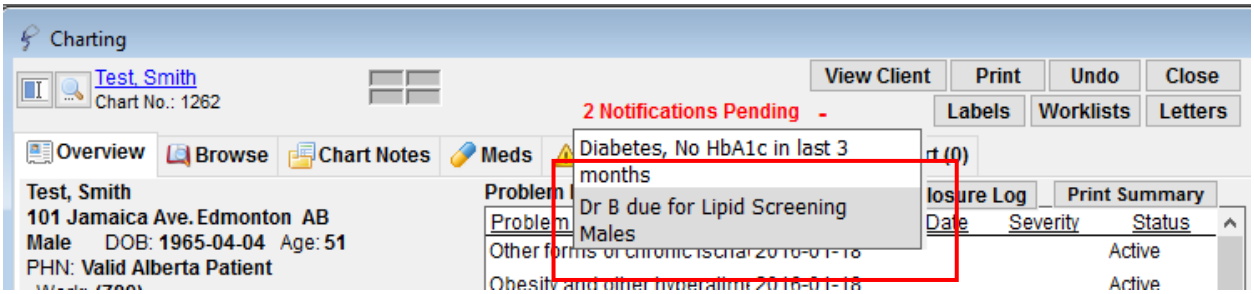
Now that the query has found patients with a lipid panel, a "NOT" criteria will be added to find the patient records WITHOUT a lipid panel in the past 3 years.

15. Click the NOT box as shown below, Save Line and Save. Close the query.



16. Back on the main page, Run report. Verify the data is correct. If the data is correct click "Notify on Chart" and/or "Notify on Appointment" for a notification to appear in a patient's chart.

17. Run Report and select a patient on the list. Open the patient's chart. Does the notification appear?

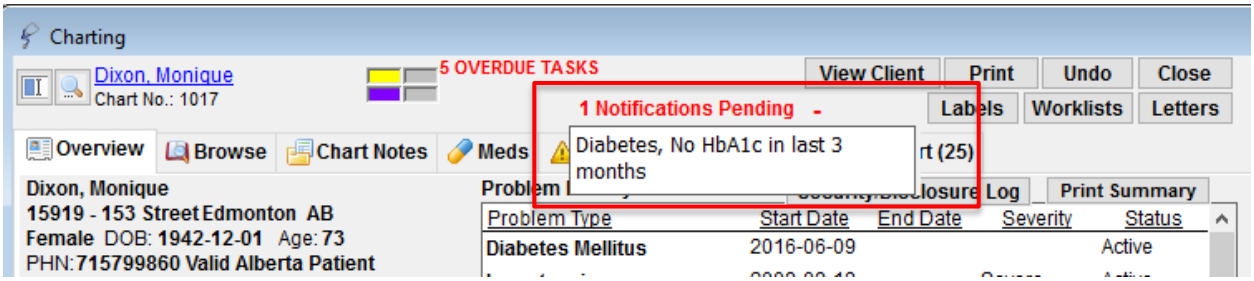


TOP website videos

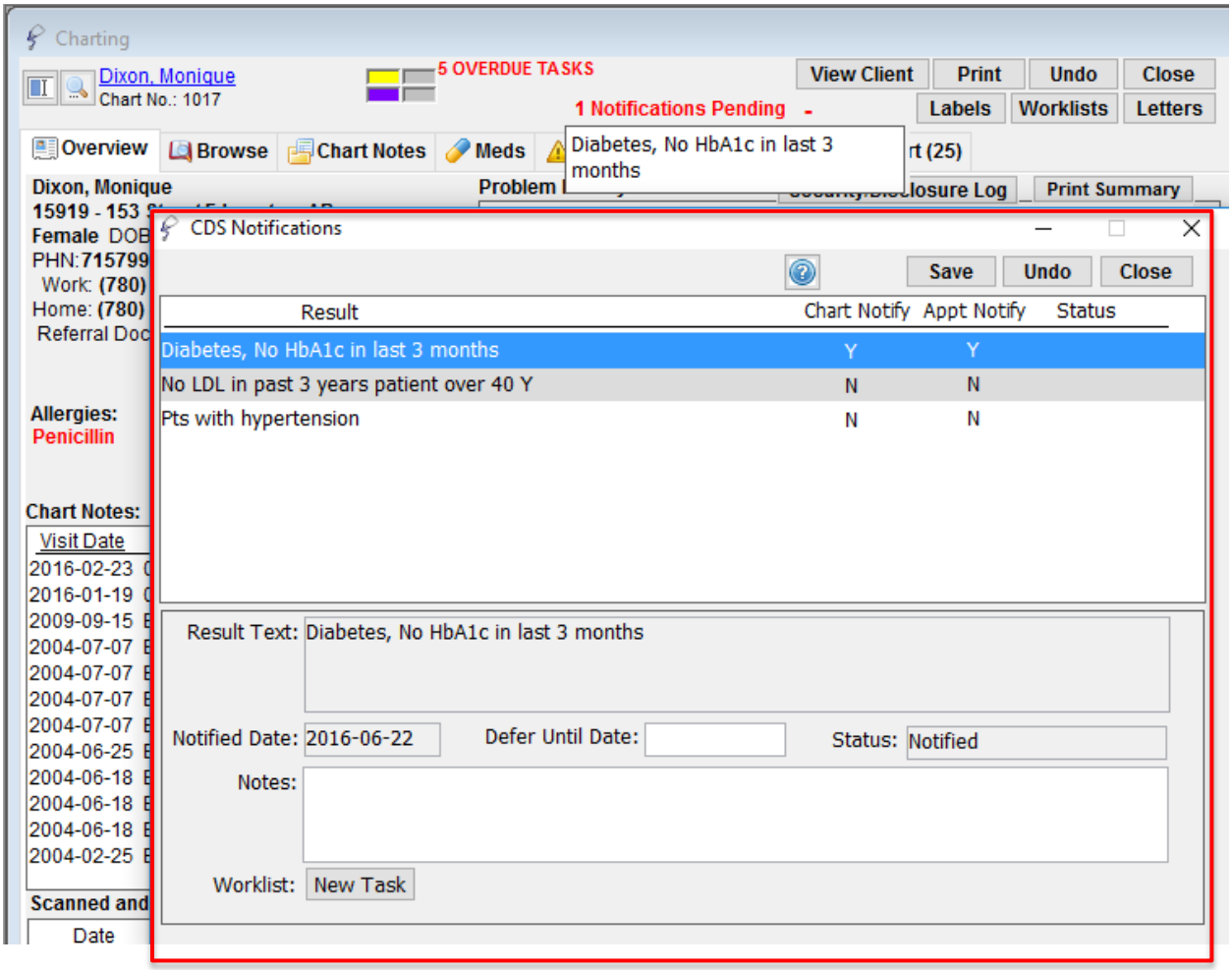
Introduction to CDS Notifications
https://www.youtube.com/watch?v=3D0mKRQNtPw&feature=youtu.be
Simple CDS Notification – Mammogram in Healthquest
https://www.youtube.com/watch?v=3l1J1MldVls&feature=youtu.be
Complex CDS Notification – Diabetes in Healthquest
https://www.youtube.com/watch?v=qm3LQgrk5ac&feature=youtu.be

Using CDS Notifications

Once notifications are created they will appear on a patient's chart and/or in appointments (as the boxes are checked when created). Click on the plus sign (+) to expand the notification.

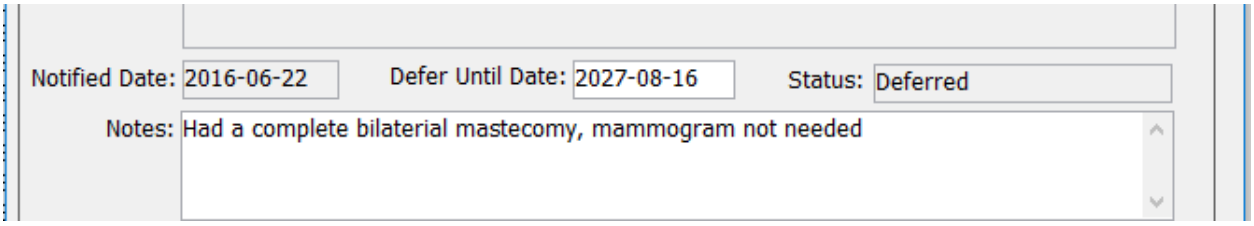


Double click on the notification to see all notifications for this patient, including those NOT pending and to manage the notification.



Double click in the "Defer Until Date" field to defer the notification by entering a future date. Add appropriate notes and click save. The Status will change to "Deferred".

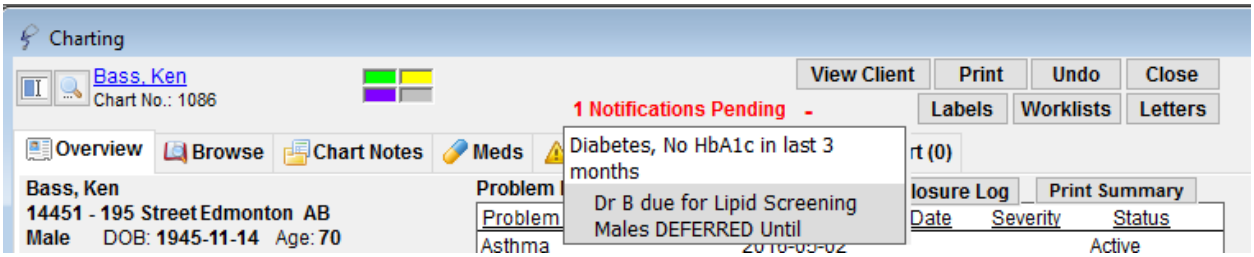
To defer a notification permanently, choose a defer date that matches the age group for the query. For example, a 65-year old woman has a notification that she is due for a mammogram but last year she had a complete bilateral mastectomy. To defer all future notifications, pick a "Defer until date" for 10 years in the future (the notification is created to include women to the age 74) and it will not appear again but is documented in her record. The year may be in in the drop-down menu but can be entered with the keyboard.



This note becomes part of the patient's chart and can be accessed at any time by clicking on the "Notifications".

Once a notification is deferred it appears in the chart as such:

If a patient has a mix of pending and deferred notifications, it will appear like this when the plus sign is clicked on.



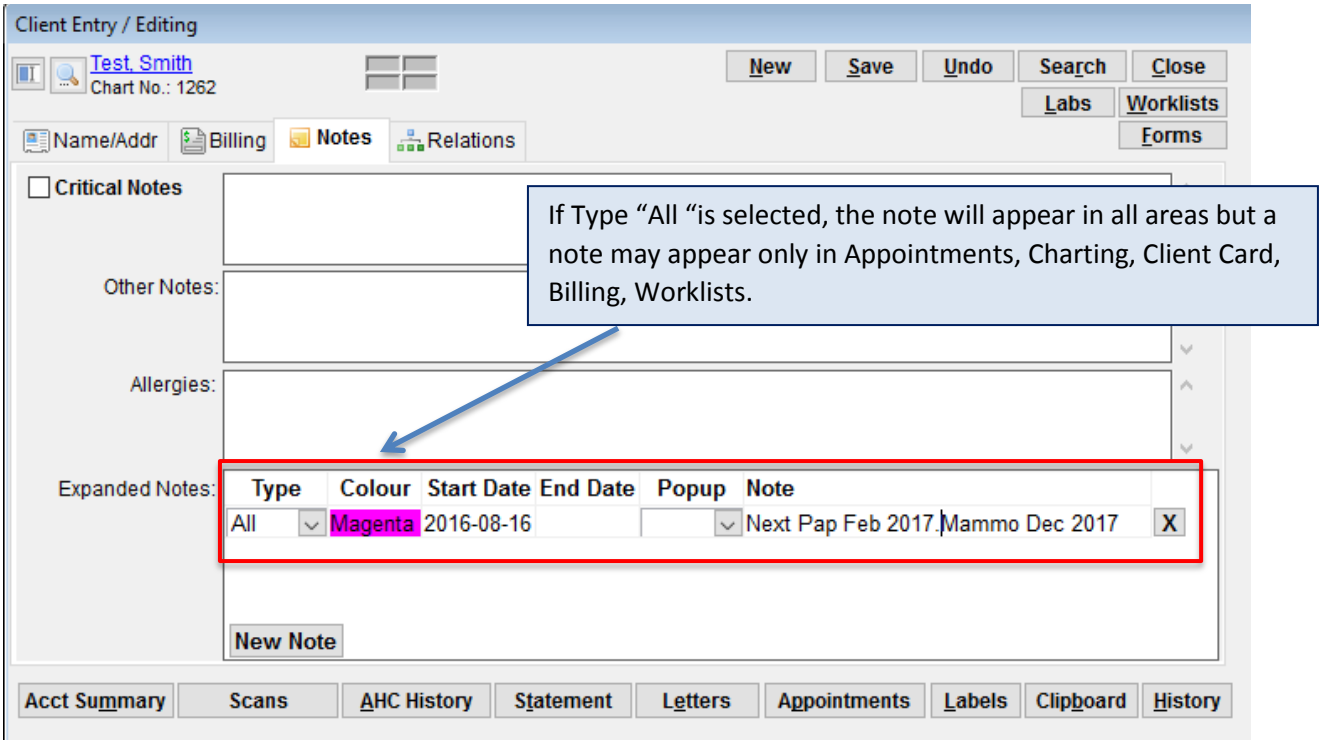
Individual Patient Alerts: Expanded Notes

At the individual patient level, EMRs have the ability to create a note or alert for an individual patient. Individual patient alerts can vary from critical pop-ups to notes that appear in certain areas of the EMR such as scheduling, appointments or in charting.

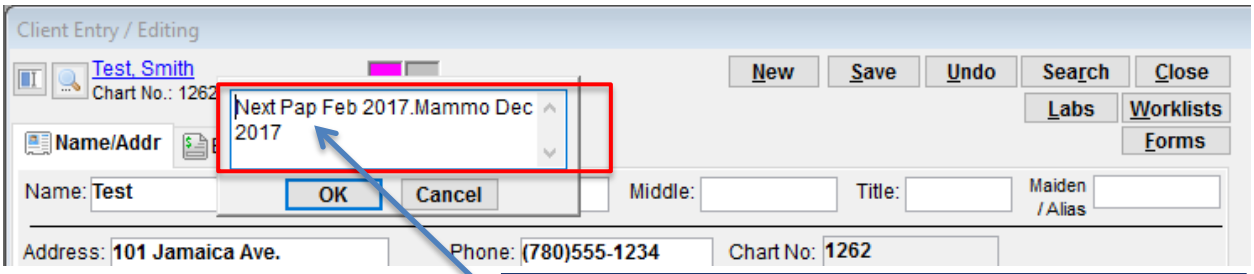
See Microquest Healthquest help file: Client Card Tabs

On the Notes tab of individual client cards, clinics are familiar with Critical Notes. Expanded Notes are a relatively new feature that can support managing care for an individual patient. Before using Expanded Notes as a clinic, think about how the practice may want to use them and colour classify these notes. One colour of note may be used for preventive screening care or chronic disease management. If a clinic chooses the Types to be "All", there will be a limit of four colour types.

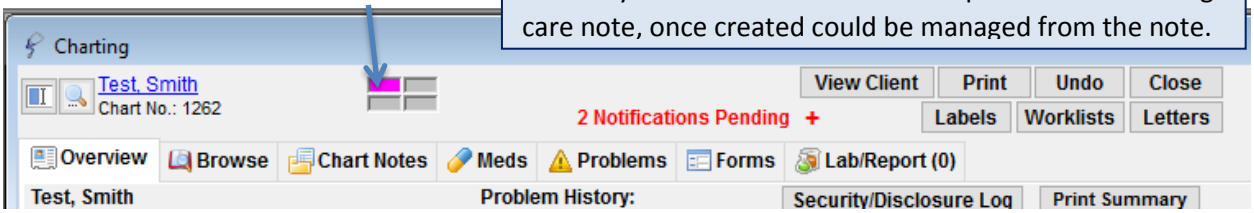
To create a new Expanded Note on the Notes tab of a patient's client card, click on New Note. Complete the fields. Most clinics reserve a pop up for something critical. A Start Date in the future means the note will not appear until that date; it can be useful for informing about future services. Click Save.



Once a note is complete and saved, the note will appear at the top of the client card. If the cursor is hovered over the color the note appears. If the note is clicked on it will appear in a box and can be edited.



The note will also appear in charting



Some ways that practices are using **Expanded Notes**:

- Preventive screening maneuvers due
- Chronic disease management actions due
- Date for next comprehensive care visit
- Patient-centric notes:

    - "Hard of hearing"
    - "Needs assistance to walk to patient room"
    - Bereavement (this has a start date and end date)
- Date for next complex care planning visit.

TOP website videos

Using Expanded Notes in Healthquest

https://www.youtube.com/watch?v=QyY1jBbitX4&index=9&list=PLf486cdx9WgLSa6UEly3HQG09Nd3xGFMZ

Panel Management Processes

Preventive Screening

As per the Alberta Screening and Prevention (ASaP) Program:

Revised Screening Maneuvers Menu for Adults 2017

Alberta Screening and Prevention Program (ASaP)

Maneuver	Age (Years)	Interval General Population
Blood Pressure	**18+**	**Annual**
Height	**18+**	**At least once**
Weight	**18+**	**3 years**
Exercise Assessment	**18+**	**Annual**
Tobacco Use Assessment	**18+**	**Annual**
Influenza Vaccination	**18+**	**Annual**
Mammography	**50-74**	**2 years**
Colorectal Cancer Screen One of: • FIT • Flex Sigmoidoscopy • Colonoscopy	50-74	2 years 5 years 10 years
Pap Test		
Do Pap test	25-69	3 years
Optional Pap test	21-24	
DO NOT DO Pap test	<21	
Plasma Lipid Profile Non-Fasting	**40-74**	**5 years**
Cardiovascular Risk Calculation	40-74	5 years
Diabetes Screen One of: • Fasting Glucose • Hgb A1c • Diabetes Risk Calculator	40+	5 years

The age and interval of given information is suitable for the general population. The need of individual patients will vary. For each maneuver, the physician/provider should offer testing as appropriate. See evidence-based practice points on reverse.

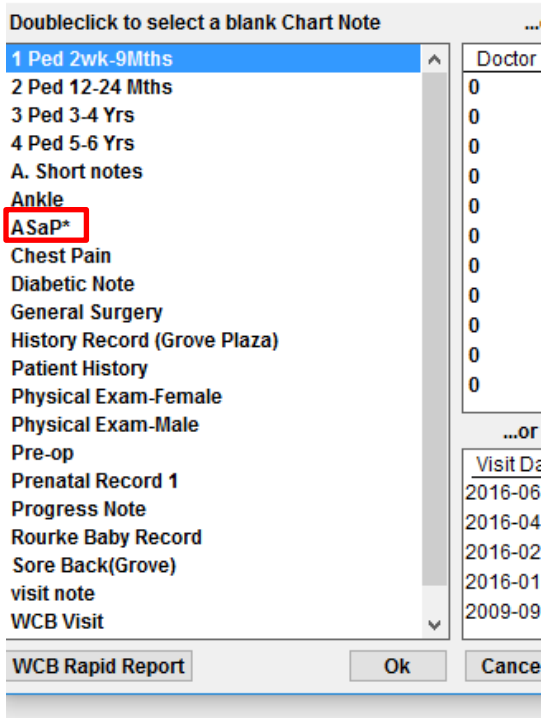
Documenting for ASaP

It is important that all ASaP maneuvers are documented in a consistent manner, ideally in a searchable field in the EMR.

- BP, Height and Weight are recorded as vitals
- Lifestyle/modifiable risk factors are often recorded in an exam template or designated area – see more about this in the Lifestyle/Modifiable Risk Factors section
- Influenza screening includes:
    - Administering a vaccine
    - Recording of vaccination administered elsewhere
    - Record of offer to vaccinate or counsel
- The following are documented as investigations/lab results:
    - Mammography
    - Colorectal cancer screening – FIT
    - Pap test
    - Plasma Lipid Profile
    - Diabetes screening (HbA1c or fasting glucose)
- Colonoscopy and sigmoidoscopy are usually documented as a report. When received it is important that these are named/indexed appropriately and in a standardized way, (e.g., "Colonoscopy Report")

ASaP Chart Note

In Healthquest, there is an ASaP Chart note that assists by keeping the screening information in one place. If the practice does not have the ASaP Chart note installed, contact Microquest.
To use the ASaP chart note for the first time with a patient select it when selecting a New Template

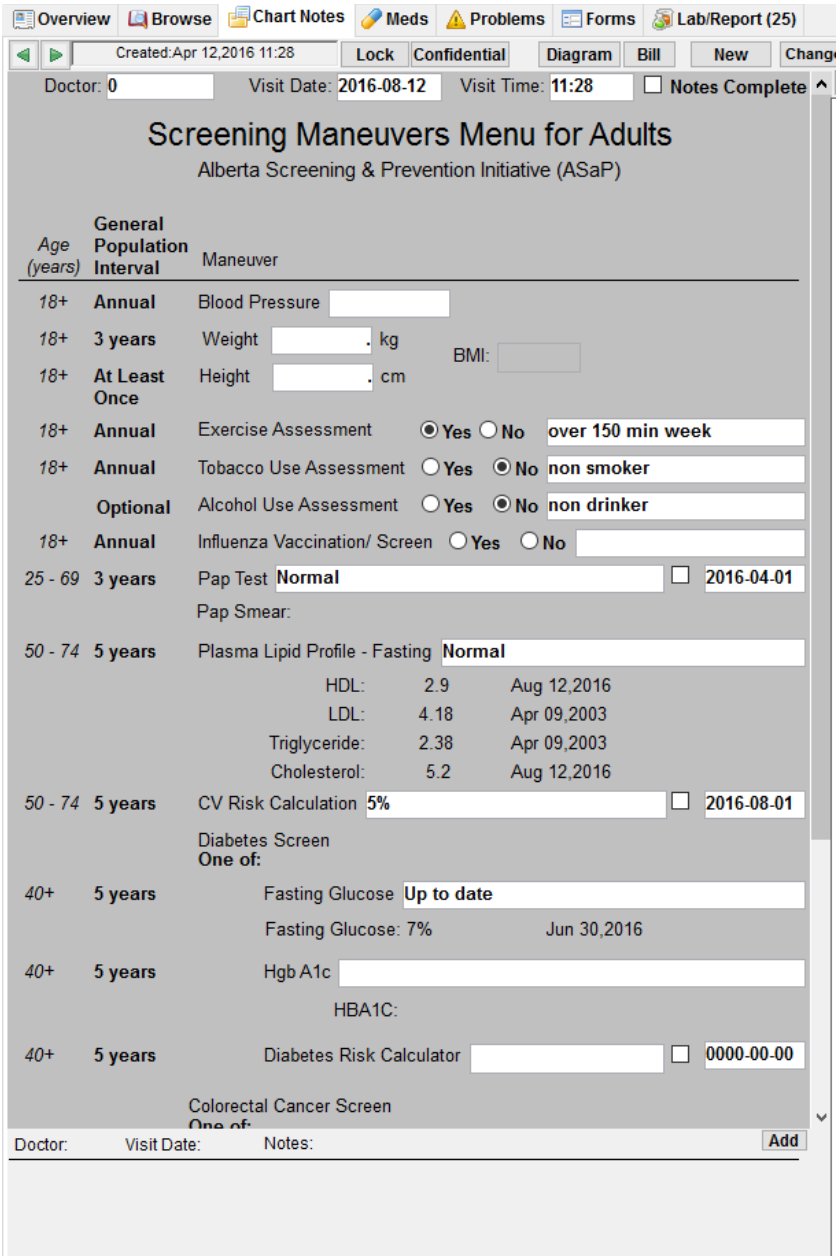


Note on settings in the ASaP Chart Note:

- The default settings for this chart note are:
    - One per patient – this was requested by a clinic that wanted one per patient as a source of truth for screening data. When this setting is created on the subsequent visit, the chart note needs to be unlocked, a new visit date entered and the fields modified
    - Appears as a History Template – this is for easier viewing on the overview and browse tabs; this aligns with the one template being the last source of screening data for the patient
- The default settings may be modified at the clinic level by users familiar with template building/editing in Setup > Charting Setup

Using the ASaP Chart Note:

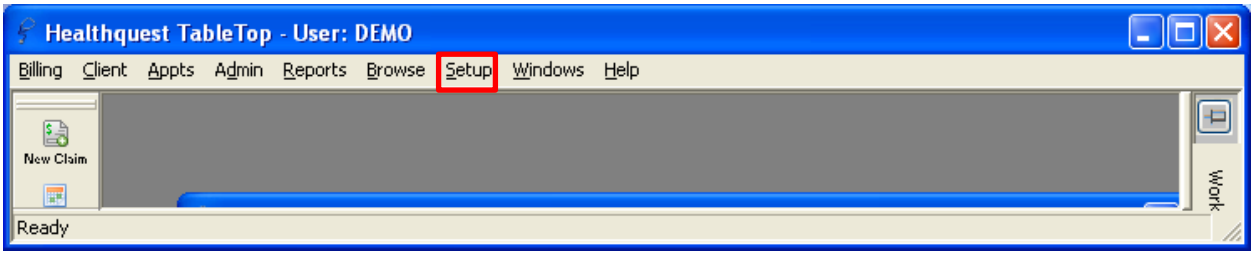
- Vitals are manually entered as text and BMI will calculate
- If Exercise, Tobacco and Influenza are screened click “yes” and enter data in the text boxes
- Lab values will pull in automatically into the chart as display only to inform the encounter. If they are not working properly contact Healthquest and they will map them
- Enter information about the investigations in the note boxes and enter dates when investigations were last done



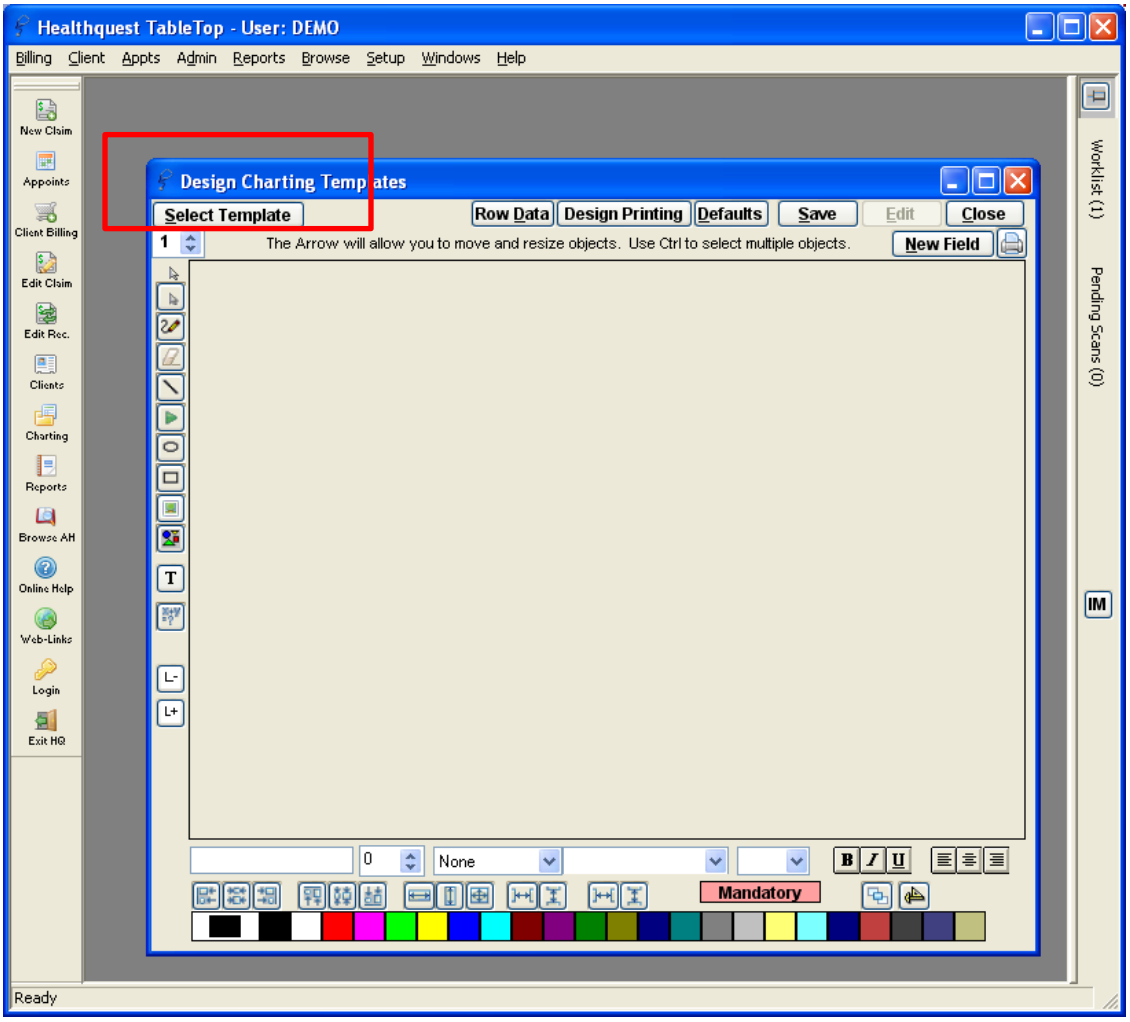
The ASaP template assists by keeping all screening area in one area of the chart. The second time it is used the template will need to be unlocked and a new visit date added. Add the dates the investigations were done. Use the mapped investigation data to inform the encounter.

ASaP Chart Note Changes: To change the ASaP template from one per patient to multiple uses per patient:

Go to the main menu and go to **Setup** > **Charting Setup** > **Template Design**.

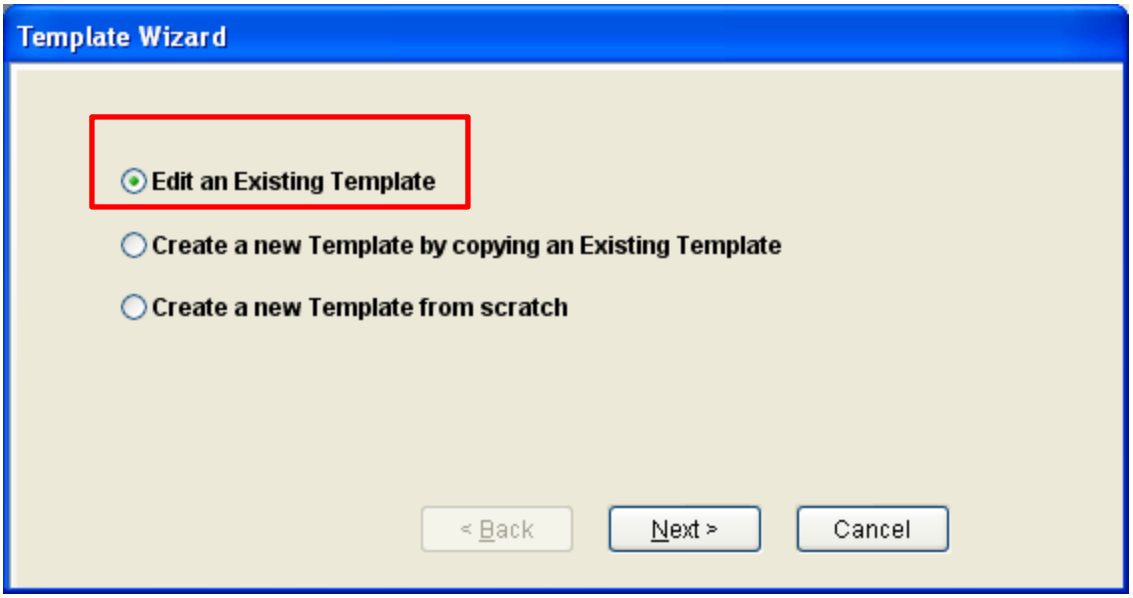


The Design Charting Templates window appears.

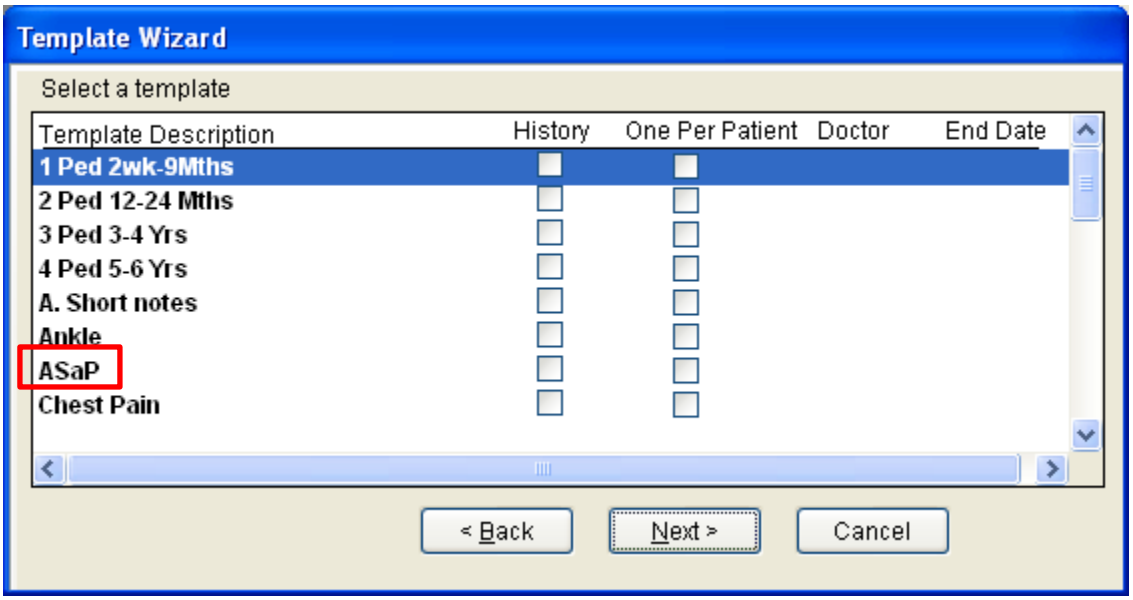


In the Design Charting Templates window, click on **Select Template**

The **Template Wizard** window appears.

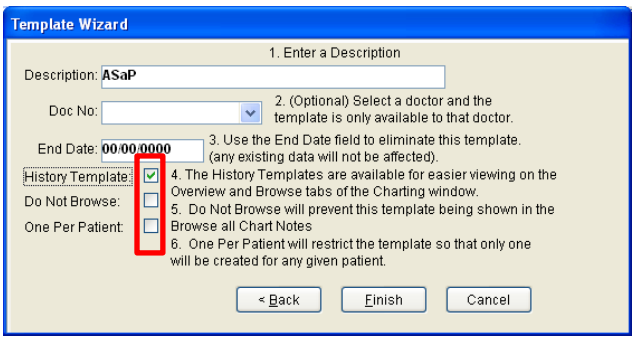


Choose Edit an **Existing Template** and click **Next**.



In this window ensure that there is no check in the column "One Per Patient" beside ASaP.

Double click the **ASaP** template this this window appears:



Make sure “One Per Patient” has no check box.

It is optional to have “History Template” checked and the template will be available for easier viewing on the Overview and Browse tabs of the Charting window.

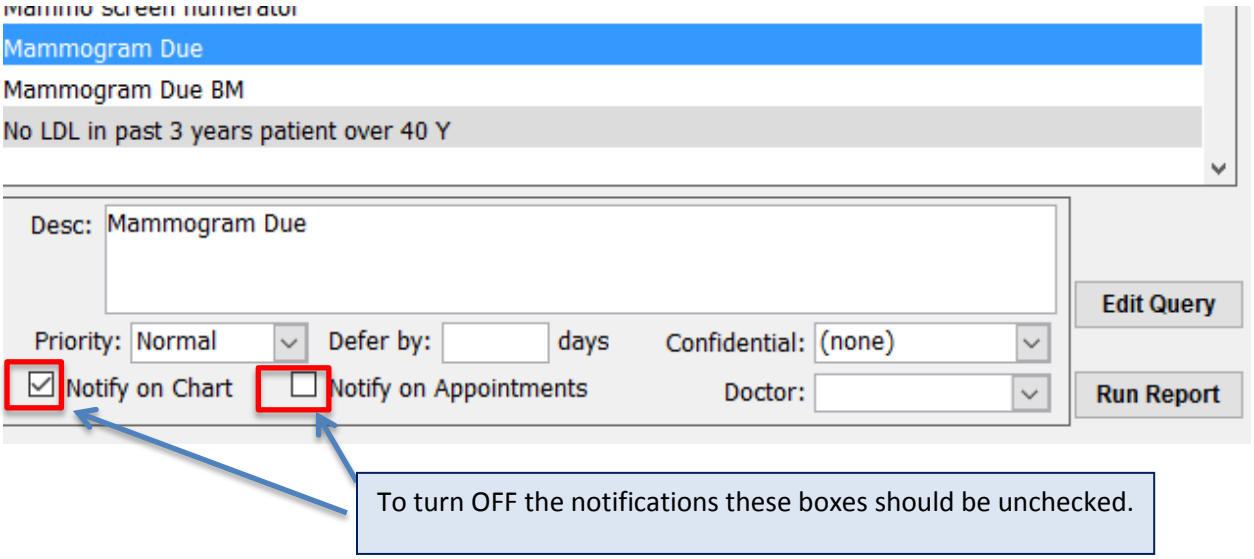
Click **Finish**.

Click **Close** on the Template on the Design Charting Template Window.

CDS Notifications and the ASaP Chart Note

When Microquest adds the chart note to a practice they will add CDS Notifications with the chart note. Clinics need to learn to use these and should enable them incrementally. The CDS Notifications may be edited by advanced users and the display may be turned off in **Setup** > **Charting Setup > CDS Query Setup**. If you switch the settings of the chart note to multiples per patients, the CDS Notifications will need to be edited. If CDS Notifications are being ignored, turn them off and re-enable when ready.

To turn the notifications OFF, click on the notification name and below the description, unclick Notify on Chart, and Notify on Appointments. There is no need to Delete the Notification.



CV Risk Calculation

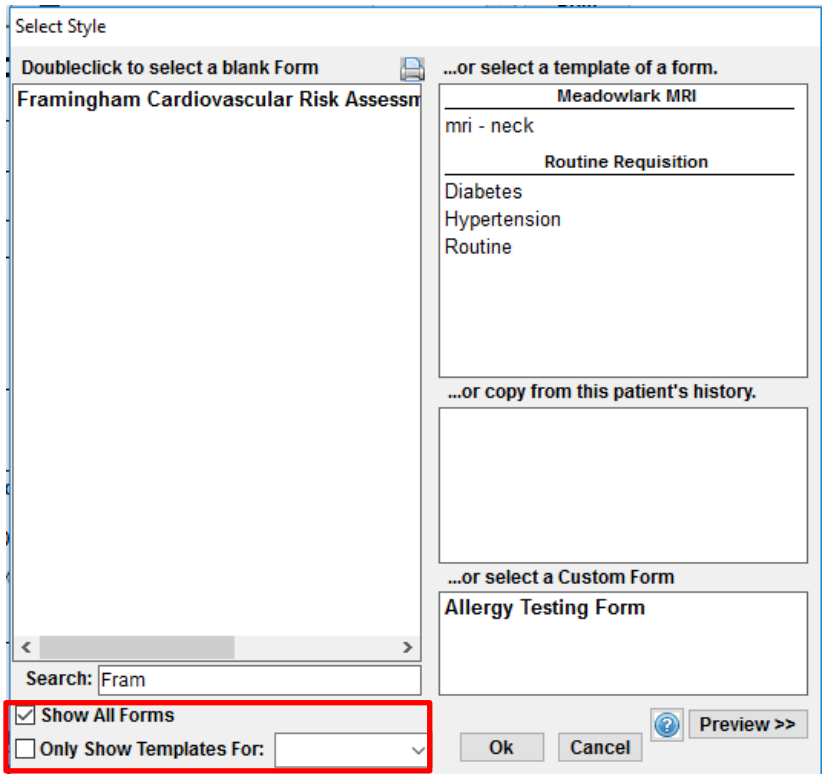
- This is a highly valuable tool to assess risk in patients with no previous cardiovascular disease (e.g., NOT taking a ‘statin’ class of medication)
- Conduct on average risk patients age 40 – 74 every 5 years
- Requires other data held in the EMR: gender, tobacco use, BP, non-fasting lipid data and diabetes diagnosis (for some CV Risk calculators)
- May use an internal EMR CV Risk Calculator or an external calculator such as: http://chd.bestsciencemedicine.com/calc2html#basic
    - Dependency on where the provider records the result or if it is auto created from the internal calculator in the EMR
- The preventive care screening search is to identify patients 40 – 74 y, not taking a ‘statin’, that have not had a CV Risk calculation in the past 5 years

    - Patients already at risk, such as those taking a statin, do not need to be assessed
- If a web-based or handheld CV risk calculator is used, the resulting score may be charted in the ASaP chart note.

In Healthquest, there is form called **Framingham Cardiovascular Risk Assessment.** Since it is a form, a team member or provider will need to add the values, and calculate the points. Once complete it may be printed for the patient and the form remains part of the chart.

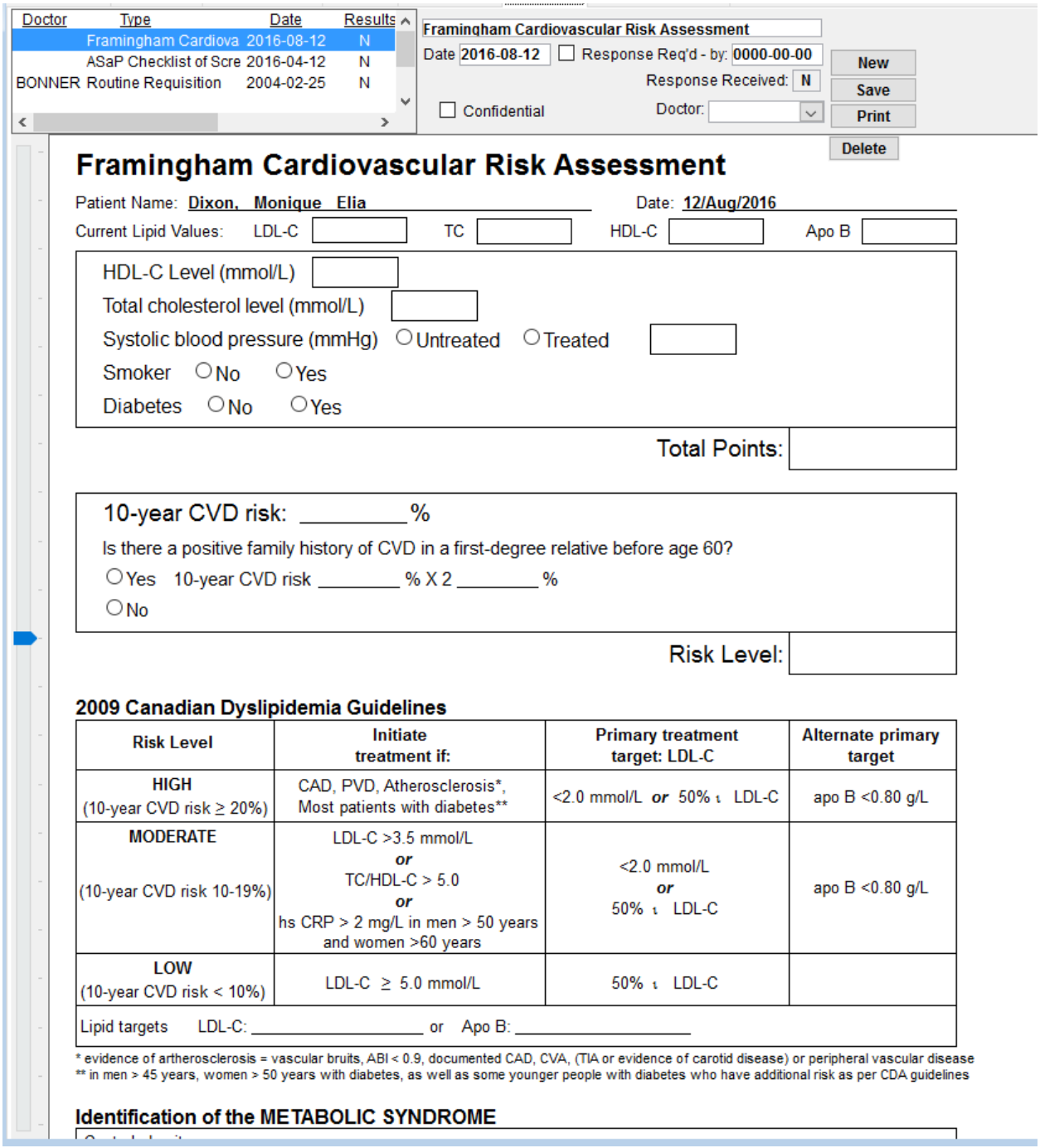
Since forms may be searched through queries, a search can be done to identify all eligible patients that have not had the assessment done and are due

To access the form, in the patient's chart go to the Forms Tab. Select New



If the Framingham Cardiovascular Risk Assessment form has not been set as a frequently used form, in the Search field, write "Fram" and click "Show All Forms".

The Framingham Cardiovascular Risk Assessment is completed like other forms with manual data entry. The form may be printed to give a copy to the patient.


Doctor Type Date Results
Framingham Cardiova 2016-08-12 N
ASaP Checklist of Scre 2016-04-12 N
BONNER Routine Requisition 2004-02-25 N
Framingham Cardiovascular Risk Assessment
Date 2016-08-12 Response Req'd - by: 0000-00-00
Response Received: N
Confidential
Doctor:
New
Save
Print
Delete
Framingham Cardiovascular Risk Assessment
Patient Name: Dixon, Monique Elia
Date: 12/Aug/2016
Current Lipid Values: LDL-C TC HDL-C Apo B
HDL-C Level (mmol/L)
Total cholesterol level (mmol/L)
Systolic blood pressure (mmHg) Untreated Treated
Smoker No Yes
Diabetes No Yes
Total Points:
10-year CVD risk: _____%
Is there a positive family history of CVD in a first-degree relative before age 60?
Yes 10-year CVD risk _____ % X 2 _____ %
No
Risk Level:
2009 Canadian Dyslipidemia Guidelines
Risk Level
Initiate treatment if:
Primary treatment target: LDL-C
Alternate primary target
HIGH (10-year CVD risk ≥ 20%)
CAD, PVD, Atherosclerosis*, Most patients with diabetes**
<2.0 mmol/L or 50% ↓ LDL-C
apo B <0.80 g/L
MODERATE (10-year CVD risk 10-19%)
LDL-C >3.5 mmol/L or TC/HDL-C > 5.0 or hs CRP > 2 mg/L in men > 50 years and women >60 years
<2.0 mmol/L or 50% ↓ LDL-C
apo B <0.80 g/L
LOW (10-year CVD risk < 10%)
LDL-C ≥ 5.0 mmol/L
50% ↓ LDL-C
Lipid targets LDL-C: _____ or Apo B: _____
* evidence of artherosclerosis = vascular bruits, ABI < 0.9, documented CAD, CVA, (TIA or evidence of carotid disease) or peripheral vascular disease
** in men > 45 years, women > 50 years with diabetes, as well as some younger people with diabetes who have additional risk as per CDA guidelines
Identification of the METABOLIC SYNDROME

Lifestyle/Modifiable Risk Factors (ASaP+)

Modifiable risk factors should be recorded in a consistent fashion to enable preventive screening care as well as to monitor and manage patients who screen positive. All members of the clinic team should know where modifiable risk factors are recorded in the EMR and who is responsible for entering them. It is recommended to enter modifiable risk factors in an area of the EMR that is searchable and can enable a population-wide reminder.

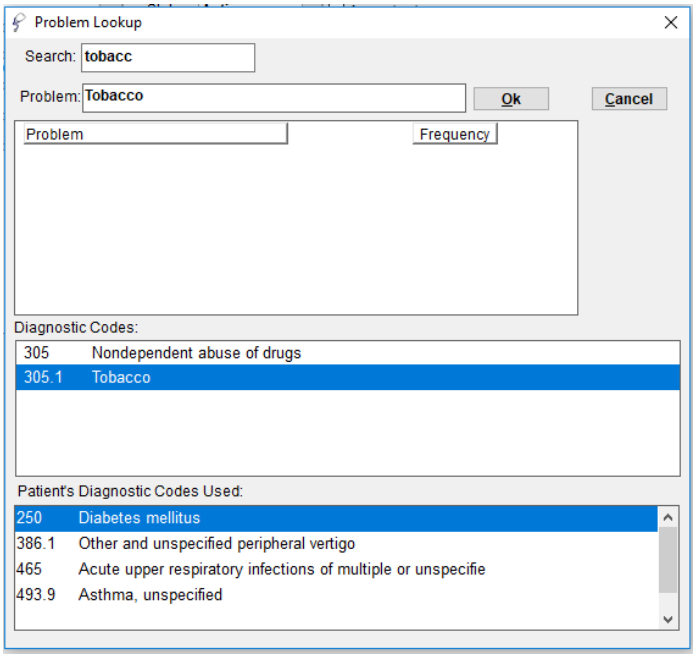
- Height and weight (to calculate BMI and weight changes)
- Physical Activity (Exercise Assessment)
- Tobacco Use Assessment
- Alcohol Use
  Potential data capture methodology for above (4) Lifestyle/Modifiable Risk Factors
- Diet – Fruit and Vegetable Consumption

Clinic members can utilize problem list, for example, to record which patients screen positive for modifiable risk factors such as tobacco use, alcohol use dependence or a diet low in fruit and vegetables. You may create notifications that apply to all tobacco users and this is a useful way to ensure that future ability. A clinic may also wish to produce a list of all patient that use tobacco. An alternative to recording as a problem is as a Manual Result.

Recording as a Problem

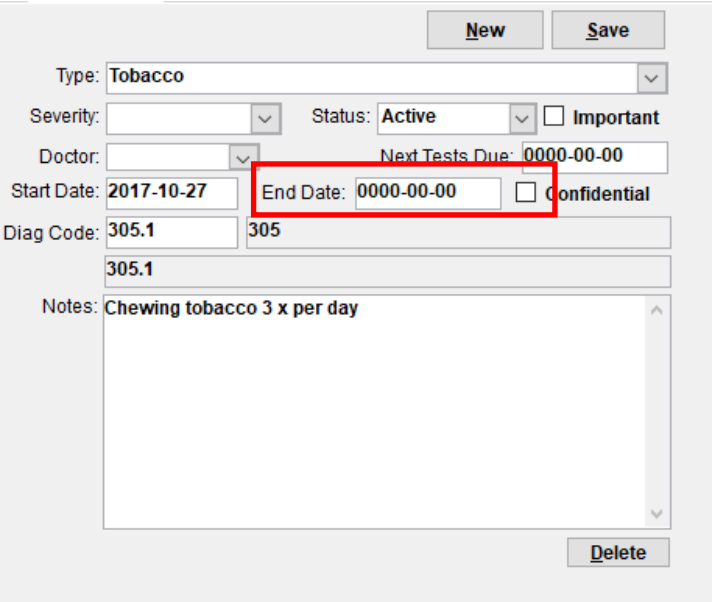
To record tobacco use:

In charting, go to the Problems tab. Click New. In the Search window type “tobac” and hit enter. The code of 305.1 for Tobacco Use appears. Click on the word Tobacco and it will appear in the problem list. Select OK.



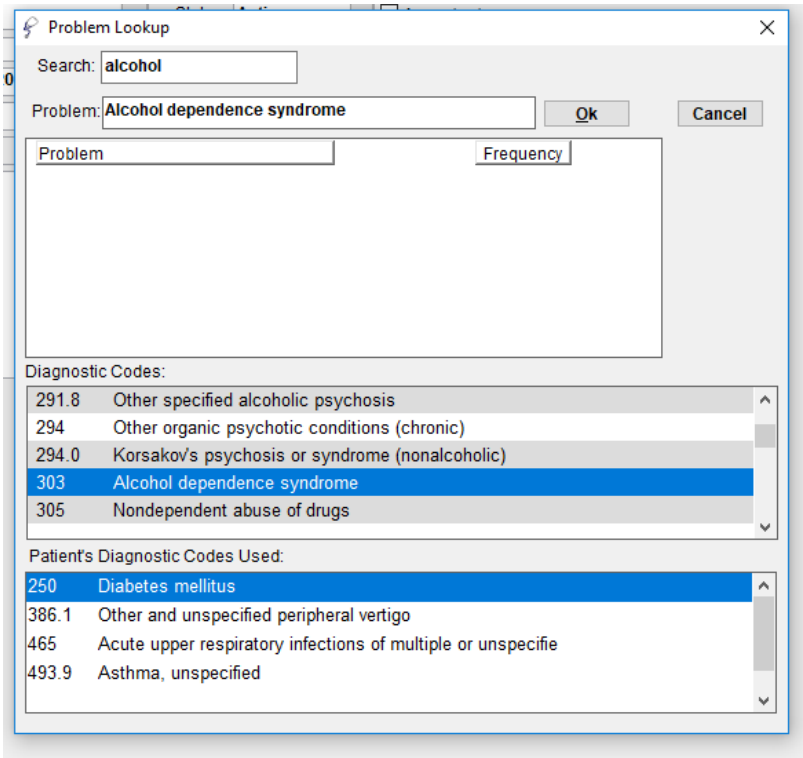
To complete the problem entry add 305.1 in the Diag Code box. Severity can be added and notes may be added such as “Chewing Tobacco 3 x per day”. Click Save when done.

If a patient stops using tobacco you can end date the problem.

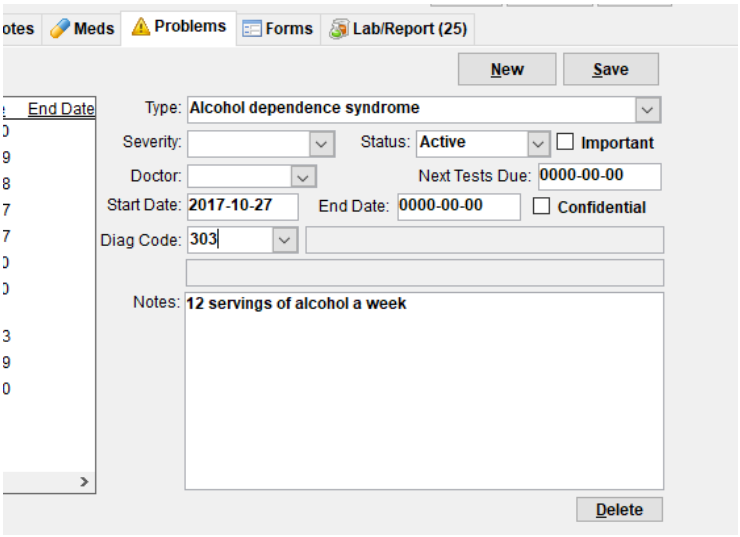


To add alcohol dependance:

For alcohol dependance, the ICD 9 code is 303 and can be searched using the term “alcohol”.



Click OK to add.

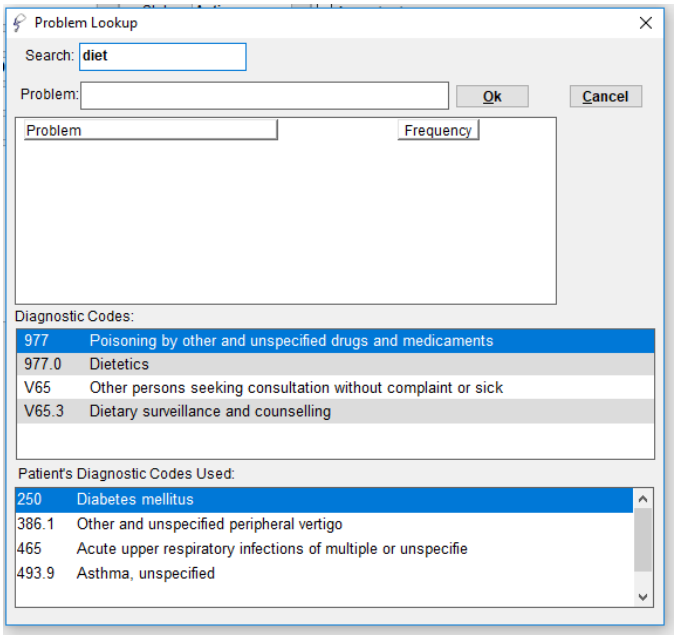


Add 303 in the Diag Code box.

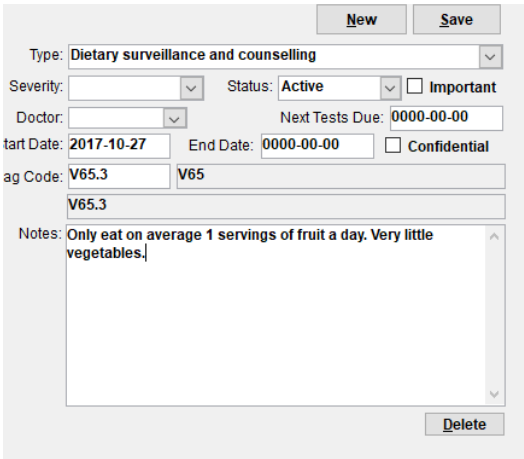
Diet Low in Fruit and Vegetables

For patients who screen positive for a diet low in fruit and vegetables, there is an ICD9 diagnostic code called “Dietary surveillance and counseling”. The diagnostic code is V65.3.

This code can be searched with the term “V65.3” in the problem lookup window.



The code V65.3 needs to added in the Diagnotic code window:



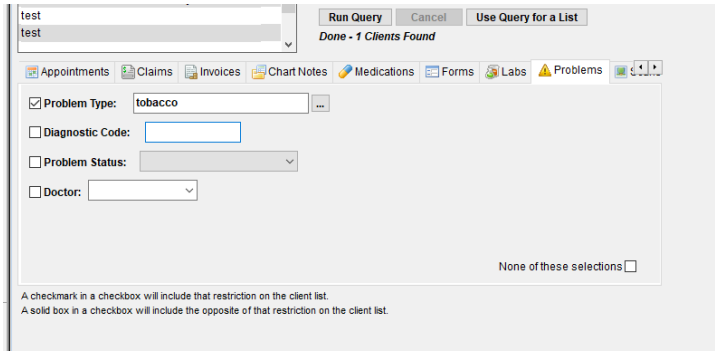
Alternative Recording Mode with Manual Results

An alternative to recording positive screens for lifestyle/modifiable risk factors is recording them as a manual lab results. See Manual Lab Entry of Lab Data.

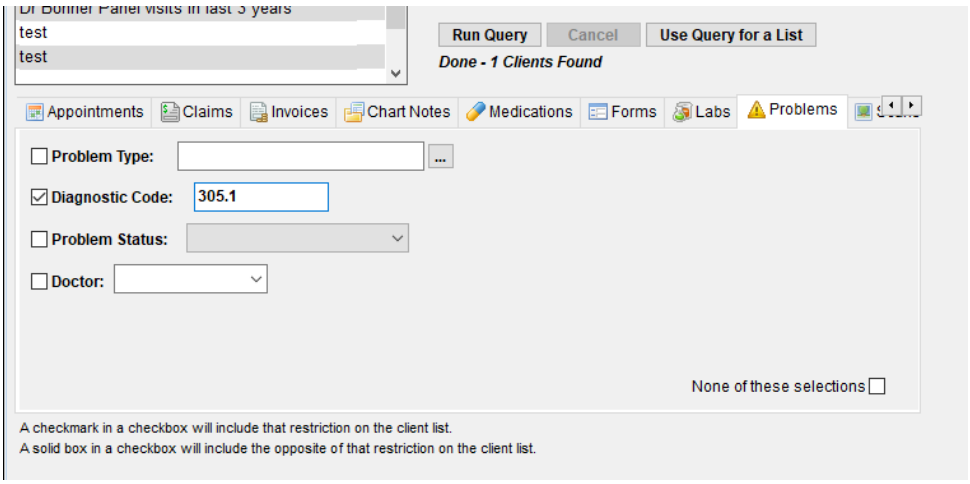
Useful Queries for Lifestyle/Modifiable risk factors.

Queries to identify all tobacco users where a problem was documented as Tobacco:

Method 1: In the **Client List Manager** Query Window:

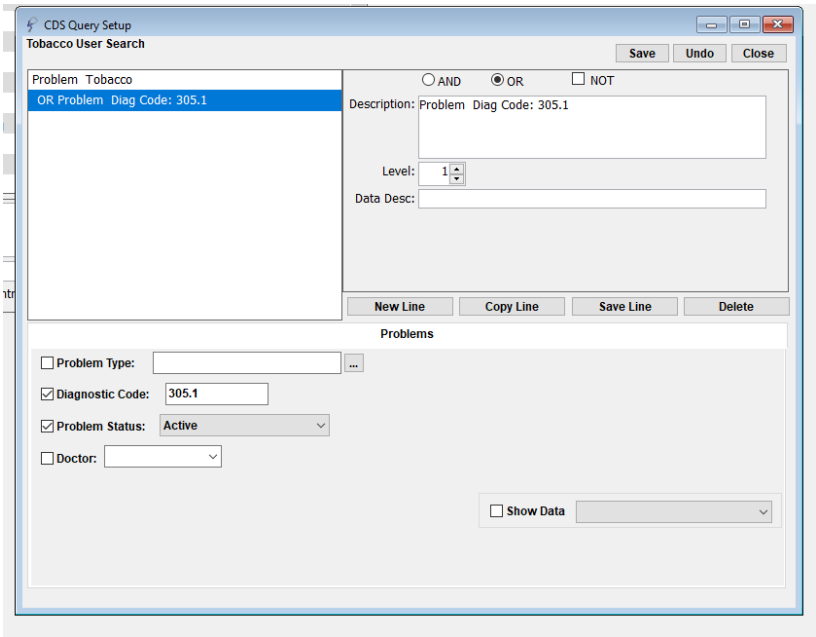


Or if the problem was coded with the problem code of 305.1:


Dr Bonner Panel Visits in last 3 years
test
test
Run Query
Cancel
Use Query for a List
Done - 1 Clients Found
Appointments
Claims
Invoices
Chart Notes
Medications
Forms
Labs
Problems
Problem Type:
Diagnostic Code:
305.1
Problem Status:
Doctor:
None of these selections
A checkmark in a checkbox will include that restriction on the client list.
A solid box in a checkbox will include the opposite of that restriction on the client list.

Method 2: Using **CDS Queries**

To search using CDS Queries create a search to identify all patients with an active Problem “Tobacco” or the diagnostic code “305.1”



Similar searches could be created for Alcohol dependence or for dietary surveillance.

To see additional information on the problem list go to: problem list

ASaP+ - Videos demonstrating patient/provider engaged using motivational interviewing:

https://www.youtube.com/watch?v=dm-rJJPCuTE
https://www.youtube.com/watch?v=bTRRNWrwRCo

ASaP Program Participation

Providers registered in the ASaP Program with TOP will use chart review methodology to look for results of completed screens as well as offers, declines or exemptions. Consistency of recording assists in the chart review.

ASaP EMR Extraction Methodology for Schedule B

Practices and PCNs measuring ASaP results for Schedule B purposes using EMR extraction methodology need only focus on the record of results (**have a screen completed**) which, in general, is easier to search in the EMRs than offers, declines and exemptions.

Exclusions/Exemptions

Some patients are excluded from general adult preventive screening for clinical reasons. Developing consistent processes to document the exclusions assists the team in collaborating on preventive screening care.

Some exclusions/exemptions are:

- Females with a complete bilateral mastectomy are excluded from mammograms
- Females with a total hysterectomy (no longer have a cervix) are excluded from pap smears
- Patients with documented cardiovascular risk and treatment no longer are screened for CV risk and may have different intervals for lipid profiles
- Patients diagnosed with diabetes are not screened for diabetes
- When diagnosed and undergoing interventions for colorectal, breast or cervical cancers, the routine screening intervals no longer apply and patients will follow their recommended care

A team should consider how documentation of the exemption criteria impacts team-based screening care.

Example:
A female patient is offered a pap but remarks that she has had a total hysterectomy 10 years ago and asks if she needs one. The clinic team member indicates no. The team notes that the reason they didn't know was because the evidence of the hysterectomy was in a document called "surgical report". The team wants to ensure this doesn't happen again and agrees that possible actions they can take are that:

1) In the document called Surgical Report that contains the hysterectomy they add the words "Total Hysterectomy" in the Description field

ASaP Searches - Examples

There are 2 general approaches for completing the ASaP specific searches:

1. Searching for patients due for an ASaP maneuver. We use this approach to build lists for opportunistic and outreach screening processes.
2. Searching for patients who have had the maneuver completed. We generally use this approach for quality improvement purposes to track how we are doing.

Searches for ASaP Maneuvers

Age and/or Gender Criteria	Maneuver/Timeframe
Patients in a specific age range and gender	have not been screened (seen) in the appropriate interval (e.g. 3 years)
Identify patients 18 + with no	Height recorded on the chart Weight recorded on the chart in the past 3 years Blood Pressure recorded in the last year Tobacco assessment in the last year Exercise assessed in the last year Influenza vaccination nor counsel in the last year

Identify females 25-69	have not had a Pap test in the past 3 years
Identify females 50 – 74 y	have not had a mammogram in the past 2 years (a mammogram may be a scanned document and/or an electronic result depending on the region)
Identify patients 40 +	have not had a fasting glucose OR a HbA1c test in the last 5 years
Identify patients 40 – 74	have not had a plasma lipid profile test in the past 5 year
Identify patients 50 – 74	have not had a fecal immunochemical test in the past 2 years OR a flex sigmoidoscopy in the past 5 years OR a colonoscopy in the last 10 years (where a FIT test is a lab result and a flex sig or colonoscopy can usually be identified by a scanned report)

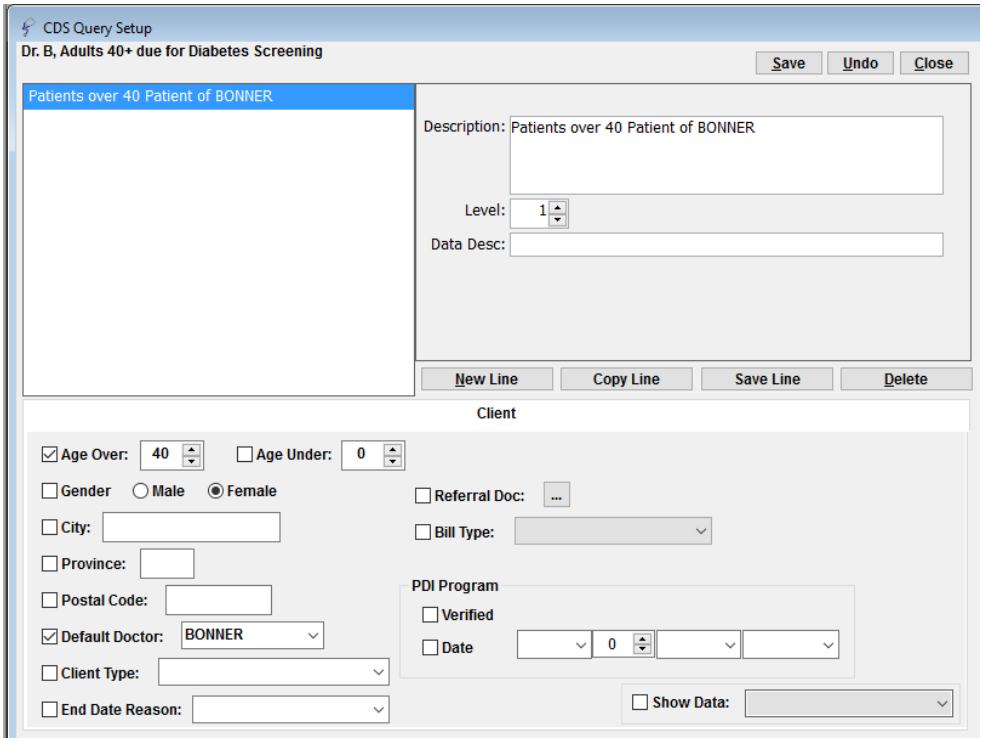
In this section we will show an approach for some of the ASaP screening maneuvers. There may be more than one way to search and it will also depend on your clinic's documentation. Other approaches will work but we suggest you validate your search results, whatever approach you take.

Examples of ASaP Queries

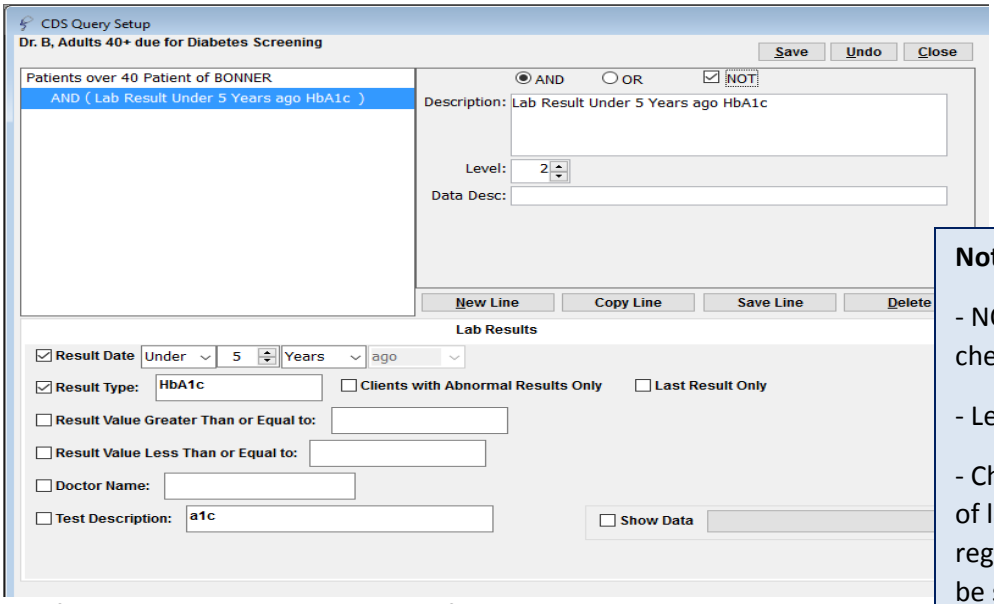
Diabetes Screen

Adults 40+ attached to Dr. Bonner that have not had Diabetes Screening (a HbA1c OR fasting glucose) in the past 5 years.

Line 1 identifies Dr. Bonner's patients over 40 years old.



Line 2 identifies patients who have NOT had an HbA1c in the last 5 years



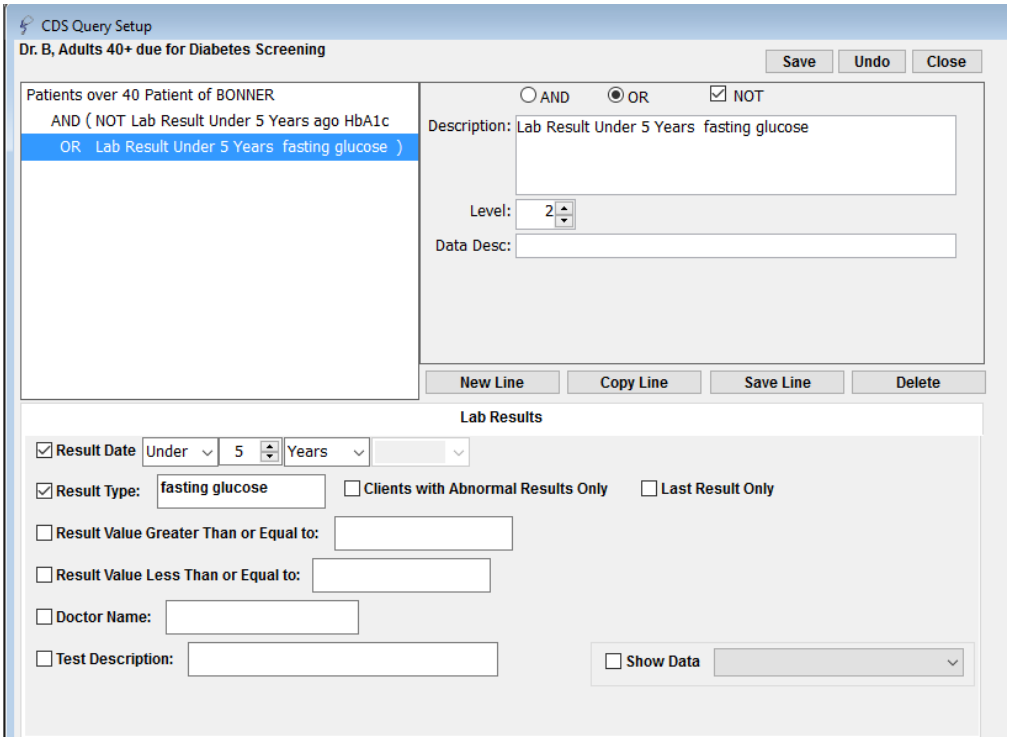
Note:

- NOT box must be checked

- Level is set to 2

- Check the naming of lab results in your region. The lab may be searched by Result Type or Test Description.

Line 3 identifies patients that have not had a fasting glucose in the last 5 years. The OR and the NOT box is checked.



Note:

- NOT box must be checked

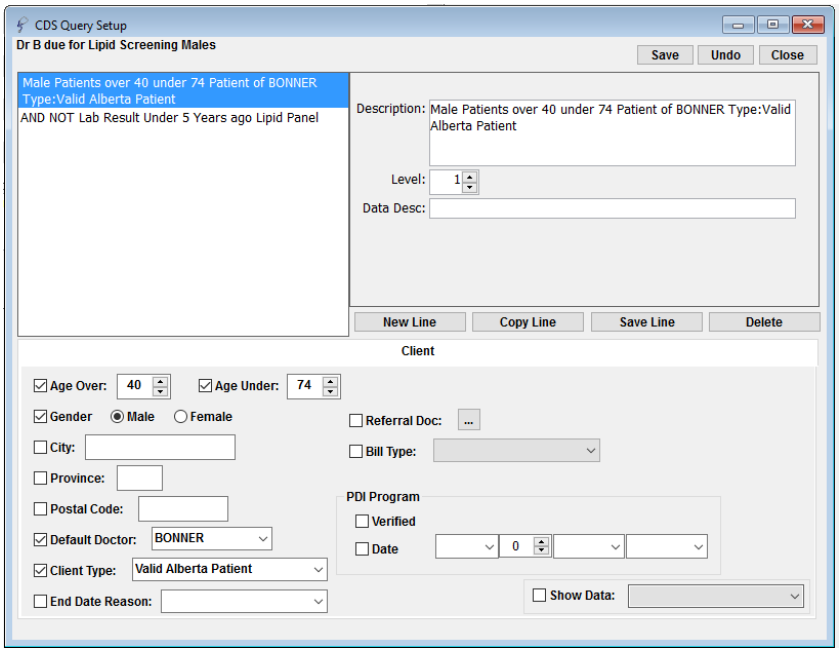
- Level is set to 2

- Check the naming of lab results in your region. The lab may be searched by Result Type or Test Description.

Lipids Screening

Male adults 40-74 attached to Dr. Bonner that have not had a lipid profile in the past 5 years.

Line 1 identifies Dr. Bonner's male patients 40 – 74. Client Type is Valid Alberta Patient

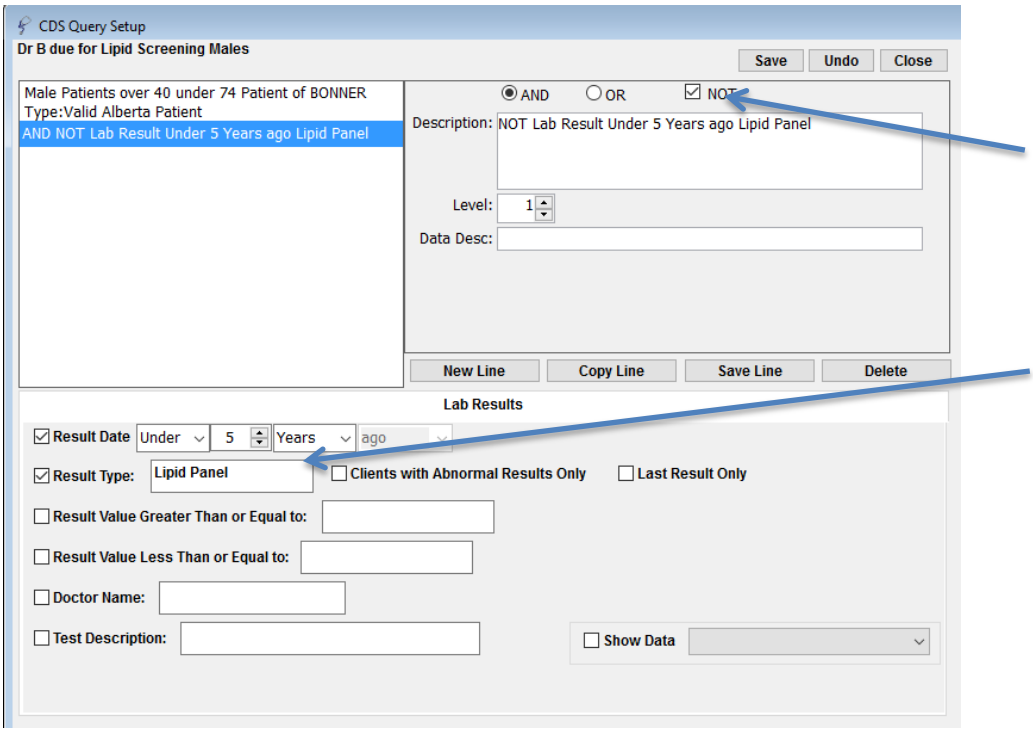


Note:

- NOT box must be checked

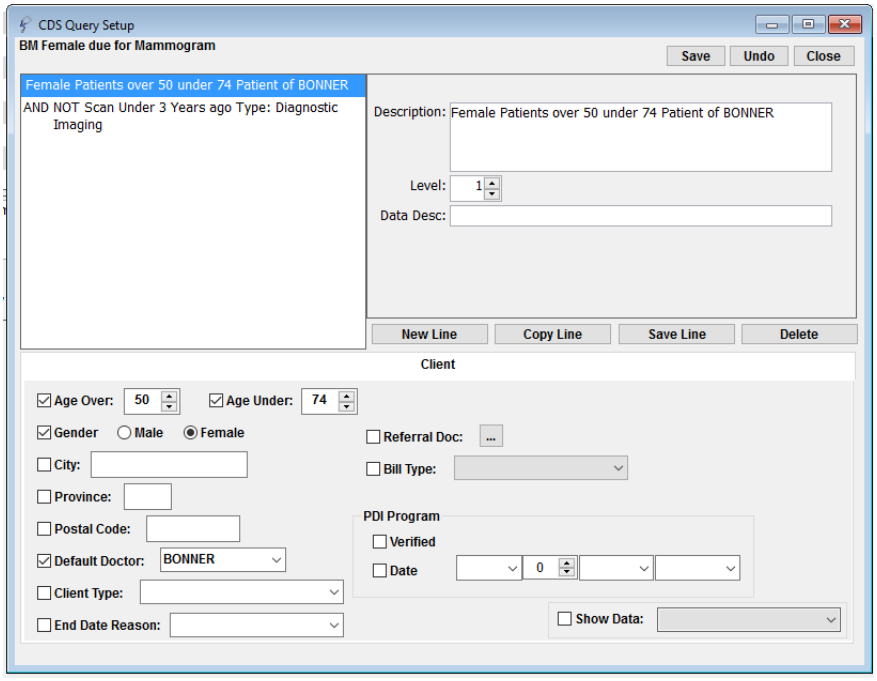
- Check the naming of lab results in your region. The lab may be searched by Result Type or Test Description.

Line 2 identifies those patients that have not had a result type called a “Lipid Panel” in the past 5 years.



Mammogram Screening

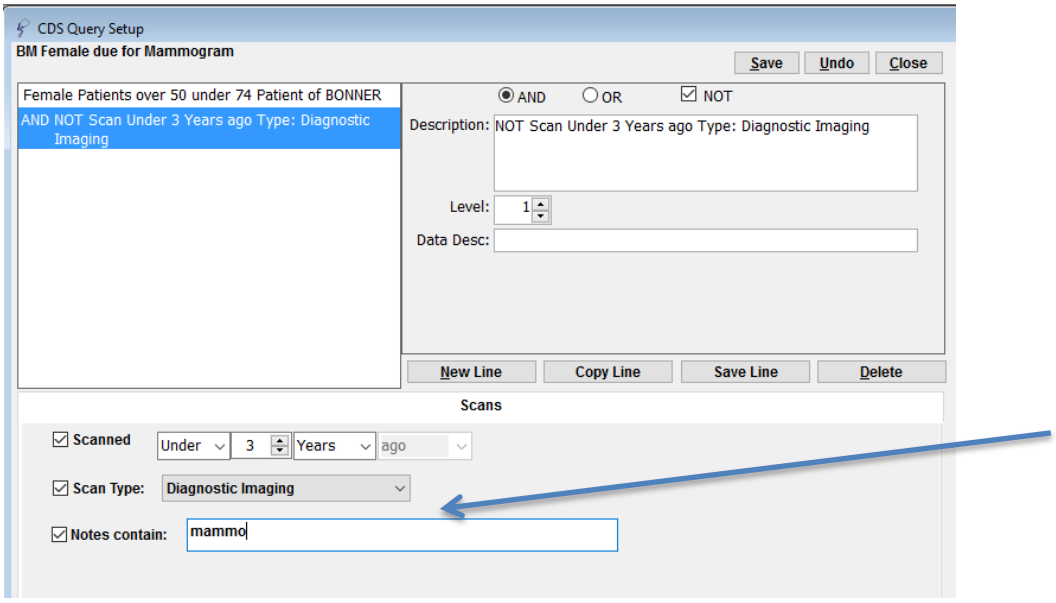
Females 50-74y who have not had a mammogram in the past 3 years
Line 1 of the query sets the demographic criteria. Females age 50-74 attached to Dr. Bonner. Optional: Client Type: Valid Alberta Patient could also be selected.



IMPORTANT:
Complete the validation steps when building new queries.

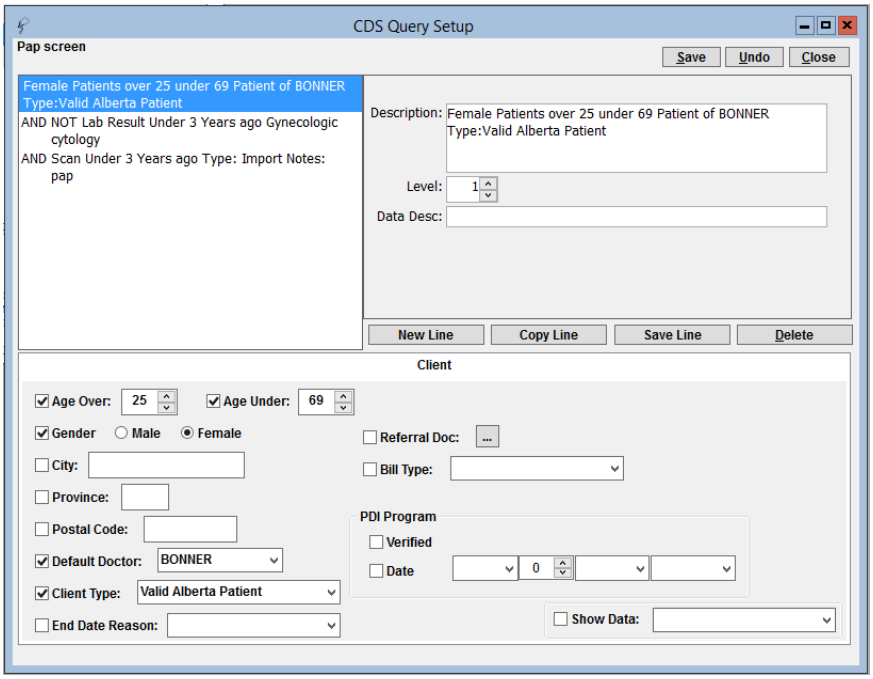
This query needs to be customized to how a clinic indexes their received mammogram

Line 2 of the query identifies patients that do NOT have a scanned image type “Diagnostic Imaging” with a description containing “mammo” in the past 3 years.



Pap Screening

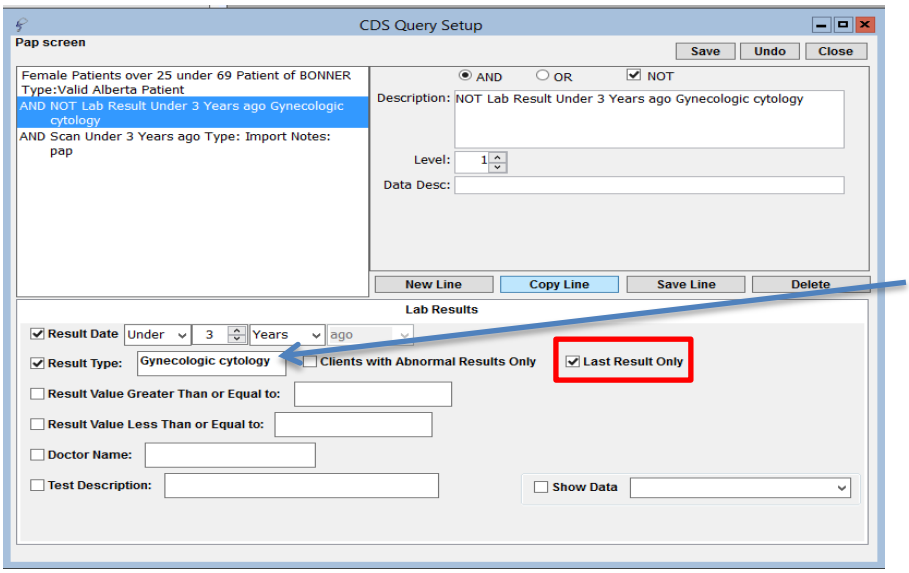
Females 25-69y who have not had a pap smear done in the past 3 years
Line 1 of the query sets the demographic criteria. Females age 25-69 attached to Dr. Bonner. Optional: Client Type: Valid Alberta Patient could also be selected.



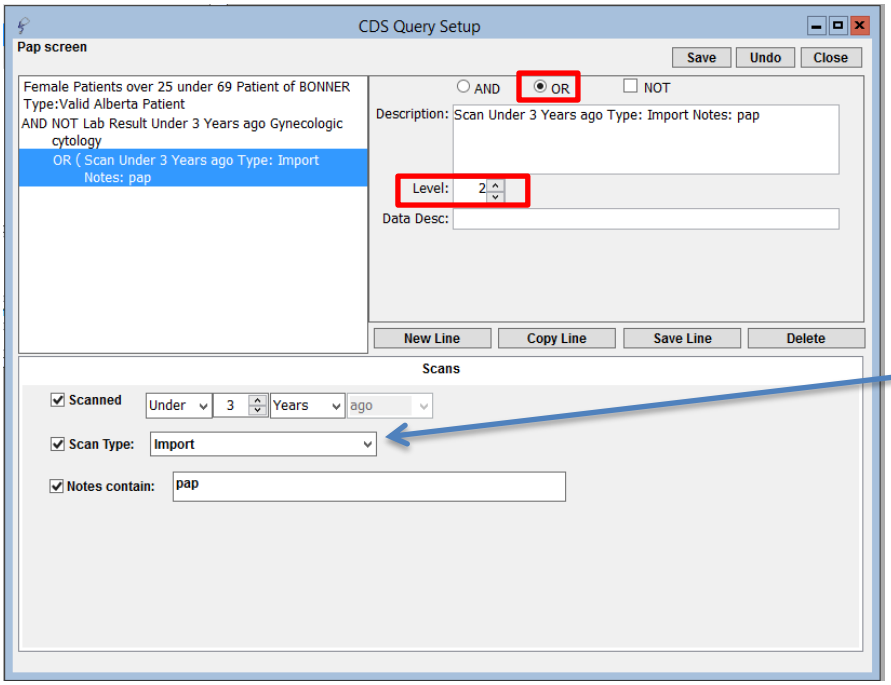
IMPORTANT:
Complete the validation steps when building new queries.

This query needs to be adapted as to account for the different name variations under which the pap test results imported into the clinic EMR based on the region of the province.

Line 2 of the query identifies patients that do NOT have a lab result under "Gynecologic cytology" in the past 3 years.



Line 3 of the query identifies patients that do NOT have scanned imports under the name "Pap" in the past 3 years



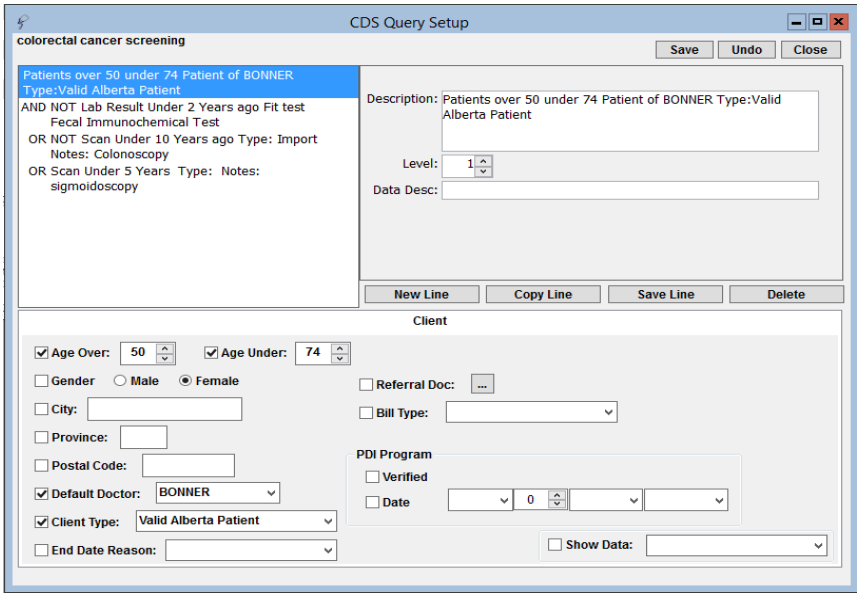
This line of the query needs to be customized to how a clinic indexes their received pap results.

Some clinics try to account for the scanned Paps (i.e. NetCare paps). This is especially useful for new patients when you are building on your history for patients. If your clinic is doing this, build your query to reflect how you are capturing this, and account for both the lab pap and scanned pap. It can make a difference to your screening rates.

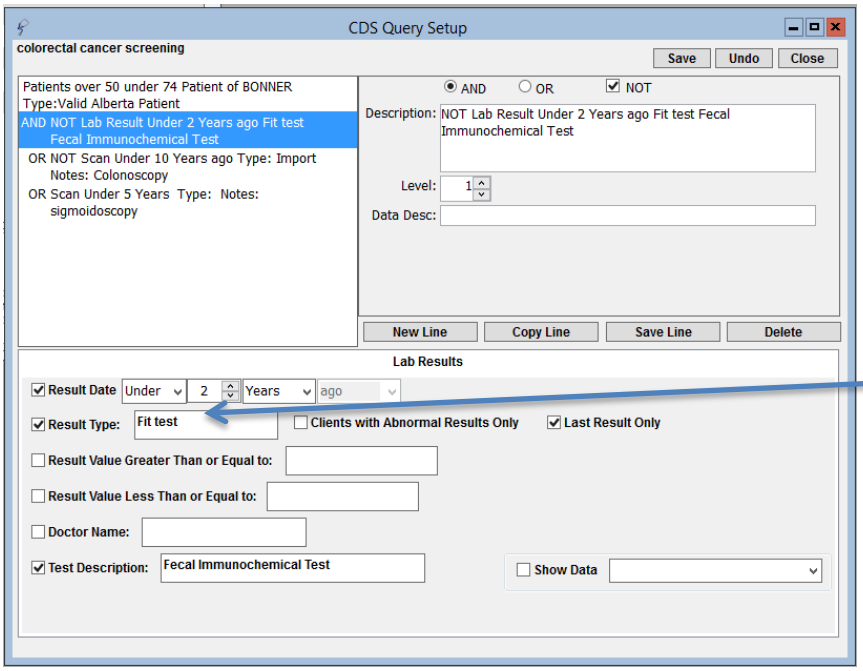
Colorectal Cancer Screening

Adults between 50-75y who are attached to Dr. Bonner that have not had FIT test in the last 2years OR did not do colonoscopy in the last 10 years.

Line 1 identifies Dr. Bonner's patients between 50-75 y years old.



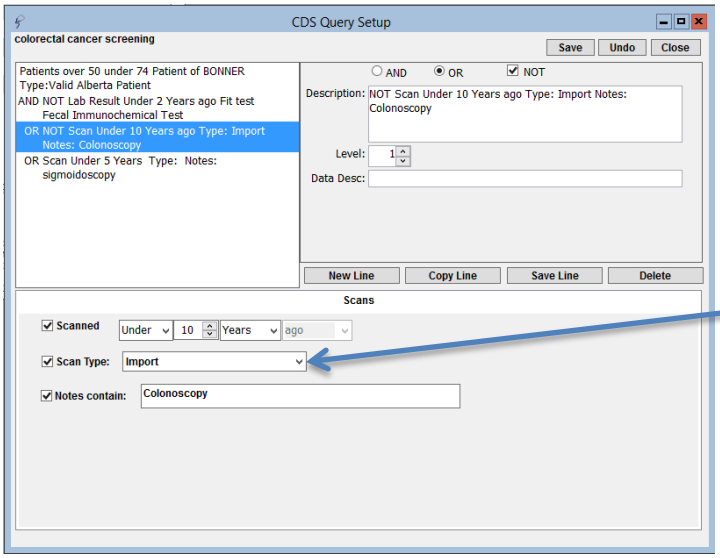
Line 2 of the query identifies patients that do NOT have a lab result under "Fit test" with a description of "fecal immunochemical test" in the past 2 years.



IMPORTANT:
Complete the validation steps when building new queries.

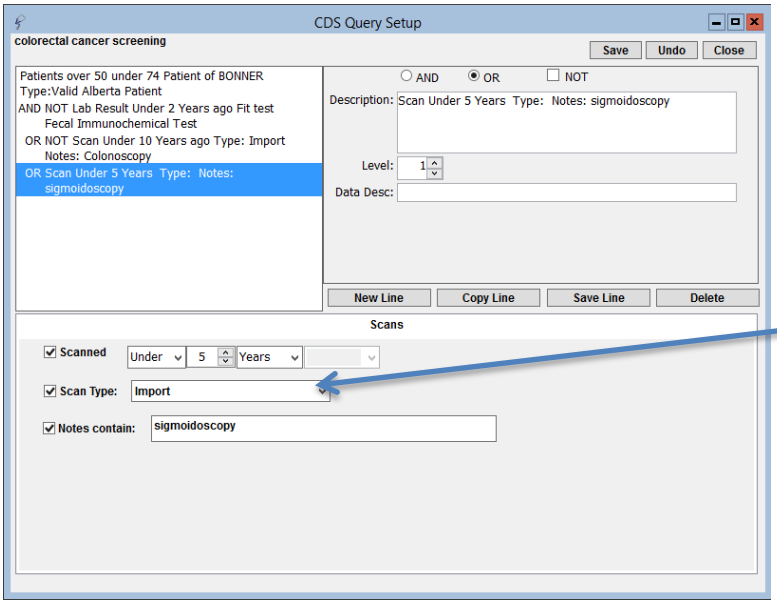
This query needs to be adapted as to account for the different name variations under which the FIT test results populated into the clinic EMR.

Line 3 of the query identifies patients that do NOT have a scanned document under "colonoscopy" with in the past 10 years.



This line of the query needs to be customized to how a clinic indexes their received colonoscopy result letters.

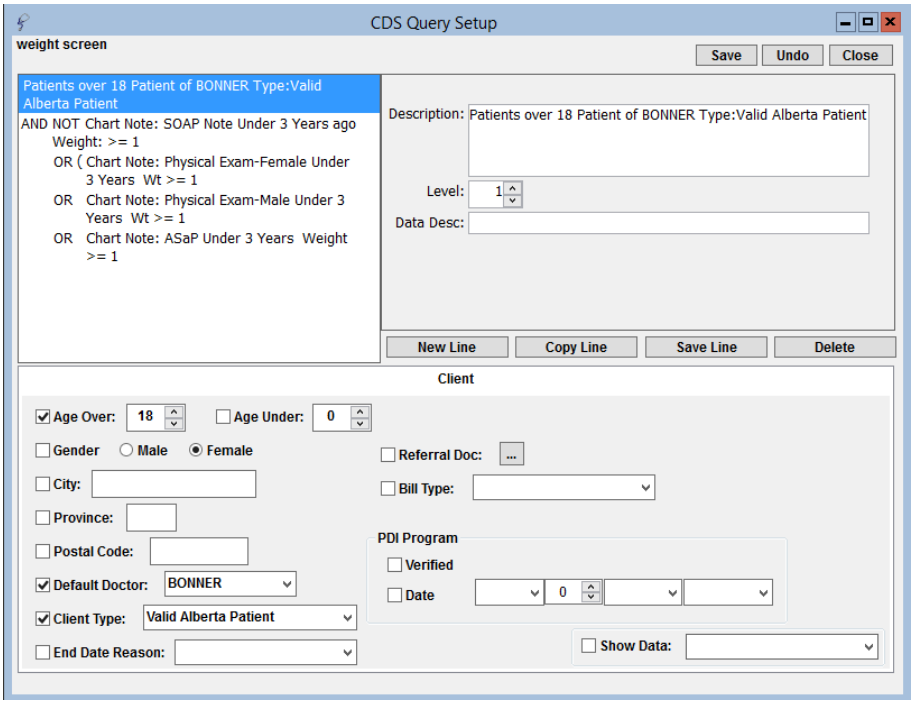
Line 4 of the query identifies patients that do NOT have a scanned document under “sigmoidoscopy” in the past 5 years.



This line of the query needs to be customized to how a clinic indexes their received sigmoidoscopy result letters.

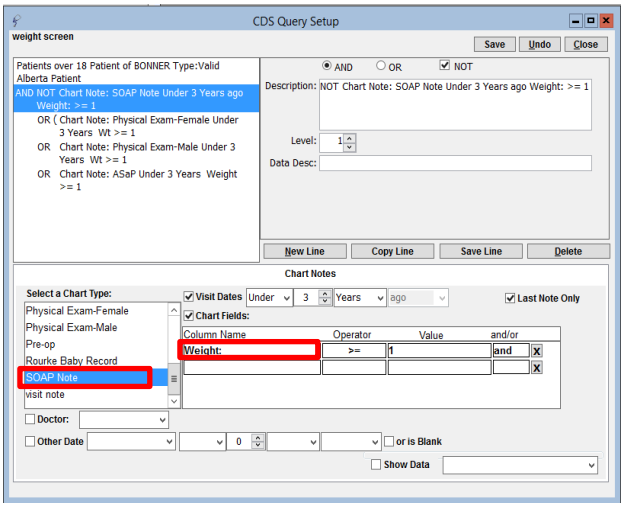
Weight Screening

Patients above 18y who have not had a weight measurement in the past 3 years
Line 1 of the query sets the demographic criteria. Adults above 18y attached to Dr. Bonner. Optional: Client Type: Valid Alberta Patient could also be selected.

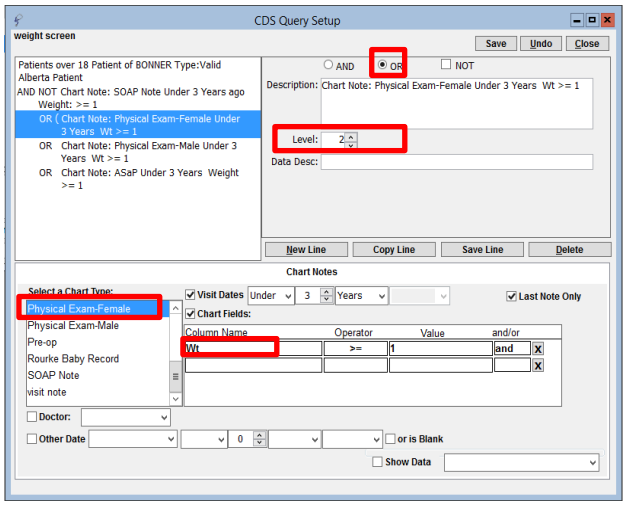


Line 2,3,4, and 5 of the query identify patients that do NOT have a measured weight in their either SOAP notes, physical examination female template notes, physical examination male template notes or ASaP template chart notes respectively in the past 3 years.

Line 2



Line 3



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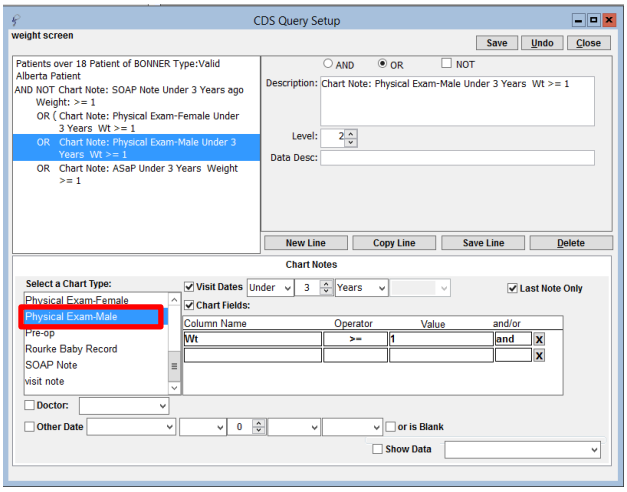
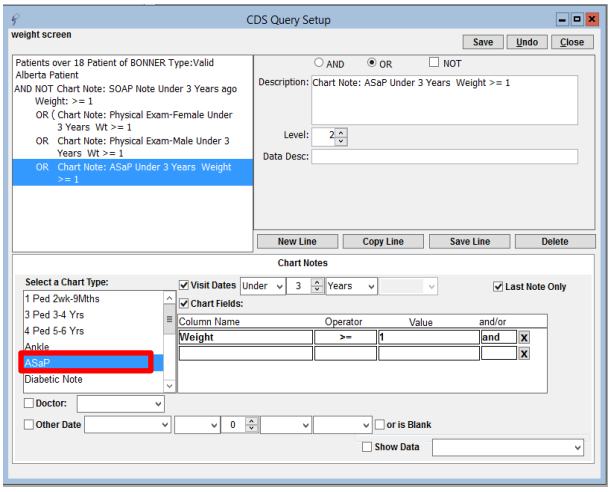


Line 5



TOP website videos

Height screening in Healthquest

https://www.youtube.com/watch?v=lML-ATNKrWE&index=24&list=PLf486cdx9WgLSa6UEly3HQG09Nd3xGFMZ

Lipid Profile Screening Rate in Healthquest

https://www.youtube.com/watch?v=uMjb9XgAVa0&index=25&list=PLf486cdx9WgLSa6UEly3HQG09Nd3xGFMZ

Diabetes Screening in Healthquest

https://www.youtube.com/watch?v=7mOOzgtEBl4

Disease Management

Beneficial Searches for Disease Management

- Patients with a given diagnosis with:
    - No clinic visits in a period of time
    - A monitoring test not completed in a period of time
    - Monitoring tests that have values above a threshold

Query Diabetes Patients with No visits in the last 6 Months

https://www.youtube.com/watch?v=_8zwtG3qPKU&index=27&list=PLf486cdx9WgLSa6UEly3HQG09Nd3xGFMZ

Chronic Disease Management

Proactive panel-based care of a cohort of patients with a given condition (e.g., diabetes or hypertension) is enabled by certain EMR features:

- **Problem list** – See Appendix B – Sample Lists
- **Flags, Tasks** - Point-of-care reminders set for a population of patients
- Pop-up notifications in various areas of the EMR
- **Tracking** Follow-ups, worklists

While patients with chronic conditions are treated and managed as individuals, processes for proactive panel-based care act as an extra "safety-net" to identify patients that may be due for care.

Example:

Peter is a chronic disease nurse that works for a PCN and with a clinic. Peter has collaborated with the panel manager, who is very savvy at EMR searches, to build a number of saved searches that he runs weekly that support his work for chronic disease management. Peter has access to the clinic EMR remotely, so he can run these searches and contact patients on days when he is not embedded in the clinic. The diabetes searches that the panel manager built for Peter are:

- List of patients with a diagnosis of diabetes and no clinic visit in the last 6 months and no future visits booked in the next month
- List of patients with a diagnosis of diabetes that have not had an HbA1c result in the last 6 months
- List of patients with a diagnosis of diabetes, whose last HbA1c result was over 7.0

Peter reviews the lists as part of his regular work as a chronic disease management nurse and calls the patients appropriately for follow-up or he may task another team member to call the patient to book an appointment.

Example 1:
A panel manager at a clinic does a search that produces a list on a monthly basis for patients with chronic conditions such as diabetes or chronic kidney disease that have had NO VISITS (and no future visits booked) in a period of time (e.g., 6 months or a year, depending on the condition). This allows the panel manager to reach out to these patients, confirm that they are still patients of their primary provider at the clinic, and offer a management appointment.

Example 2:
A panel manager uses lab data to run a monthly search in the EMR to identify patients that have lapsed in getting lab tests done that support management of their condition. For example, a monthly search identifies any patient with a diagnosis of diabetes with no HbA1c result on file in a period of time, such as 6 or 7 months. The clinic may set protocol for the panel manager to act on this list or the list may be provided to the CDM nurse for action.

Example 3:
A panel manager has created a search in the EMR for the CDM nurse that produces a list of all patients with a diagnosis of diabetes that displays the patient's last lab values for HbA1c, fasting glucose, blood pressure and last visit date. The CDM nurse runs the search on a weekly basis and can sort columns in the report to identify patients that may need follow-up. By running the search live in the EMR the CDM nurse can easily click on the patient's name to be directed to their chart to get more information for next steps.

These examples identify ways that clinics can set up processes that act as a "safety-net" and be proactive in identifying patients early for interventions.

Chronic Disease Management Searches – Examples

Query Diabetes Patients with No visits in the last 6 Months

TOP website videos

https://www.youtube.com/watch?v=_8zwtG3qPKU&index=27&list=PLf486cdx9WgLSa6UEly3HQG09Nd3xGFMZ

Registries

A disease registry, identifying patients with a coded disease condition, is the first step in preparing for panel management of patients of a given condition. **The process of coding of patients with a condition to produce a list is called a 'patient registry'.** Ideally, all patients with a condition will have the condition noted in their 'Problem List' in a consistent way. For example, Diabetes is always called 'Diabetes Mellitus' and will likely have the '250' ICD-9 code attached to it. It is important that an entire practice agree on terms for the conditions to create registries. In this example Diabetes is not named with other inconsistent terms such as 'Diabetes', 'DMII', 'DM2', 'Diabet M', etc.

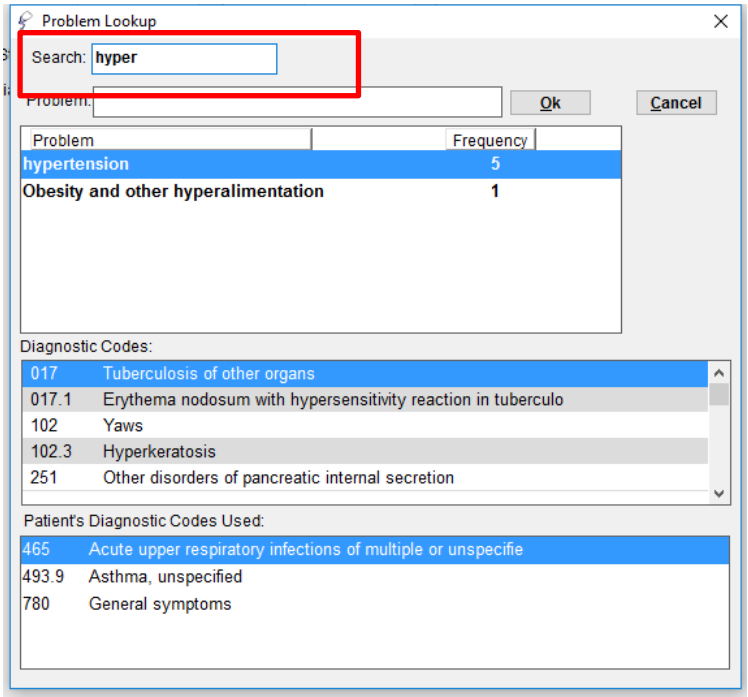
> **TIP**: Free typing in the problem list is NOT recommended. Physicians should use the drop-down list when coding problems. In some cases, a "clean-up" of the list may be needed to enable consistent coding moving forward.

While the Service Codes used in claims or billing is a very useful search to inform the practice when forming registries, it is not in itself accurate enough to be used when creating point of care reminders. An accurate problem list should be the trigger for the point of care reminders.

Problem Lists

EMRs have at least one designated area to enter confirmed diagnoses in the problem list. Agreeing as a team to have consistent entry into one area in a consistent way is critical to enable team-based care of patients with chronic conditions.

To enter a problem, go to the **Problems** tab and select **New**. The Problem Lookup window appears. Enter the first few letters of the problem in the Search window. Select the problem with the highest frequency that matches the problem you are seeking and click OK.



If you know the ICD-9 code of the problem you are seeking (e.g., 401 for hypertension), it may be entered in the Search window and then click OK.

Disease Registry Queries

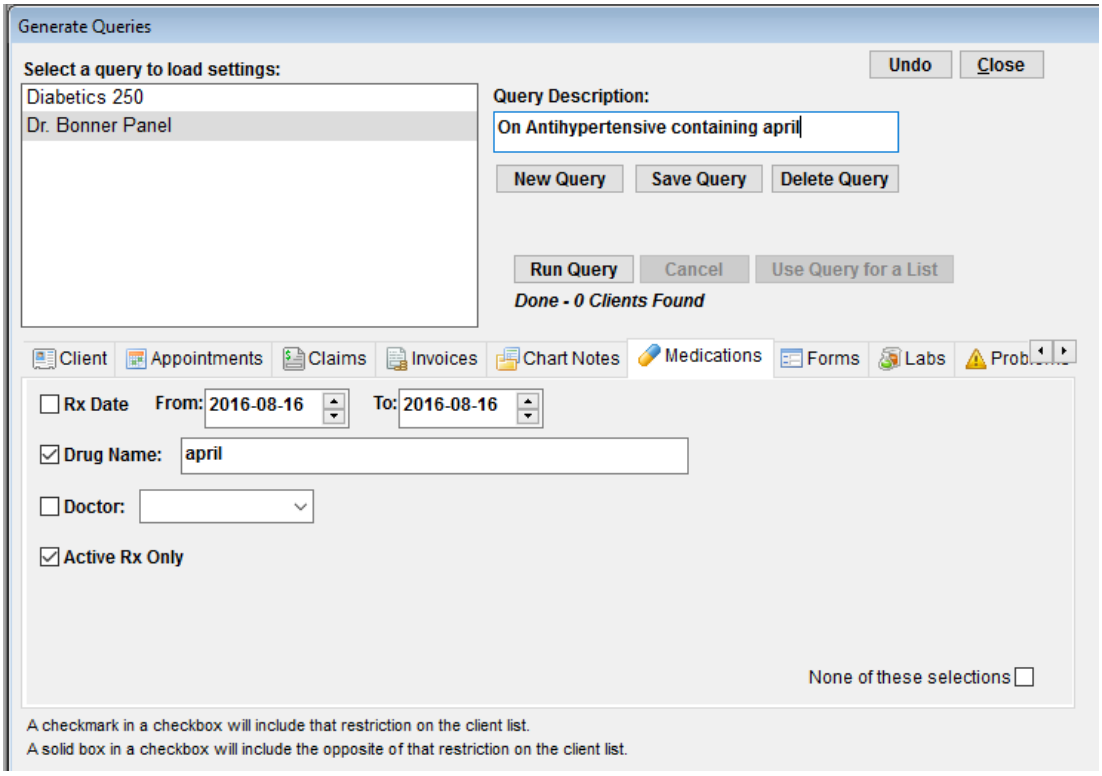
There are useful searches that will support creation of disease registries. By looking in other areas of the EMR, patients without the problem in their 'Problem List' can be identified. See Appendix B – Sample Lists

Feature of EMR	Example 1 Data that would inform Diabetes Mellitus Registry	Example 2 Data that would inform Hypertension registry
Billing	Diagnostic code 250	Diagnostic code 401
Medications	Currently taking metformin or insulin	Currently taking an antihypertensive
Lab	HbA1c over 7 %	BP > value specified by clinic MDs

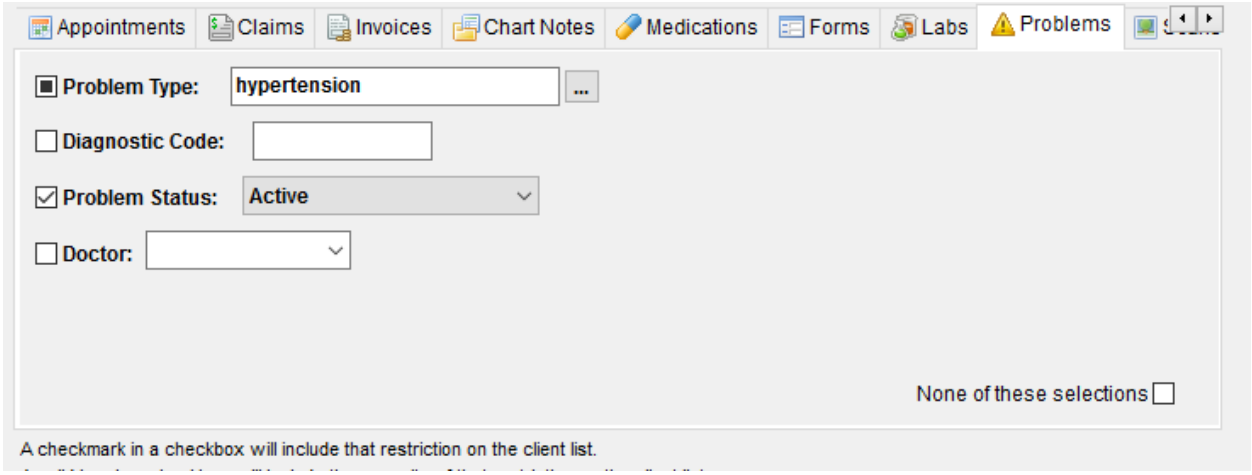
The bulk action feature from reporting area of the EMR is a useful tool when producing a list of verified patients with a given condition to add it to the patient problem list in bulk.

Example: to produce a list of patients taking an antihypertensive medication class called ACE inhibitors containing the letters "april" as in Ramapril or Enalapril, but not have the Problem "hypertension" on their problem list to tabs would need to be created in a query.

This criterion of the query identifies the patients with an active drug name that ends in "april". This is the class of medications known as ACE inhibitors



A second criterion identifies patients without the active Problem Type "Hypertension" (the "without" is signified by the solid box in "Problem Type")



When this query is run and the list is produced it will contain all patients taking an antihypertensive but do not have the Problem "Hypertension" identified on the chart. A practitioner at the clinic can review the list and identify which need the problem "Hypertension" added to the chart. (A similar query could be done for medications containing "sartan" – the class of ARBs)

With the assistance of a panel manager, queries can be run to help develop disease registries at a practice. Once disease registries are well formed an accurate, CDS Notifications that apply only to patients with a confirmed condition can be created.

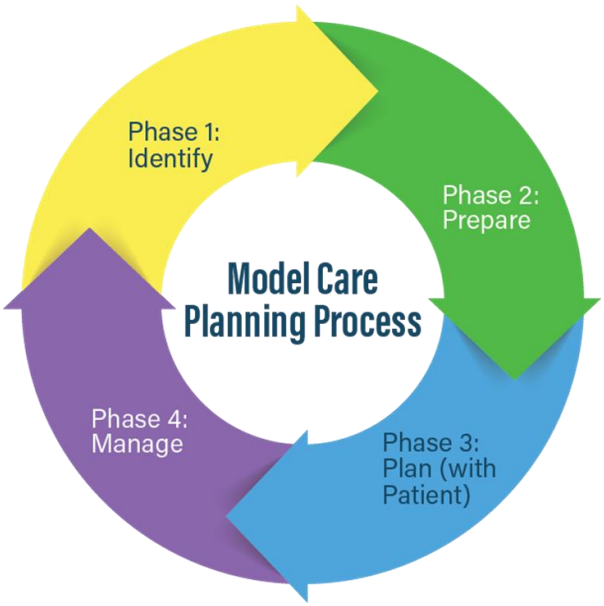
Care of Patient with Complex Health Needs

Patients Collaborating with Teams (PaCT)

PaCT is a next step in the Patients Medical Home journey. The next opportunity to positively impact care for those with the most complex health needs, including those at risk for or having multiple chronic diseases.

Care Planning

"The process by which healthcare professionals and patients discuss, agree upon, and review an action plan to achieve the goals or behavior change of most relevance and concern to the patient."



PaCT Care Planning Process

http://www.topalbertadoctors.org/pact/

PaCT Resources

Project and team resources can be found in the PaCT area of the TOP website:

http://www.topalbertadoctors.org/pact/

PaCT Processes

Clinics participating in PaCT will need to have well-established processes for panel identification and maintenance to ensure that they are offering care planning to their confirmed patients. Once the Central Patient Attachment Registry (CPAR) is available, it is recommended that clinics participate to ensure that they are offering care planning to their CPAR verified patients.

This section of the EMR guide focusing on PaCT is intended to be used by teams alongside the PaCT How-To Guide. The sections below follow the "Potentially Better Practices" as they relate to the "Optimize EMR" focus of each phase.

PaCT Prework

- Uploading the Care Planning Template into your EMR
  See Appendix A- Care Planning Template
- Discuss and agree upon standard charting procedures for team-based care

PaCT Identify Phase:

- Identifying patients with complex health needs
- Marking the patient's chart with "Complex Health"
  See Problem Lists

PaCT Prepare Phase:

- Appending relevant patient assessment information to the record.
- Pre-populating the care planning template
- Generating requisitions

PaCT Plan Phase:

- Care Planning Template Use:
  - Standardizing documentation to enhance pre-population
  - Optimizing documentation during the appointment
- Creating reminders for follow up appointments

PaCT Manage Phase:

- Maintaining the care planning document over time
- Creating reminders for planned care interventions
- Standardizing processes for referral tracking

PaCT Pre-work

Uploading the Care Planning Template into your EMR

A new care planning template has been created for the PaCT initiative that is patient-centered and relies on evidence-based care planning principles. For processes on how to make the template available in your clinic EMR, use the template at the care planning visit, save and use for follow-up visits, see your EMR specific tip sheet.

Discuss and agree upon standard charting procedures for team based care

Care planning is a team activity. For this to occur there should be general protocol on where information is stored in the chart so that all team members can both contribute to the chart, find information in the chart and contribute to the care plan appropriately. This would impact team members of diverse roles across the practice: scanners, medical office assistants, nurses, pharmacists, physicians, etc. In summary, chart in a way that team members can help care for the patient. Some benefits include:

- Care team members know where to find the information.
- The patient's data can inform population-wide reminders to alert when care services are due
- Monitoring and management can be done systematically

Important Note: It cannot be overstated how important this people process step is to the successful adoption of any information collection and capture in the clinic's EMR. Changes in workflow or process need to be discussed as a group.

Identify Phase

Identify patients with Complex Health Needs

The first step in the care planning process is to identify patients for care planning. Your PaCT team will have reviewed the suggested menu for selecting a patient population (see menu below). In the EMR-specific Guides you will see suggested approaches to searching each of the menu items.

Part of the improvement process for you team may be improving how your selected population is identified by your EMR. For instance, if you select 'frail patient's' as your focus, you may have to work on how frailty is documented to make it reliably searchable.

Menu

Clinical Criteria	*Risk Factors*	*Utilization Parameters*
☐ People with advanced illness ☐ Complex Conditions: (Multiple Sclerosis, Parkinson's Disease or Lupus) ☐ Dementia ☐ Multiple Chronic Conditions (e.g., 3 or more) ☐ Patient eligible for a Complex Care Plan ☐ Multiple medications ☐ Functional impairment ☐ Adults under 65 with disabilities	☐ Age (e.g., > 85, or > 75) ☐ Frailty ☐ LifeStyle/Modifiable risk factors ☐ *Social risk factors* ☐ High risk (using predictive risk assessment tool)	☐ Many visits (e.g., > 10) in the last year ☐ Hospitalizations (2 or more within the past year) ☐ ER visits (3 or more) in the past year ☐ Had a care plan in the past but not in the last year ☐ Receiving home health services ☐ No visits to the clinic in the last year (with risk factors or a chronic condition)

*Note – these are some main considerations – not an exhaustive list

Other patient data will be used to inform a team if a patient is appropriate for or due for care planning. Data that a team may use for this purpose includes:

- Visits:
    - Date since last visit. Searching for patients with chronic conditions or risk factors that have had a lapse since their last visit (e.g., one year) may represent patients due for care planning
    - Number of patient visits to the clinic. This is searched from the number of appointments or visits. Some patients with many visits to the clinic (e.g., > 10/year) may assist the clinic in identifying patients with complex health needs
- Hospitalization and/or ER reports. These are external documents received at the clinic, usually as a fax/e-fax. In this case how these are indexed/named and attached to the chart matters. With consistent naming protocol, the number of hospital and/or ER reports can be found for a patient

- Scanned documents:
    - Past care plans. If care plans are consistently named and linked in the patient's chart, past care plans can be found and as the date they are indexed can be determined, these can inform follow-up visits or follow-up care plans. The billing of the care plan can also be used to inform follow-up
    - Reports and referrals,
- Home health services. Documenting in a consistent way which patients receive home health services would assist in identifying all these patients; some of which will represent patients with complex health needs.

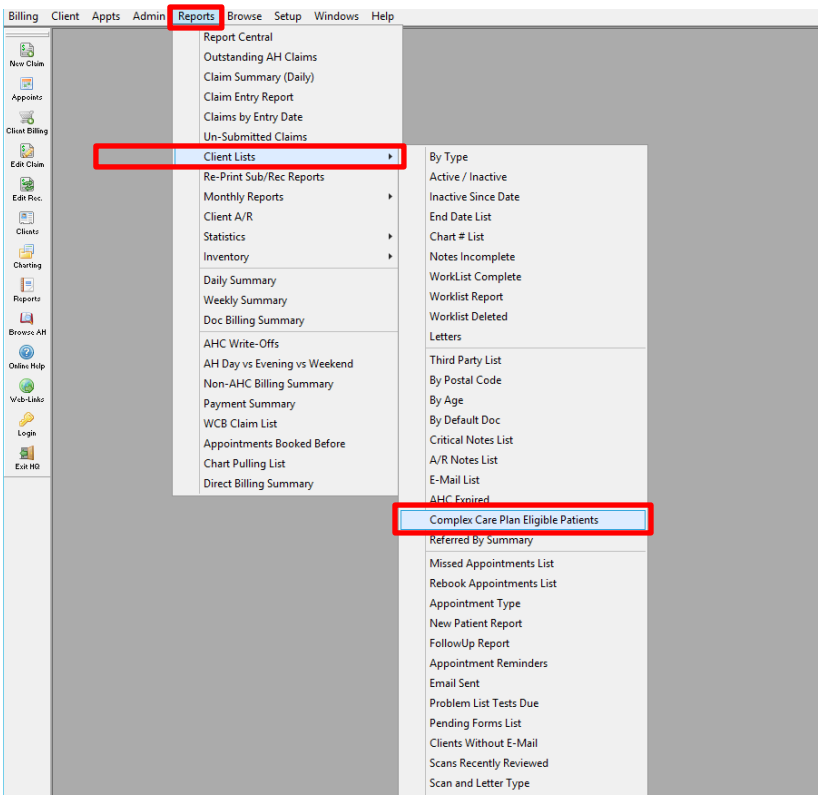
Patients Eligible for Complex Care Plan

Given the complexity of the Complex Care Plan eligibility it will require building and thoroughly testing all queries to capture all patients that are eligible. The rules for claiming the 03.04J are the patient must have two or more qualifying conditions, one from **Group A** and one from **Group B**, or two from **Group A**.

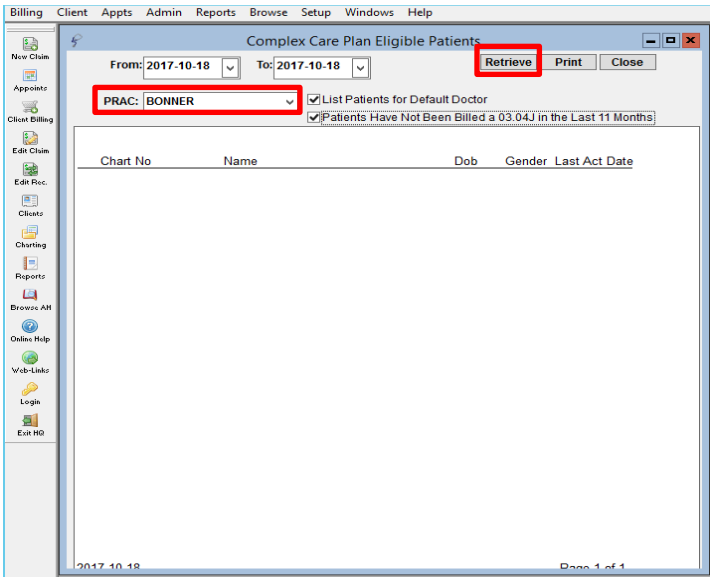
Group A	Group B
• Hypertensive Disease (401) • Diabetes Mellitus (250) • Chronic Obstructive Pulmonary Disease (496) • Asthma (493) • Heart Failure (428) • Ischemic Heart Disease (413 or 414) • Chronic Renal Failure (585)	• Mental Health Issues (290 thru 319) • Obesity (278) Adult = BMI 40 or greater Child = 97 percentile • Addictions (303-304) • Tobacco (305.1)

Searches for CCP eligible patients

To produce a list for patient who are eligible for CCP, go to **reports----client lists---complex care plans eligible patients**



Another screen will pop up, choose the provider from the "PRAC" drop menu, and hit "retrieve"



A list will be produced which could be exported and saved as excel sheet.

Recording "Complex Health Needs" in the EMR (Critical Step)

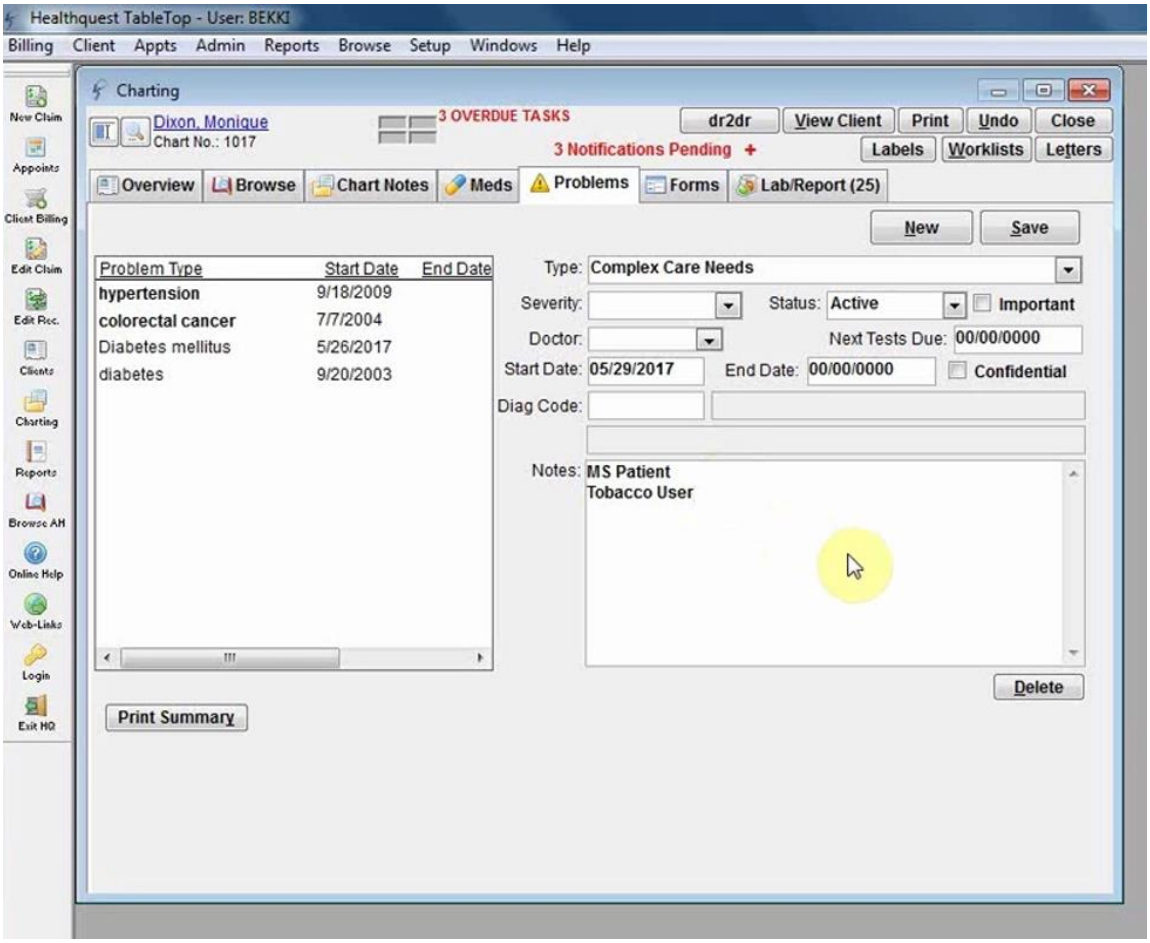
A critical step to monitor and follow-up with patients with complex health needs is to have one place in the EMR where the term "complex health needs" is recorded and is searchable; it is also beneficial if it is searchable for your quality improvement measures. As a clinic, determine and agree on **one place** it will be recorded. It is recommended that this be in the:

- Problem List (The term "Complex Health" may need to be added to the Problem List master list of terms by the clinic's EMR administrator.) See Sample Problem Lists

How to create a custom 'Problem' for Complex Health Needs

TOP website videos

Complex Health Needs in Healthquest
https://www.youtube.com/watch?v=jWvZSfpR-5E&index=20&list=PLf486cdx9WgLSa6UEly3HQG09Nd3xGFMZ

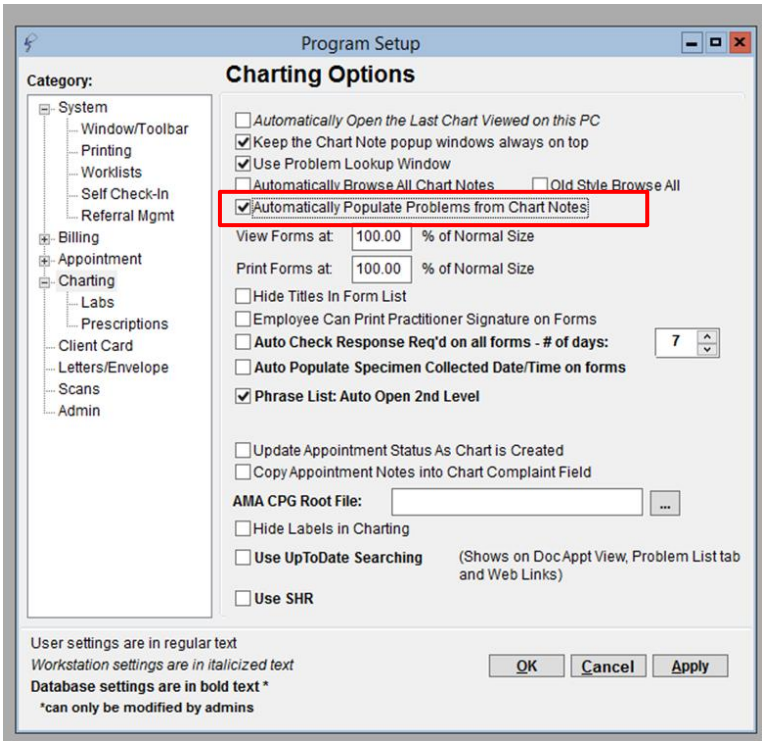


Auto-populate Problem from Chart Note to Problem List

In Healthquest, the diagnosis could be auto-populated from chart notes to the problem list. This setting must be first configured by the user though.

Set-up

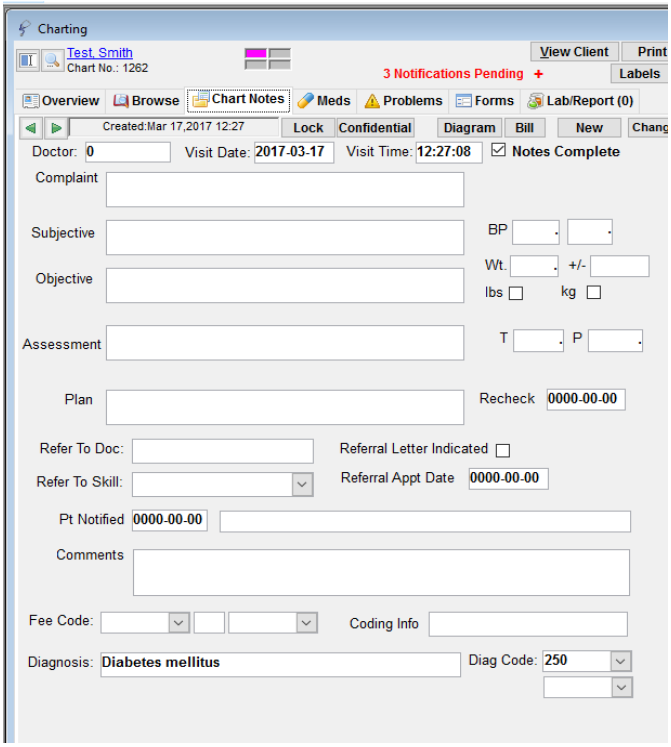
1) In the top menu got to Setup > Program Setup
2) Click on Charting
3) Select Charting Options: “Automatically Populate Problems from Chart Notes”



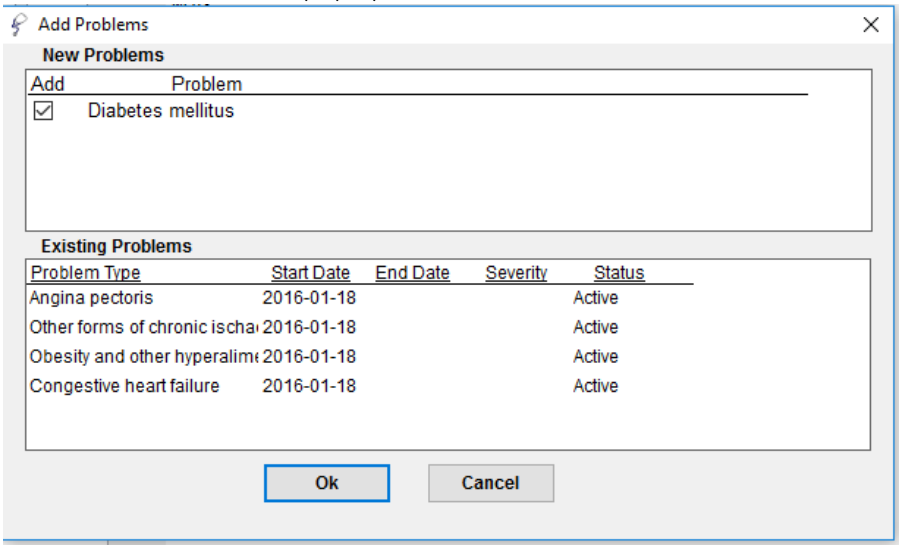
4) Click “Apply” and “OK”

To Use:

When charting in a Chart Note and a Diagnosis code is added to the chart note and then the Notes Complete box is checked,



a “Add Problem” box will pop up



:

When you click OK, the new problem will be added to the problem list.

Prepare Phase

Append patient assessment information to the record

Some patients identified for care planning may have seen other providers and had various diagnostic, lab or other tests completed that may be relevant to the care planning process. Some of this information might be available on NetCare. This potentially better practice suggests that someone from the care team looks at NetCare for relevant information and adds it to the EMR in a standardized way.

See Foundation for Success - Commitment to Standardization in the EMR

Populate care plan template with known information in advance of the encounter

Some EMR data can be entered once in the patient's chart and then flow to the care plan (mapped). By charting this way team members will save time when looking for information and it will take less time to create the care plan and there will be less chance of data discrepancies and errors. Data that can be mapped in most EMR's includes:

- Emergency Contact Info
- Current Problems
- Medications – Current (OTC & Rx) & Failed
- Allergies
- Family Medical History
- Significant Historical Medical Events
- Test & Treatments
- Labs
- Diagnostic Imaging
- Modifiable Risk Factors including Tobacco, Alcohol, Exercise, Obesity (BMI), Diet of Fruit & Vegetables

Other data that is less likely to be mapped in most EMRs should be charted in a consistent way so that the team knows where to enter it and where to find it in the record when working on the care plan with the patient. Such data includes:

- Care Team Members
- Medical Team Members
- Social History (Risk Factors)
- Frailty Identifier
- Medical and Assistive device
- Personal Care Directives
- Goals of Care
- Follow ups

NOTE: How and where you capture information in the EMR will determine the amount of information that can be mapped/linked to the Care Planning Template (see appendices).

Please refer to individual EMR Guide for details on pre-populating the template

http://www.topalbertadoctors.org/tools--resources/emrsupports/#vendor

Generate lab and/or diagnostic imaging requisitions in advance of the encounter

EMRs have requisitions for laboratory and diagnostic imaging that are generated from the system. If your team is not using this feature, this is an opportunity to begin using this feature to proactively generate and provide requisitions to patients in advance of appointments.

Some EMRs have built in capabilities to e-fax directly from the system to the lab or imaging centre of the patient's choice. There are also a number of third party software options that allow for secure electronic transmission of requisitions.

Plan Phase

Documenting in the care planning template

In the prepare phase, the care plan template activities focused on populating the template before the patient arrives for their appointment. In this section, the change is the population of the template during the appointment. These sections include:

- Medical goals and targets
- Patient goals (health and life)
- Medical action plan
- Patient self-management action plan
- Potential barriers and coping plan
- Follow-up plan (who, when what, next visit)
- other identified care team members outside of the clinic or PCN involved in the patient's care See Appendix A

Some teams will already be used to charting during the appointment. The goal is to have the information in the template by the end of the appointment with the patient so that you can print a copy for the patient.

It is suggested that you check settings on your EMR to see if/how you can print in a font size appropriate for the patient.

Set a reminder in your EMR for follow up appointments

Most EMRs have a function to set a reminder to the appropriate staff member to call a patient in for follow up. The patient should be aware of the follow up date based on their care planning follow up plan but many will still want or need a follow up call.

Many clinics already use this function in some capacity but there may be additional considerations for care planning that could be discussed.

Manage Phase

Maintaining the care planning document over time

As patients come in for follow up appointments there will be a need to add, delete and change information in the care planning template. Each EMR will handle this task in a slightly different way and you will need to become familiar with how your EMR handles this and what is optimal for you and your team. Over time, you may wish to start a new template which may be based on time or the volume of change over time for each patient.

Creating reminders for planned care interventions

Most EMRs have a reminder system where you can be reminded during the appointment that a care intervention is due or where you can create searches for certain interventions overdue/coming due.

Standardizing processes for referral tracking

Most clinics have processes for tracking referrals to specialists, programs and services. Participation in PaCT may be an opportunity to review processes and examine some of the features in your EMR for more effective

Measurement

While implementing the Patient's Medical Home, a practice or team will not know how they are doing unless they measure for improvement. Process measures reflect the things that are done in the practice and how the systems are operating. Example measures are **referral tracking and a patient confirmation rate.**

Confirmation/Validation Rate[4]

It is useful is to measure how often the team is confirming the patient demographic information (address and phone) and physician attachment. When a clinic is new to the process of patient confirmation it can be measured in the search tool.

Process Measure(s)

For example, a team that wants to measure how they did in a week:

patients confirmed this week x 100 = confirmation rate (%)
patient visits this week

A clinic may also have an expectation over a period of time and can determine if the validation goals are being met. For example, if a practice has an expectation that their validation rate over a 3 month period should be 95% the formula would be:

patients confirmed in the last 3 months x 100 = confirmed rate (%)
patient visits in the last 3 months

Outcomes Measure (3 years)

Overtime a clinic can use an agreed upon timeframe (e.g. 3 yrs.) to determine that the confirmation of attachment percentage to their most responsible primary provider and team has been sustained.

patients confirmed in the 3 years x 100 = confirmed rate (%)
patient visits in the 3 months

For all the above calculation by adding all the individual primary provider percentages a comprehensive clinic's percentage for confirmation can also be determined.

See: Appendix D: Calculating Panel and Clinic Confirmation Rates Worksheet

See the example video: 3 Month Verification Rate in Healthquest
https://www.youtube.com/watch?v=NChkzjOF26M&index=19&list=PLf486cdx9WgLSa6UEly3HQG09Nd3xGFMZ

[4] When patient demographics and primary provider relationship are checked at the clinic that is called confirmation even though the box in the EMR may be called "verified" or "validated". A confirmed patient panel is produced at the clinic through this process. The Central Patient Attachment Registry will **verify** the patients on the confirmed panel to identify only those patients attached uniquely to that primary provider.

Screening Rate Based on Completed Screens

A practice will also find that they are able to measure rates for preventive screening care. Measuring completed screens looks for completed results. The generic equation is:

patients in eligible population with a
result during the screening interval [+] x 100 = screening rate (%)
patients in the eligible population*

[+] The screening interval is the time frame during which the screening maneuver should be done

* The eligible population would include all the active, paneled patients for a provider whether they came into the clinic or not as all rates are calculated over the paneled population.

Example 1: Dr. Brown wishes to calculate the completed blood pressure screening rate for her active paneled adult patients. Blood pressure should be measured annually (ASaP)

active adult patients* (18 +) with a BP result in the last year x 100 = BP screening rate (%)
active adult patients* (18 +)
* Attached to Dr. Brown in the EMR

Example 2: Dr. Brown wishes to calculate the completed diabetes screening rate for her active adult paneled patients. Diabetes screening is:

- appropriate for adults 40 +
- recommended once every 5 years
- completed with a fasting glucose, hemoglobin A1c result or a diabetes risk calculator score

active adult* patients (40 +) with a fasting glucose
OR HbA1c OR diabetes risk score in the last 5 years x 100 = Diabetes Screening Rate (%)
active adult patients* (40+)

* Attached to Dr. Brown in the EMR

Calculating a Screening Rate Based on Offers of Screening Care

Practitioners participating in the Alberta Screening and Prevention improvement project will include both completed screens and offers of the screen. In this case, to measure with the EMR there must be a place that **declined**, **deferred** and **exemptions** for screening are reliably recorded. In this case the generic equation is:

active adult patients with an offer of screen
or completed screen during screening interval x 100 = screening rate (%)
active adult patients

Appendix D: Calculating Panel and Clinic Confirmation Rates Worksheet

It is recommended to use the chart audit methodology[5] instead of EMR measures if the offers of screening care are unable to be searched in the EMR.

See the example video: Lipid Panel Screening Rate in Healthquest

https://www.youtube.com/watch?v=uMjb9XgAVa0&index=25&list=PLf486cdx9WgLSa6UEly3HQG09Nd3xGFMZ

Disease Management Rate

EMRs are capable of measuring around disease management parameters provided the information is entered in a place where it can be searched.

Example:

Dr. Brown wishes to measure how many of her active paneled patients with diabetes have an HbA1c result below 7% in the last year.

Generic equation:

active patients* with diabetes[+] with an HbA1c result below 7% in the last year x 100 = rate (%)
active patients* with diabetes[+]

[+] Patients identified as having diabetes when Diabetes is listed as an active problem in their Problem List

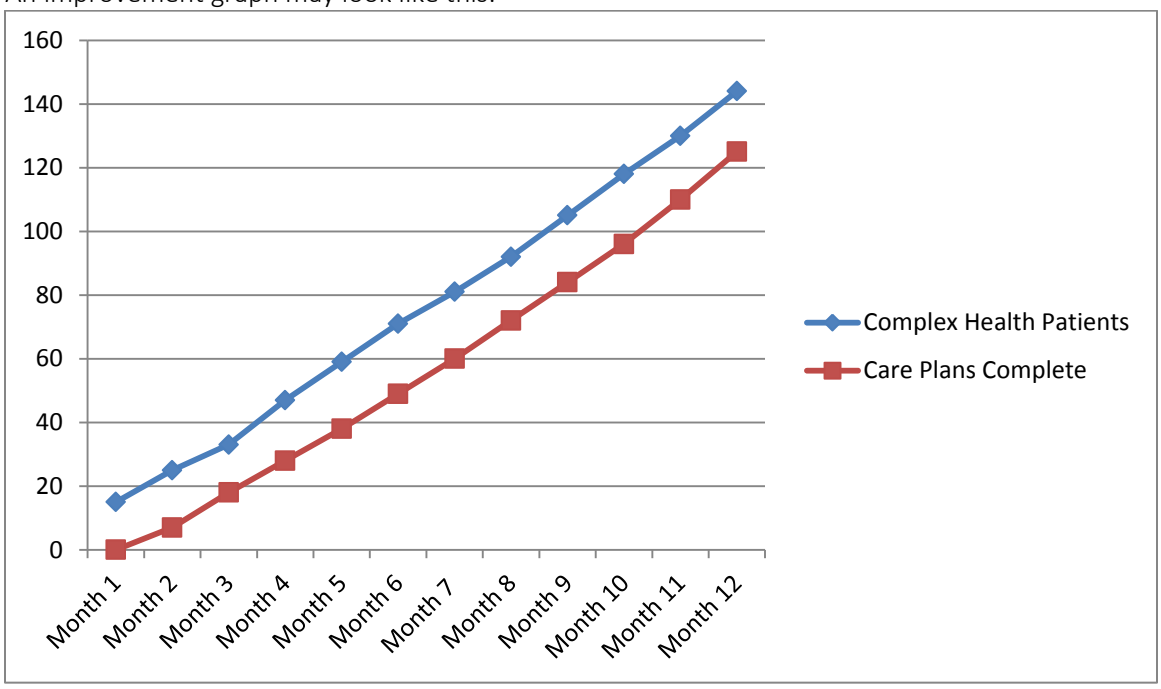
[5] See ASaP EMR Chart Review Instructions: http://www.topalbertadoctors.org/file/asap-chart-review-instructions-emr.pdf

Care Planning

For clinics participating in PaCT, progress on identification and care plans completed may wish to collect supporting measures. In this case the clinic may wish to measure how many patients have been identified as having a complex health needs and, of those patients, how many were offered care plans with the new process on a monthly basis. To do this the two monthly searches would be:

1. number of patients with complex health needs
2. number of patients with complex health needs with a care planning template

An improvement graph may look like this:



Appendix A: Care Planning Template (with prompts)

Download the most up to date template at:
http://www.topalbertadoctors.org/pact/pactcommunicationtoolkit/

Patient Name:	Preferred Name:
AB Health Card No.:	Date of Birth:
Primary Care Provider:	Primary Provider Contact No.:
Emergency Contact:	Contact No.:

This document was created on: <INSERT DATE> and last updated on: <UPDATE DATE>

Introduction to Your Care Plan and Care Planning Visit

During the course of this visit, this document (called a care plan) will be filled out by you and your health care team. A care plan is useful when you have several people involved in your care or you have ongoing health conditions. It helps keep everyone on the 'same page' as to what matters to you (your goals, values and preferences). It also helps keep track of what you and your healthcare team have planned or are working on for the next 12 months to improve your health and wellbeing.

It is designed to help everyone involved in your health to know:


What is important to you


Your goals for the next 12 months


About your health conditions


The healthcare and support you need

PART A: Medical Summary

In order to better understand your health conditions and how you are currently managing them, questions about your health, medications, medical history, and treatments, etc. are discussed in the section below.

Current Health Conditions

Please name your current health conditions. What do you know about them? What more would you like to know about them?

Impact of Health Conditions

How do your health conditions impact you, your daily life and the things that are important to you (e.g., medication cost, personal and work obligations, transportation)?

Health Target(s)

Specific tests are used to help understand whether a health condition is well managed. Understanding where your numbers are now and what you can work towards will help ensure you can achieve what is important to you.

Test Results	My Current Number	Where I Need to be
BMI (height and weight calculation)		
Blood Pressure (BP)		
<add new test results>		

Current Medications

Please name the medications you are currently taking. How and why do you take them?

Medication	Dosage	When I Take It	What I Take it For

Past Medications

Are there any medications that you have taken in the past that you want your doctor to be aware of (e.g., failed medications or cases where one medication was replaced with another medication)?

Patient Name: _____ *Preferred Name:* _____

Alberta Health Care No.: _____ *Date of Birth:* _____

Allergies and Intolerances

Your records show that the following are your allergies and intolerances. Is there anything that should be added?

No Known Allergies ☐	Reaction	Severity
		Choose an item.
		Choose an item.
		Choose an item.

Family Medical History

In previous appointments you have shared the following family medical history. Is there anything that should be added?

Condition(s)	Relation

Significant Historical Medical Events

Your records show the following history of medical events. Is there anything that should be added? Include surgical history, hospitalizations or emergency visits in the last 2 years.

Medical Event	Date

Other Team Members Seen for Tests and / or Treatments

What other tests or treatments do you receive from health team members outside of this clinic? Include all tests and treatments and the corresponding health care team member information e.g., specialists, chiropractor, physiotherapist, etc.

Name of Test or Treatment	Frequency and/or Date	Health Team Member Name	Contact Number

Modifiable Lifestyle or Risk Factors

Specific lifestyle or risk factors, such as tobacco use, regular physical activity and diet can impact a person's health. Is there anything that you would like to share with me about what you are doing well in these areas or what you would like to improve?

Areas where doing well:	Areas for improvement:

What is your smoking status?

Non-smoker ☐ Ex-smoker ☐ Smoker with desire to quit ☐ Smoker actively quitting ☐
Smoker with no plans to quit at this time ☐ Other ☐ Specify:

Comments: *(e.g., if ex-smoker, length of time since quitting, type of product smoked)*

Medical and Assistive Devices

Are you currently using any medical or assistive devices?

None ☐ Wheelchair ☐ Oxygen ☐ Other ☐ Specify:

Advance Care Planning

Have you thought about, talked about with family and friends and written down wishes for your health care in the event that you are incapable of consenting to or refusing treatment or other care? Would you be interested to have guidance or assistance to prepare a personal care directive?

I have a personal care directive Yes ☐ No ☐	I have a Power of Attorney Yes ☐ No ☐
Do you have your goals of care documented? Yes ☐ No ☐	

Patient Name: _____ *Preferred Name:* _____

Alberta Health Care No.: _____ *Date of Birth:* _____

Comments:

Insert relevant information such as goals of the care designation, power of attorney contact information, etc.

PART B: Social History

Now that you have provided your medical history, this section captures other aspects of your life that may impact your ability to manage your health such as your finances, housing, and support systems. Is there anything in those areas that are impacting your health?

Do you ever have difficulty making ends meet (paying your bills) at the end of the month? Is there anything about your current employment situation or finances that would impact your health and wellbeing? Who covers the cost of medications and other services?

Is there anything you would like your care team to know about your housing situation? Do you feel safe where you live?

Do you feel you have enough support at this time to manage your health? Can you tell me more about your supports? Are there any community resources or services that you use (e.g., transportation services, food services, group support meetings, etc.)?

PART C: Goals and Action Plan

The section below builds on the information you've provided above by capturing some potential goals and actions that can be taken to better manage your health and improve your quality of life.

What you want to achieve and why it is important to you

Please share what matters to you personally and what you want to achieve so you have the best quality of life and health outcomes.

e.g., I want to have my diabetes managed (A1C below 8) so I can travel to Ottawa in the fall for my daughter's wedding.

Where you need to start

There are a number of areas you can work on to achieve your goal(s) listed above. The list below helps to determine what area is the highest priority for you.

Priority (1=lowest priority; 5=highest priority. The same number can be assigned more than once.)

1. Monitor and manage symptoms (e.g., pain, dizziness, weakness, blood sugars)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ N/A
2. Engage in specific treatment activities (e.g., physiotherapy, foot care, mental health, wounds)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ N/A
3. Attend services and appointments (e.g., lab work, specialist, education sessions)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ N/A
4. Monitor and manage triggers and risk factors (e.g., alcohol, tobacco, recreational drugs, stress)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ N/A
5. Monitor and manage healthy lifestyle factors (e.g., physical activity, nutrition, mood, social support)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ N/A
6. Manage medications (e.g., right dose, side effects, medication review)	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ N/A

Action Plan

What specific actions you need to take to achieve your goal(s)
(SMART Goal – Specific, Measurable, Attainable, Realistic, Timely):

e.g., I will work on monitoring and managing my symptoms. I will do this by checking my blood sugar every morning before breakfast. I write down my result in my log book so I can work towards my A1C coming down and be able to go to my daughter's wedding.

Patient Name: _____ *Preferred Name:* _____

Alberta Health Care No.: _____ *Date of Birth:* _____

	Is there anything you think of that might get in your way? How could you work around these things?
	e.g., I will need to set a regular reminder on my cell phone to remember to check my blood sugar each morning before breakfast and I will put my log book beside my glucometer so I remember to write my numbers down.
	How confident are you that you can achieve the above goal and action plan?

1	2	3	4	5	6	7	8	9	10
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Low				Medium					High

We (the physician and patient/agent) have discussed this care plan and the patient/patient agent has received a written copy of it. A similar document has not been completed with another physician in the past twelve months.

Date (yyyy/mm/dd)	Patient and/or Agent Name	Patient or Agent Signature
Date (yyyy/mm/dd)	Physician Name	Physician Signature

Appendix B: Sample Common Problem Lists/ Diagnostic Codes Lists for Primary Care for standardized EMR data capture

These examples were from real clinics or PCNs

Example 1: TOP 32 CODES

SYSTEM	CODE	DIAGNOSIS
Endocrine	250	Diabetes
	244	Thyroid (hypo)
	279	Obesity
	272	⬆ Lipids
Neurological	340	M.S
	345	Epilepsy
	346	Migraines
	434	Stroke
	780.5	Sleep Disturbance
MSK	723	Cervical Disorder
	715	OsteoArthritis
	714	Other Inflammatory Polyarthropathy (Rheumatoid Arthritis)
	729	Fibromyalgia
	724	Back
	781	Chronic Pain
Psycho	311	Depression
	300.0	Anxiety
	290	Dementia
Respiratory	496	COPD
	493	Asthma
CVS	428	Health Failure
	427	Arrythmia
	414	Coronary Artery
	401	Hypertension
	443	Peripheral Vascular Disease
GI	564	Functional GI Disorders
Renal	585	Chronic Renal Failure
OB/GYN	628	Infertility
	626	Menstrual Disorders
	627	Menopausal Disorders
ADDICTIONS	305.1	Smoking Dependency Syndrome
	303	Alcohol Dependency Syndrome

Created by the Red Deer PCN

Example 2:

Sample Standardized Problem List (simplified without using ICD9 codes)		
Addiction	Depression	Obesity
ADHD	Diabetes	Obstructive Sleep Apnea
Alcoholism	Down's Syndrome	OCD
Alzheimer's Disease	Eating Disorder	ODD
Amputation	Epilepsy	Other
Anemia	Erectile Dysfunction	Panic Disorder
Aneurysm	GERD	Paralyzed
Angina	Glucose Intolerance	Paraplegia
Anxiety	Gluten Intolerance	Parkinson's Disease
Asthma	Grave's Disease	Personality Disorder
Autism	Hemophilia	Phobia
Bell's Palsy	Hepatitis	PMDD
Bipolar Disorder	Hepatitis B	PMS
Blindness	Hepatitis C	Psychosis
Borderline Personality Disorder	High Blood Pressure	PTSD
Cancer	High Cholesterol	Reactive Attachment Disorder
Celiac Disease	HIV	Schizoaffective
Cerebral Palsy	HPV	Schizophrenia
Chronic Pain	Insomnia	Seasonal Affective Disorder
Cluster B Personality Disorder	Learning Difficulties	Seizure Disorder
COPD	Learning Disability	Sensory Processing Disorder
Crohn's Disease	Major Depressive Disorder	Tourette Syndrome
Dementia	Mood Disorder	

Created by Edmonton Oliver PCN

Appendix C: Lists of scanned document index words/keywords

These examples are from real clinics.

Example 1:

- ALLERGIST
- Appointment
- Appt Confirmation
- CARDIOLOGY
- Care Plan
- Care Plan - Signed
- Chart
- Colonoscopy Report
- Colposcopy Report
- Consult Letter
- CT Scan
- DERMATOLOGY
- Discharge Summary
- Driver's Medical
- ECG Graph
- ECG Report
- ENDOCRINOLOGY
- ENT
- Forms
- GASTRO
- GEN SURGERY
- Total Hysterectomy
- INTERNAL MED
- Lab
- Lab – Provincial
- Mammogram
- MRI
- Neurology
- Neurosurgery
- Notice of Admission
- Notice of Discharge
- OBGYN
- OPD Sheet
- Ophthalmology
- OR Report
- ORTHO
- Pap Report
- Parking Placard
- PEDIATRICS
- PLASTICS
- Pre-op Medical
- Referral
- Report
- Requisition
- RHEUMATOLOGY
- Rx Adaptation
- Rx Refill
- Ultrasound
- UROLOGY
- Vascular
- WCB
- Xray

Example 2:

- Admit
- Air Contrast
- ALT
- Anti-HIV
- Anti-Nuclear (ANA)
- Appointment Notice
- Attending physical statement
- Audiology Report
- Beta HCG
- Biopsy
- Blood Culture
- Blood Type
- Blue Cross Authorization
- Breast Ultrasound
- Body Fluid Culture
- Bone Density
- Bonnyville Cancer Centre
- Bubble Pack Authorization
- C-reactive Protein
- Care Plan
- Care Plan - Signed
- Cat Scan
- CEA
- Cervical Culture
- Chart Notes
- Chart Request Acknowledgement
- Chemistry
- Child Welfare Medical
- Chlamydia
- Claims Management Program
- Colonoscopy Report
- Colposcopy Report
- Consult
- Creatinine
- Critical Care Line
- Cross Cancer
- Cytology Report
- Diabetic Consult
- Discharge Instructions
- Discharge Summary
- Double Contrast
- Driver's Medical
- ECG
- Echocardiogram
- EA screen
- Endoscopy
- Ferritin
- Free testosterone
- Gastroscopy
- GC Probe
- Gynecological Cytology Report
- HBA1C
- Hematology
- Hepatitis
- Home Care
- Total Hysterectomy
- Imaging
- Influenza
- INR
- Iron and TIBC
- Lipid Testing
- Mammogram
- Medical release and report
- Medications
- Mental Health
- Microbiology
- Millard Health WCB
- MRI
- MRSA
- Newborn Metabolic Screen
- NIHB Drug Exception
- No Show
- Occult Blood
- Oncology Imaging
- OPD
- Operative Report
- Ova & Parasite
- Pap
- Pathologist Comment
- Patient Photo
- Perinatal
- Phenytoin
- Physician Admit Advice
- Pre-op medical
- Prenatal
- PSA
- Psychogeriatric Consult
- RAAPID North Patient Summary
- RAH
- Rapid Plasma Reagin Test
- Release of information
- Rx adaptation
- Rx request
- Serum Protein Elect.
- Slick
- Sputum Culture
- Stool Culture
- Superficial Culture
- Surgical Pathology Report
- Syphilis
- TB Update
- Throat culture
- Tom Baker Cancer Centre
- Troponin
- TSH
- UAH
- Ultra Sound
- Urethral Culture
- Urine Microalbumin
- Vaginosis Screen
- Vital Aire
- VRE
- WCB
- Wound Culture
- X-ray

Appendix D: Calculating Panel and Clinic Confirmation Rates Worksheet

Calculating Panel and Clinic Confirmation Rates Worksheet

Confirmation Rates for Dr. ____________________

3 Month Confirmation
Number of patients confirmed in last 3 months / Number of Patients seen in last 3 months ________ X 100 = %

Panel Confirmation
Number of patients confirmed in last 3 years / Number of Patients seen in last 3 years ________ X 100 = %

Confirmation Rates for Dr. ____________________

3 Month Confirmation
Number of patients confirmed in last 3 months / Number of Patients seen in last 3 months ________ X 100 = %

Panel Confirmation
Number of patients confirmed in last 3 years / Number of Patients seen in last 3 years ________ X 100 = %

Confirmation Rates for Dr. ____________________

3 Month Confirmation
Number of patients confirmed in last 3 months / Number of Patients seen in last 3 months ________ X 100 = %

Panel Confirmation
Number of patients confirmed in last 3 years / Number of Patients seen in last 3 years ________ X 100 = %

Confirmation Rates for Dr. ____________________

3 Month Confirmation
Number of patients confirmed in last 3 months / Number of Patients seen in last 3 months ________ X 100 = %

Panel Confirmation
Number of patients confirmed in last 3 years / Number of Patients seen in last 3 years ________ X 100 = %

Clinic Confirmation Rate (All Physicians)

3 Month Clinic Confirmation

Number of patients verified in last 3 months by all physicians in the clinic / Number of Patients seen in last 3 months by all physicians in the clinic _____ X 100 = %

Clinic Panel Confirmation

Number of patients verified in last 3 years by all physicians in the clinic / Number of Patients seen in last 3 years by all physicians in the clinic _____ X 100 = %

Date: ____________________

* For Panel Confirmation Rates, use 3 years or date since practice opened if less than 3 years)*
If validating every visit you can pull this weekly or monthly. If validating every 6 months or yearly, then change the 3 month interval to what your interval is.

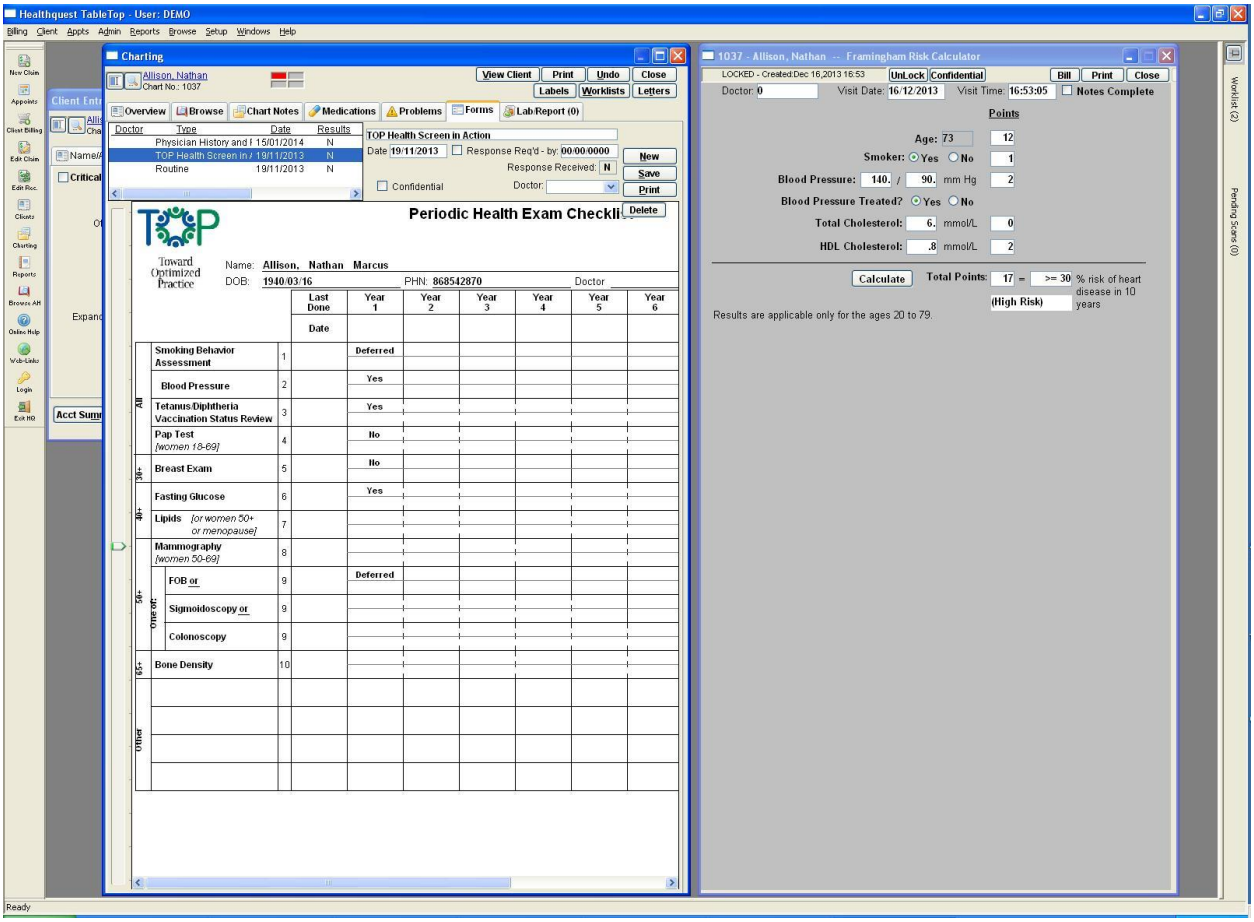
January 2017

Created by Highlands PCN

Appendix E: High Value Efficiency Tips

1) Multiple Items Open

It is useful to see two or more chart notes; patient history sheets or forms open at the same time during a patient encounter. While in the charting menu 'Overview' Tab, move your cursor over the desired chart note or form. 'Single' click on the note. Now, hold down the 'Ctrl' key on your keyboard then 'Right-mouse' click. The form opens in a new window. Repeat to open another form or choose a New to open a new form or chart note.

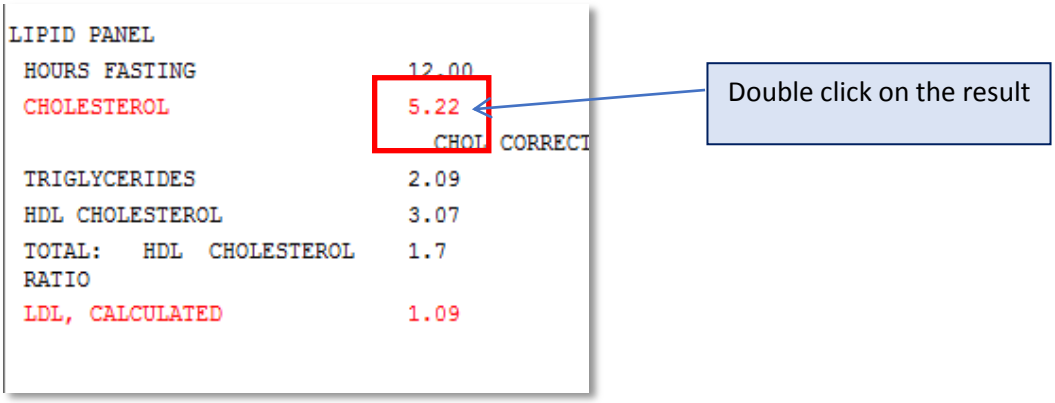


TIP:

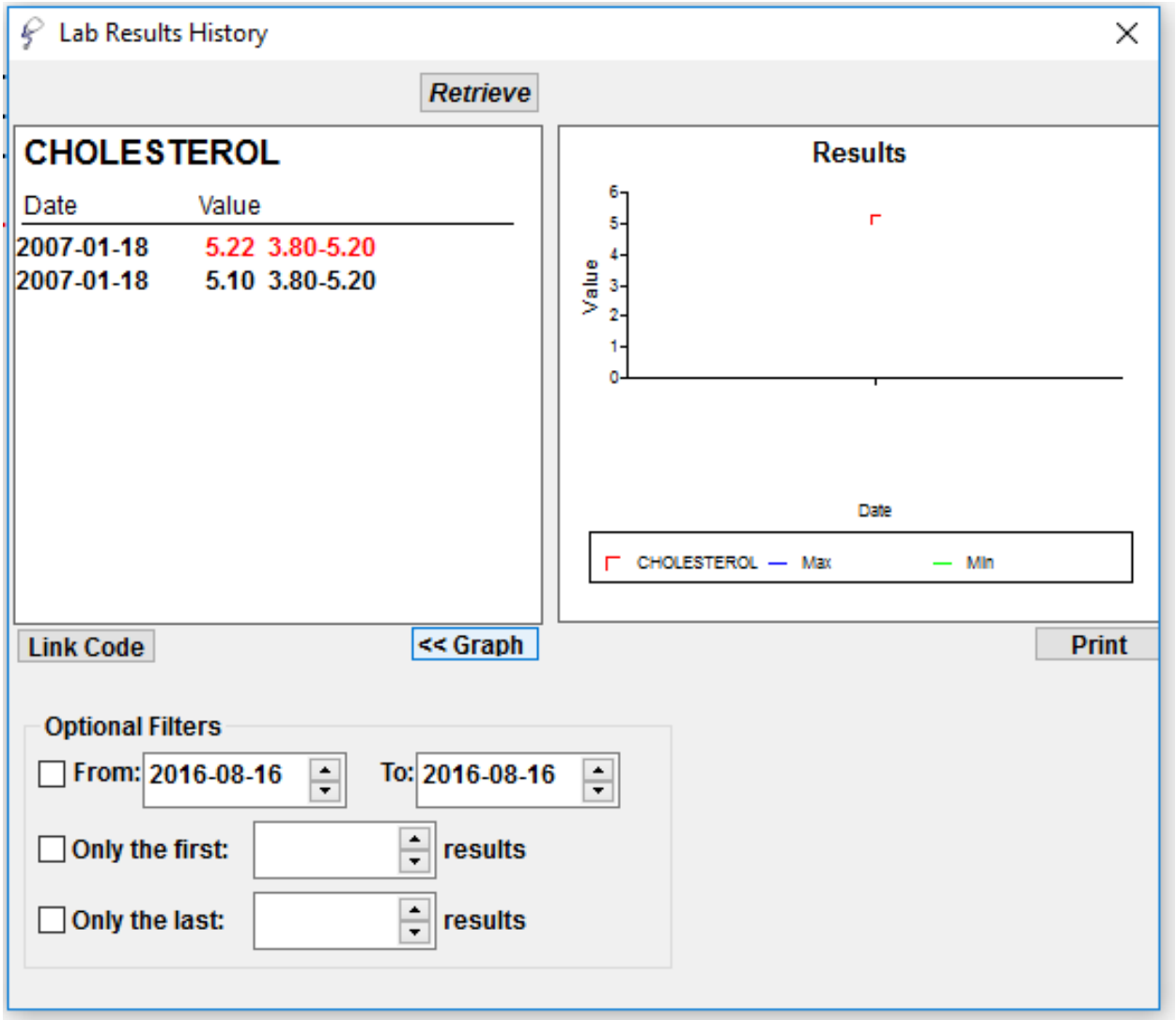
Ctrl – Right mouse click to open two or more chart notes, forms or patient

2) Lab Results History

When viewing lab results for a patient, double click on the result.



A "Lab Results History" window for that lab will appear, including a graph. Filters are optional.

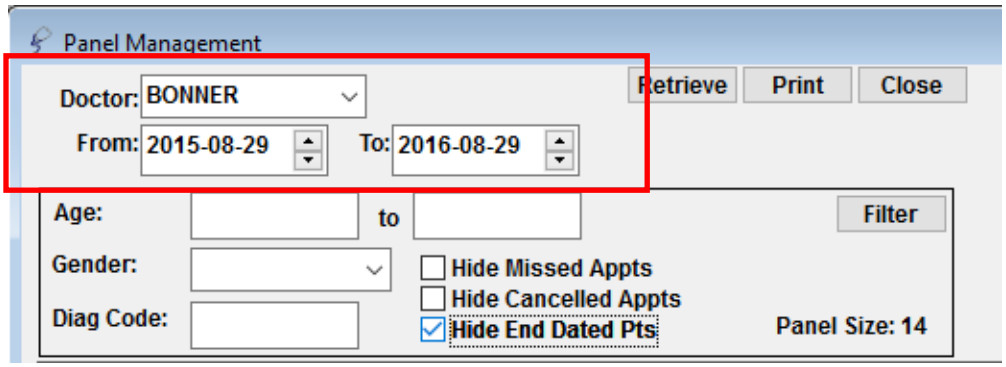


3) Panel Management Report

There is a useful report available called “Panel Management”. It is available in **Reports > Statistics > Panel Management.** What this report will provide is a list of patients for a given provider. It can be filtered by gender, age and by diagnostic codes. This report will pull all patient types (including WCB and deceased patients). To ensure end-dated patients are not selected check off “Hide End Dated Pts”.

A **Panel Manager** may use this report to assist in identifying patients attached to a provider that have certain diagnostic codes. This may assist in forming disease registries or identifying patients with certain diagnosed conditions for consideration for referral to a PCN multidisciplinary team member.

To use this report at a minimum, select a doctor and appointment dates. Once the list is generated it is possible to filter by age, gender and diagnostic codes.



The resulting report will look like this:

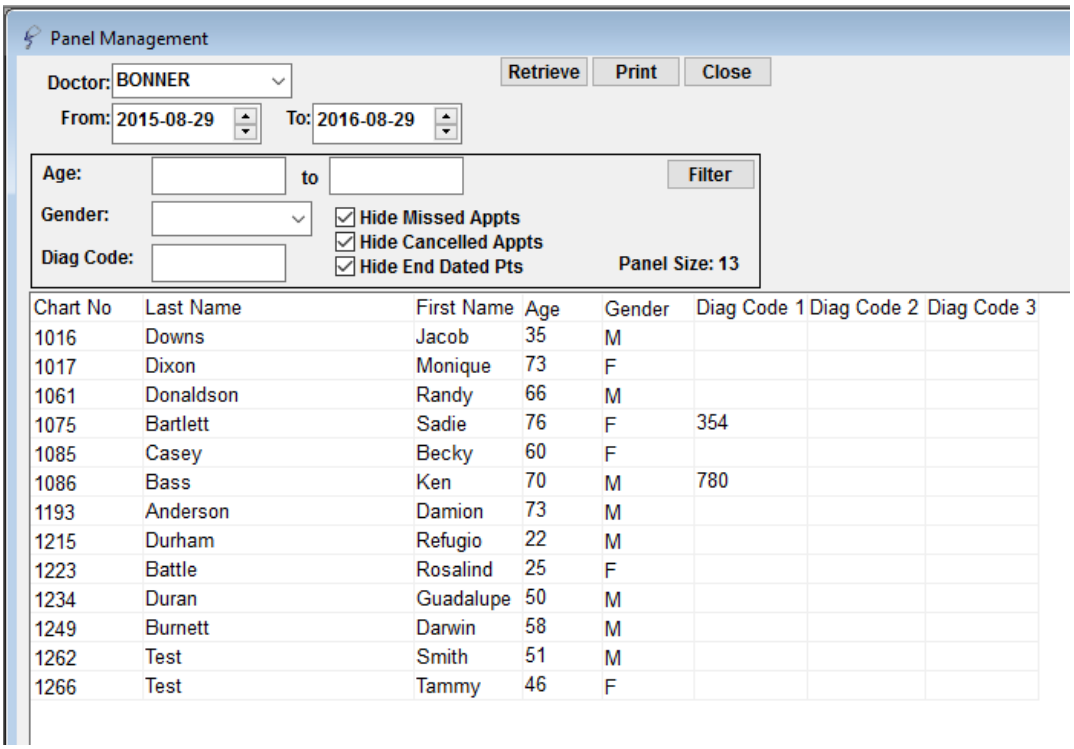
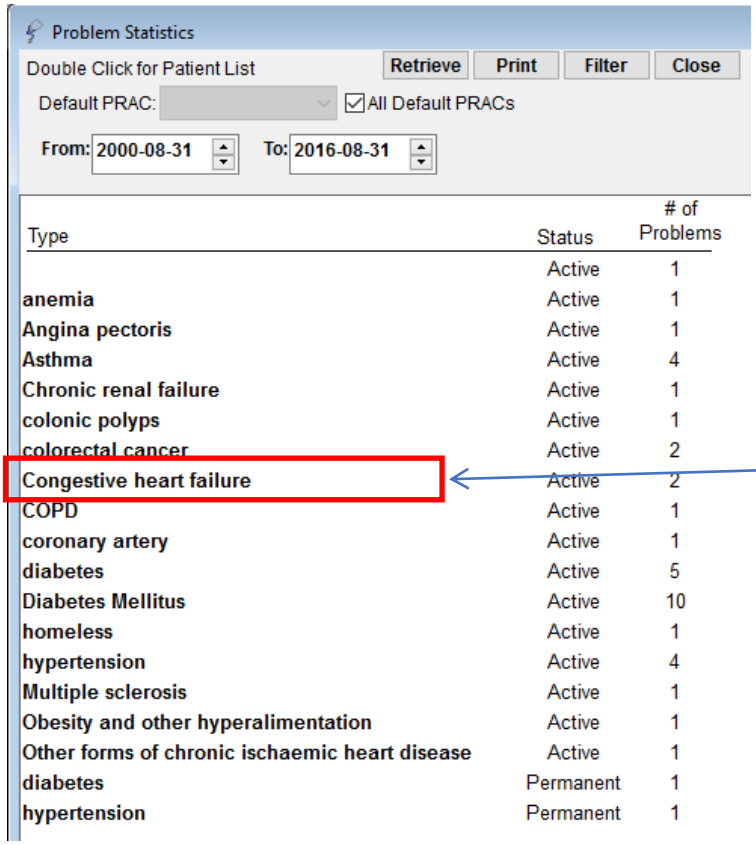


Chart No	Last Name	First Name	Age	Gender	Diag Code 1	Diag Code 2	Diag Code 3
1016	Downs	Jacob	35	M			
1017	Dixon	Monique	73	F			
1061	Donaldson	Randy	66	M			
1075	Bartlett	Sadie	76	F	354		
1085	Casey	Becky	60	F			
1086	Bass	Ken	70	M	780		
1193	Anderson	Damion	73	M			
1215	Durham	Refugio	22	M			
1223	Battle	Rosalind	25	F			
1234	Duran	Guadalupe	50	M			
1249	Burnett	Darwin	58	M			
1262	Test	Smith	51	M			
1266	Test	Tammy	46	F			

4) Problem Statistics Report

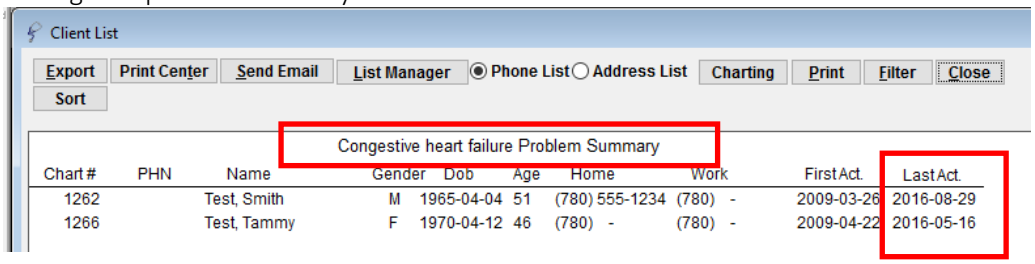
The Problem Statistics Report is available from **Reports > Statistics > Problem Statistics**. This report will produce a list of problems coded in the EMR for given dates. Double click on each problem type to produce a list of patients with this problem. This list can be produced for all Default PRACs or filtered by Default PRAC.



Double click on the problem to produce a list of patients with that Problem recorded in their Problem List

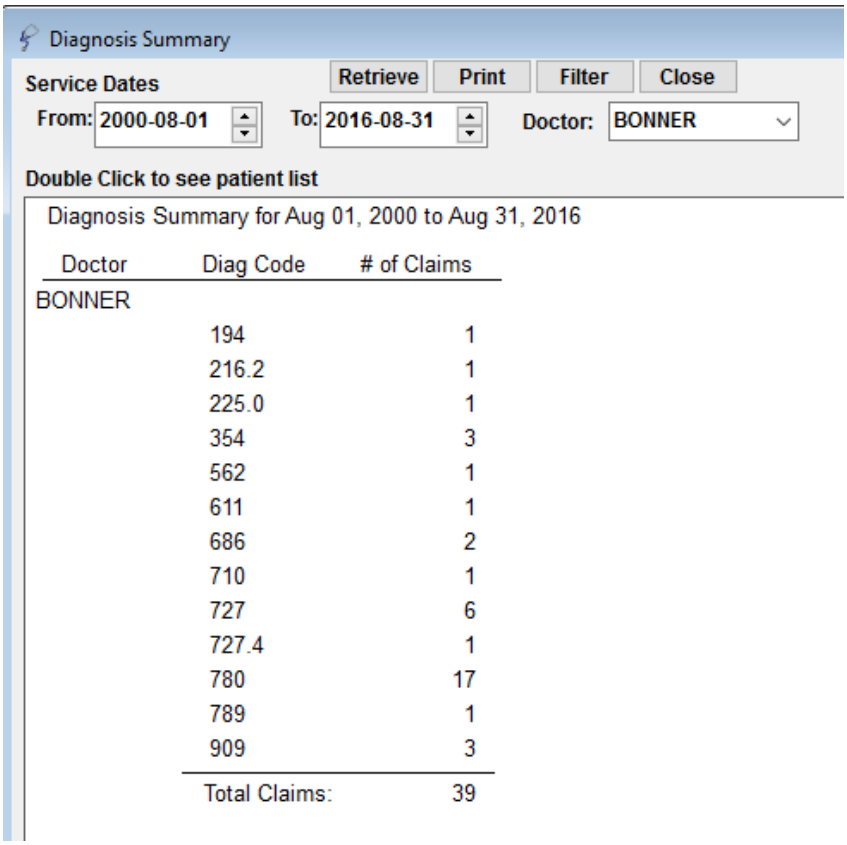
This report would be useful for:

- A panel manager assisting a clinic in problem list clean up or in disease registry development with the clinic team. It provides a list of problems used. For clinics that are working on problem naming conventions and clean up this list will inform the conversation toward consistent naming.
- For identification of patients suitable for visits with a PCN multi-disciplinary team member or clinic
- When the client list is produced for a given problem the "Last Act" date may inform a panel manager of patients that may be due for care



5) Diagnosis Summary Report

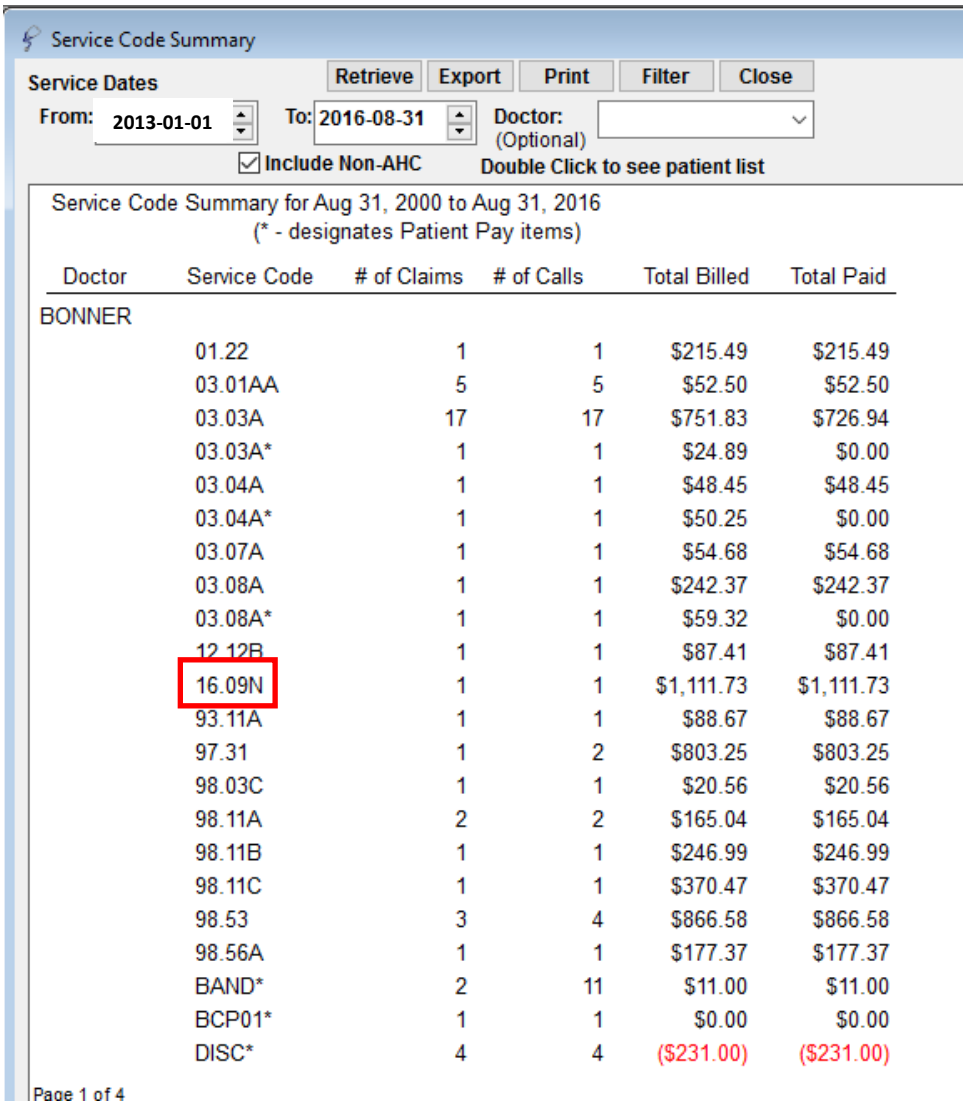
The Diagnosis Summary report is available in **Reports > Statistics > Diagnosis Summary**. It provides a list of diagnostic codes by provider for selected period of time. Double click on a diagnostic code to produce a list of patients that the provider applied to the code to.



This report may assist a panel manager in assisting a clinic in developing their disease registries. For example, it is possible to identify patients with a diagnostic code but the problem has not been listed in the patients Problem List.

6) Service Code Summary Report

There is a useful report called "Service Code Summary". It is available in **Reports > Statistics > Service Code Summary**. This report will provide a list of service codes used (optionally by provider); double click on the service code a list of patients to which that that code applies. A **panel manager** may user this report in initial panel clean up or for ongoing panel maintenance to identify groups of patients that may be in the EMR and ensure that the patients are attached to the appropriate Default PRAC.



Look for codes for hospital billing codes, long term care (03.03E) or services that the practices provide, such as a vasectomy or aesthetics, that may include non-panel patients.

7) Problem List Auto-Populate from Chart Notes

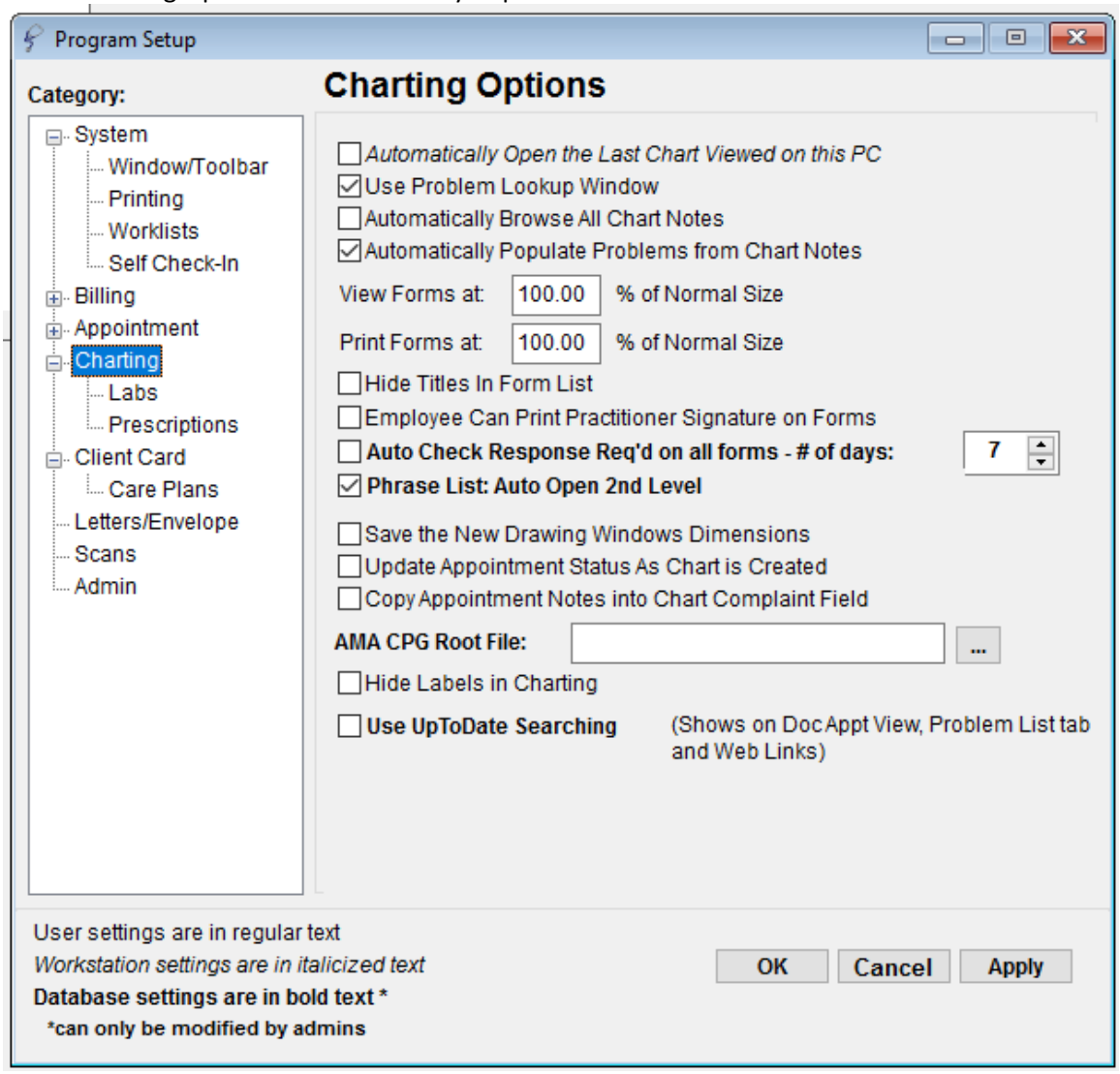
This workflow will assist in adding problems to a problem list which:

- Building disease registries at the practice
- Assists in team work for proactive panel based disease management

This setting must be configured by user.

Set-up

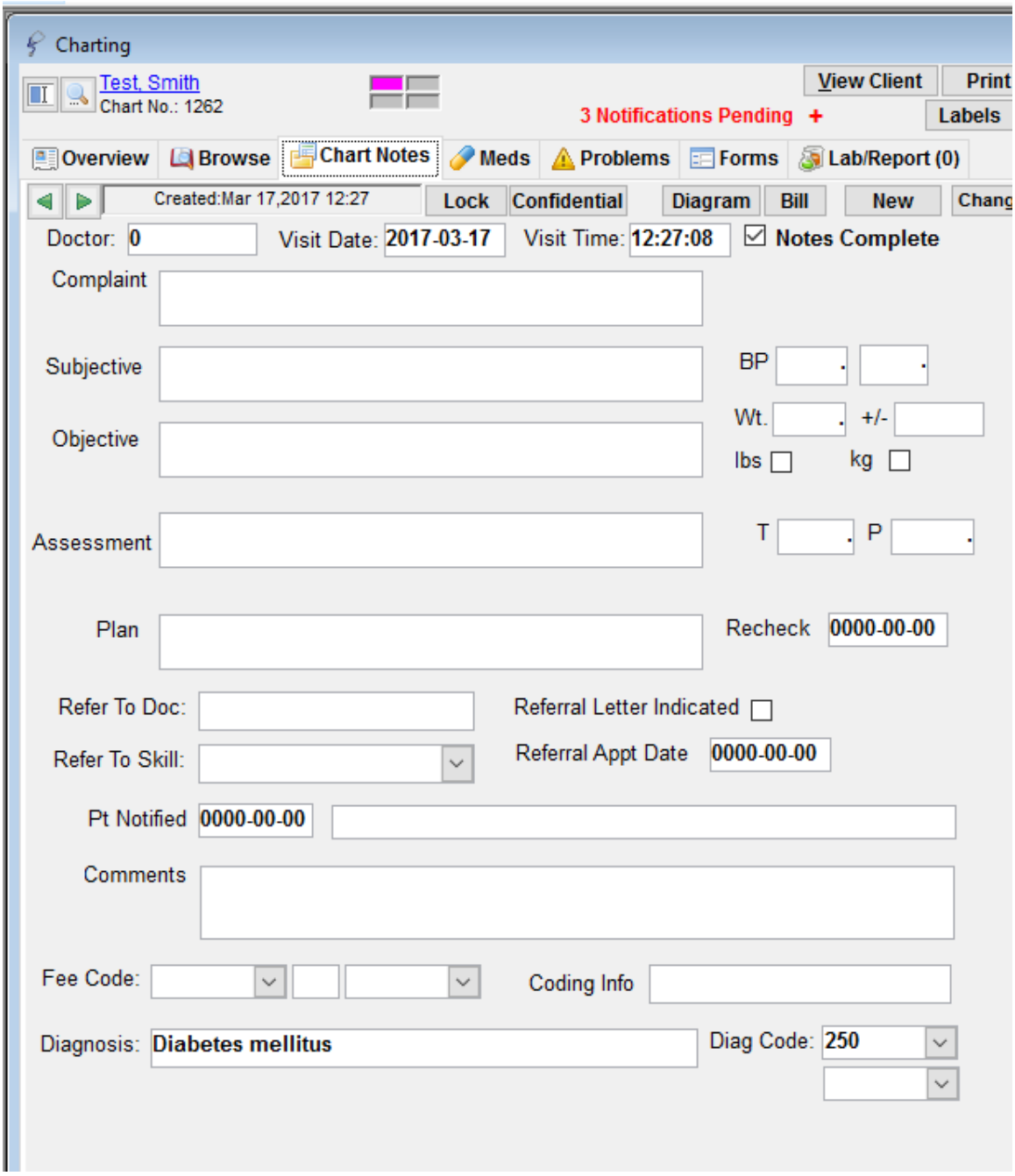
1) In the top menu got to Setup > Program Setup
2) Click on Charting
3) Select Charting Options: "Automatically Populate Problems from Chart Notes"



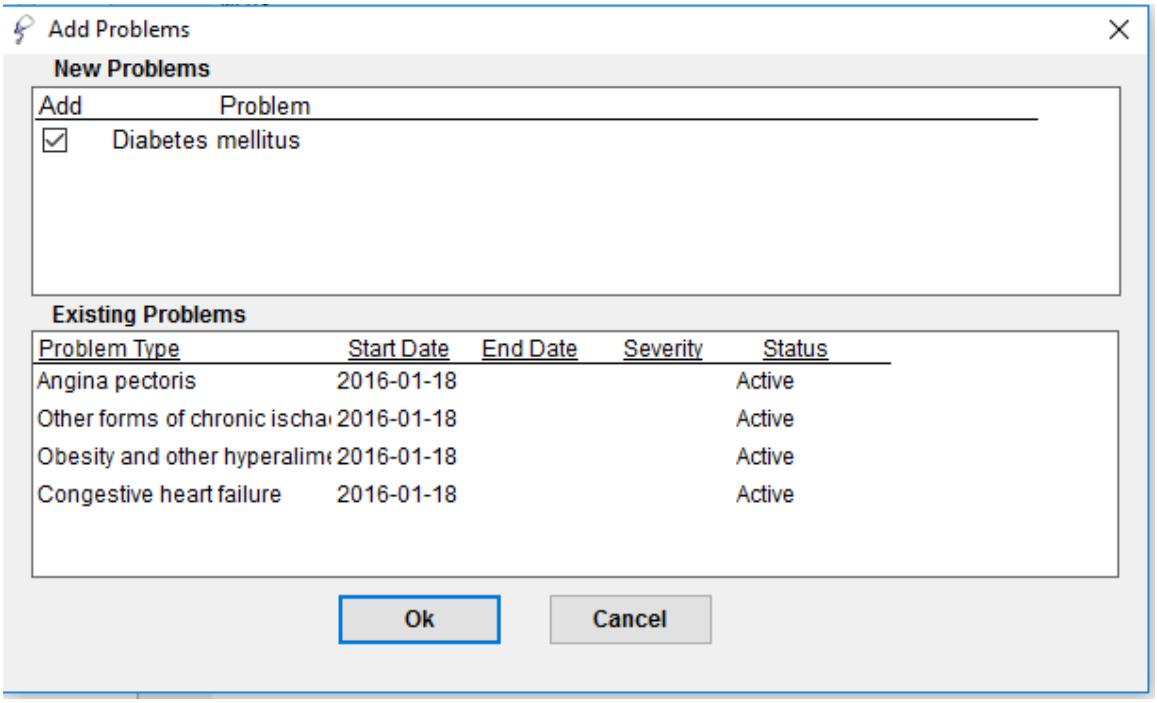
4) Click "Apply" and "OK"

To Use:

When charting in a Chart Note and a Diagnosis code is added to the chart note and then the Notes Complete box is checked,



"Add Problem" box will pop up:



When you click OK, the new problem will be added to the problem list.