Using Practice Solutions Suite to Support 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 will enable ‘Panel & Continuity’, knowing which patients are active with 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.
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 EMR functionality for adoption and use.

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 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 Coordinators, etc.)

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
     - utilizing standardized text or macros (common repeated text) whenever possible instead of free text
     - develop 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)
     - develop and provide staff education with associated job aids for 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)
     - where appropriate, to more clearly identify who documented the information in the chart, it is recommended to use the individual initials in areas outside of chart notes (e.g., in demographic notes or while providing a reason for a bulk/batch change)
   - 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 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.

**References**

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


Phase 1


Phase 2

Help Files

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

- The Help files are available through the main menu when logged into PS Suite.

- PS Suite User Guide for Alberta

  The help files are available as a pdf document that you can download and save to your local computer for quick reference. The most recent versions for Alberta are available on the Telus Health Community Portal. Monitor the Release notes to see when new versions are available.

  To quickly access the most recent User Guide, search the Knowledge tab on the Community Portal with a search term such as “user guide alberta”.

- PS Suite Community Portal:

  https://telushealthcommunity.force.com/pssuitecommunity/thsitelogin

  The community portal is designed for PS Suite users and all users can create an account. On the portal you can:

  - Access Knowledge articles, videos, webinar recordings, learning aids, release notes and user guides.
  - Post questions in a Q & A section answered by Telus Health or other users on the portal.
  - Access the Custom Forms Libraries

  If you have not done it already, visit the site and register for an account. Many links are provided in this document that will link to the portal documents if you are logged in.
There is a Community Portal Guide available once you are logged into the portal:  
https://telushealthcommunity.force.com/pssuitecommunity/servlet/fileField?id=0BE800000008S8m

- **Weekly Teleconferences**

PS Suite also hosts a weekly Q&A session called “Ask a PS Suite Expert” which are every Wednesday 12:00 EDT, or 10:00am Alberta time. Details are available on the community portal. In the knowledge section search “ask an expert” for details.

Help files specific to certain topics will be highlighted throughout this document.
Panel Identification

Patient Panel Definition

A patient panel, or roster, lists the unique patients that have established relationships with a provider. There is an implicit agreement that the identified physician will provide primary care services. Relational continuity, or an ongoing relationship between a physician and a patient, is a key objective of establishing a patient identification process.

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)
  - You have the ability to “favourite” the patient’s preferred number by clicking the star next to the preferred number.
- Primary provider
  - There are 3 fields in the patient’s demographics that appear logical for indicating the primary provider:
    - Patient’s MD/NP
    - Family MD/NP
    - Primary Provider

It is intended by PS Suite that primary care practices use the first option of Patient’s MD/NP to indicate the most responsible provider. The User Guide/Help file contains information on when the other options are recommended.

- Patient status (Active or Inactive)
  - Patient Status
  - Patient Status Date
- Alberta Patient Healthcare Number (PHN)
Verification

PS Suite does not have a unique field for indicating that patient demographics have been verified. There are 2 alternative processes that can serve this purpose:

**Patient Status Date (Preferred Option)**

This field will auto stamp the current date when the status is changed. As it is unlikely that the patient status will change at each verification, just the Patient Status Date can be changed. By tabbing to this field or by double clicking in it, the text will highlight and the letter “t” can be typed in. This will change the date to “today’s date”. This field is searchable.
An example search and calculation to tell you how well you are doing with this process is found in the section, Verification Rate.

Comments Box
The comments section can be used to track if and when patients have been verified as it is a searchable field. This process requires all staff to enter a consistent word or phrase into the comments section and then a search can be created to find patients with this exact phrase. The search engine is limited to finding just the phrase and not the date it was entered in. Thus, the comment would have to include something like “ver2016” (to indicate the verification took place in 2016) so the date could be determined. In this example of using the year, you could only find patients verified in the calendar year and you would not know which month it was done. In addition, the search would need to be updated as the phrase is changed.

Another consideration when using this field is that the clinic may wish to use it for another purpose and there are limited characters available in this field. Thus using the Patient Status Date (described above) field is preferred.

Configuring Status
PS Suite does not have the ability for users to create a custom status. The provided list has a good selection of inactive options to categorize patients, but only one active status. It is recommended that each clinic define exactly which patients fall into each category and who in the clinic can change what status. For example, in some clinics only the primary physician marks a patient deceased.

In order for a patient to be billed, they must have a status of Active.

The available options in PS Suite are shown on the right.

Alternative Options when Another Status is Required
Other Provider
If additional statuses are required to categorize non-panel patients, another option is to use the Other Provider field. The option is found at the bottom of the demographics page.

You will need to create a non-billing provider in the system to suit your needs, such as Dr. Maternity or Dr. IUD. You may need to contact Telus Health in order to add another user to your system.
Because these patients will have an **Active** status, you may need to either exclude these patients from your searches and reminders or specify the physician you wish to execute the search/reminder on for each search you create.

Your needs for classifying patients may also be met with the Cohorts feature. The Cohorts feature is covered in Appendix 7.

**Comments Box**

If you enter information into the **Comments** field in a standardized manner, this information is searchable and patients with a certain phrase can be excluded from your search.

One limitation of this approach is that the Comments field has a limited number of character and if being used for other purposes and alerts it may not work for all patients.

**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 **Searches** feature in PS Suite.

Including the date of the last visit 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)

To produce this patient list, go to the main toolbar in the **Records** window and select **Settings > Edit: Searches**.
The **Edit Searches** window will open. On the left side existing (saved) searches will be listed.

To create your new search for your provider panel list:

1. Click on the **Add Search** button at the bottom of the window. The window will open to allow you to enter the criteria for your search.

2. The cursor will be in the box at the top of the window which is prompting you to name your search, which you must do to move onto the next step. In this example, we will create a search for Dr. McCaffrey. We will name our search “Panel-McCaffrey”.

3. Click on **Add Line** to begin defining criteria for your search.
4. A new window will open where you can begin adding search criteria. In this example we select the physician we are looking for and click OK. *(Doctor Number is the preferred criterion.)*

5. The next step is to limit the search by searching active patients only, then click OK.
6. The next step is to add the criteria for last seen date. Click **Add Line** which will take you back to add more criteria (PS Suite automatically inserts an “and” between the lines). Select **Last Seen Date**. For this criterion that you can specify the exact date (this would need to be changed each time you run the search) or you can select how many days, months or years to look back. In this example we are looking for patients seen within the last 36 months. Once again, click **OK** to add the line.

*As of the writing of this document, this field is not fully functional in Alberta clinics. The **year, month and date** criteria are not accurate. Use of the **whole date** feature is recommended if your results are not accurate. The date will need to be changed each time the search is performed. This is easily enabled by using the **Ask When Run** checkbox (seen above below the box with the “36” in it) when building the search. By using this checkbox, you will be prompted to enter a date each time your run the search which you can set at 3 years from the current date.*

7. Click **OK** and you will be taken back to the **Edit Searches** window where you will see the search that includes the 3 criteria you just specified.
8. Click on **Perform Search** to execute the search.

9. At this next window, if desired, you can customize the columns that appear on the search by using the **Add Column** button. Next a window that opens where you can select **Search** to get the patient list.
10. You will be provided a list of patients such as in the example below.

<table>
<thead>
<tr>
<th>Patient</th>
<th>First Name</th>
<th>Surname</th>
<th>Age</th>
<th>Home Phone</th>
<th>Business Phone</th>
<th>Mobile Phone</th>
<th>Privacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>102</td>
<td>Baby</td>
<td>PSS</td>
<td>6</td>
<td>780-433-1234</td>
<td>780-555-1234</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103</td>
<td>Mommy</td>
<td>PSS</td>
<td>38</td>
<td>780-555-2345</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>105</td>
<td>Female</td>
<td>Test</td>
<td>40</td>
<td>780-555-9876</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>106</td>
<td>Ronnie</td>
<td>MacDonald</td>
<td>50</td>
<td>780-555-2345</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>107</td>
<td>Donald</td>
<td>MacDonald</td>
<td>53</td>
<td>780-555-9876</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>108</td>
<td>Barney</td>
<td>Miller</td>
<td>60</td>
<td>780-555-9876</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>109</td>
<td>Dudley</td>
<td>Moore</td>
<td>65</td>
<td>780-555-9876</td>
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<td></td>
</tr>
<tr>
<td>110</td>
<td>Maryanne</td>
<td>Martin</td>
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<td></td>
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<tr>
<td>111</td>
<td>Henry</td>
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<td></td>
</tr>
<tr>
<td>112</td>
<td>Debbie</td>
<td>Diabetes</td>
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<td>113</td>
<td>Emily</td>
<td>Emers</td>
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<td>430-999-9999</td>
<td></td>
<td></td>
</tr>
<tr>
<td>114</td>
<td>Sylvie</td>
<td>Scroenck</td>
<td>72</td>
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<tr>
<td>115</td>
<td>Margaret</td>
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<td>Jenny</td>
<td>Selfmanub</td>
<td>39</td>
<td>123-456-7800</td>
<td></td>
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<tr>
<td>139</td>
<td>Joseph</td>
<td>Notselfmanu</td>
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<td>987-554-3210</td>
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<td></td>
</tr>
<tr>
<td>140</td>
<td>Charles</td>
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<td>55</td>
<td>403-222-2222</td>
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<td>141</td>
<td>Janice</td>
<td>Jaycide</td>
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<td>143</td>
<td>Tina</td>
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<td>403-987-6543</td>
<td>403-234-5078</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number found: 23

Running a simple list like this will give you an indication of how large your panel is, whether you think it will need considerable clean up, and can also give you clues as to how your data is begin entered into the EMR. Further panel clean-up is assisted by additional searches in the EMR explored in the section below.

**TIP:** The list produced in PS Suite can be sorted by column by double clicking on the column header. It is also interactive where you can click on the patient name and open their chart. You can also export the list for further sorting and analysis in Microsoft Excel or Open Office Calc. Basic spreadsheet training is recommended if you will be exporting.

**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:
No Recent Appointment (and no future appointments)

Option 1: The panel list search shown in the previous section used the Last Seen Date criterion to find patients seen within the last 3 years (this search is based on a billing). We could do this next search using the same criterion but look for patients seen more than 3 years ago.

Demographics > Last Seen Date > whole date > is earlier than > <<insert date>>

Option 2: Another recommendation is to search based on the Progress Note criterion. The progress note must be created by a user so is typically a reliable indication that the chart has had activity. An exception where this would not be reliable are clinics that exclusively use Custom Forms to chart as these are not recognized in the search as progress notes.

Visits > Progress Note > months since latest > “>=” 36

TIP: If you save this search to use again in the future, you can check the Ask When Run box and when you execute the search in the future it will prompt you to add a revised date.
In the next part of this search we want to ensure that the patients we are finding with no recent appointment, do not have an appointment booked for some point in the future. Unfortunately, PS Suite does not recognize future dates in searches so an appointment in the future cannot be added as a search criterion.

We can however, get around this limitation by adding the column, “Next Appointment Date” into the search output.

When you are executing the search, click on the **Column Options > Patient Property > Demographics > Next Appointment Date > whole date**

<table>
<thead>
<tr>
<th>Patient #</th>
<th>First Name</th>
<th>Surname</th>
<th>Age</th>
<th>Home Phone</th>
<th>Mobile Phone</th>
<th>Privacy</th>
<th>Next Appointment Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>102</td>
<td>Baby</td>
<td>PSS</td>
<td>6</td>
<td>760-433-1234</td>
<td>780-555-1234</td>
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<td>587-777-7777</td>
<td>587-888-8888</td>
<td></td>
<td></td>
</tr>
<tr>
<td>122</td>
<td>June</td>
<td>Juniper</td>
<td>69</td>
<td>403-222-3333</td>
<td>587-444-5555</td>
<td></td>
<td></td>
</tr>
<tr>
<td>123</td>
<td>Tina</td>
<td>Topper</td>
<td>59</td>
<td>403-987-6532</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>124</td>
<td>Timothy</td>
<td>Topper</td>
<td>61</td>
<td>403-987-6532</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>125</td>
<td>Jane</td>
<td>Smith</td>
<td>55</td>
<td>503-987-6543</td>
<td>403-765-4321</td>
<td></td>
<td></td>
</tr>
<tr>
<td>126</td>
<td>Kevin</td>
<td>Smith</td>
<td>56</td>
<td>403-987-6543</td>
<td>403-234-5678</td>
<td></td>
<td></td>
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<tr>
<td>127</td>
<td>Jude</td>
<td>Smith</td>
<td>3</td>
<td>403-987-4321</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>128</td>
<td>Priscilla</td>
<td>Pregnancy</td>
<td>24</td>
<td>403-999-9999</td>
<td>403-888-8888</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For additional instructions on adding columns into your searches, please see the section on **Process for Adding Columns**.

Once this is added in you can click on the column header which will sort this column by date. By adding this column, you are able to see if any of the patients on your list have future appointments (as well as the date of the appointment). In the example above, you can see that 2 of the patients on the list have future appointments.
Age

Sorting the list of active patients by age is valuable. In viewing the list of active patients over the age of 95 years, a provider is usually able to indicate if there are patients on the list who should be marked as deceased. Age sorting criterion can be added by selecting:

Demographics > Age > “>=95”

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.

There are different ways you can find patients with no visits to the practice. One suggested option is to use the Progress Note criterion. Unlike many of the other options, you can look for the number of times a progress note was generated. Since the progress note has to be initiated by a user, it does not include patients that have only had labs pushed in, but were never at the clinic for an appointment.
Visits > Progress Note > number of times done > “>” 0

In the next part of this search we want to ensure that the patients we are finding with no visits to the practice, do not have an appointment booked for some point in the future. Unfortunately, PS Suite does not recognize future dates in searches so an appointment in the future cannot be added as a search criterion.

We can however, get around this limitation by adding the column, “Next Appointment Date” into the search output.

When you are executing the search, click on the Column Options > Patient Property > Demographics > Next Appointment Date > whole date

A screen shot of this process can be found in a previous section.

A more detailed description of adding columns to your search output can be found in the Searches section, under Process for Adding Columns.
Appointment Type/Reason

If the practice uses the appointment type or reason when scheduling visits, searching by this information may produce lists of patients that are not family practice panel patients such as ‘aviation medical’ or ‘Botox injection’

Select **Appointments > Containing.... >**

Then you must manually type in the name of the appointment in the box on the bottom of the window. You may need to first consult your scheduler to see the name of the appointment so you can type it in. The list of appointments is not available in the search.

This example is similar to the search for last visit date shown above. In this case, we are searching specifically by a type of appointment, for this clinic “cpx” (complete physicals). Because users create their own appointment type, you must manually enter the name of the appointment type you are looking for based on how you created it in your EMR. This can be especially helpful for clinics who provide specialty or consultative services (and who label the appointment accordingly) such as maternity care or surgical procedures.

Fee and Diagnostic codes

If a clinic offers specialty services to patients that are not members of the physician’s family practice, they may be identifiable by the fee/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.

- Fee and Diagnostic codes
  - In PS Suite Service Code = Fee Code
  - E.g., searching by procedures offered at the practice, but all the patients may not belong to the practice, such as vasectomy (fee code 75.64)
- Long term care patients are billed with an 03.03E fee code

Select Bills > Diagnosis Code or Procedure Code>

Then you must manually add in the code you wish to search into the box at the bottom of the window.

Diagnostic code searches can also be useful for searches to find patients with certain problems, that would best be coded on their problem list, but are not yet coded this way. Common examples are diabetic or hypertensive patients.

**Address or Postal Code**

Sorting of active patients by the country/province/city 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.

Select Demographics >

You can then limit by City, Province or Country; select according to your practice.
Last Name is Test

Most clinics have test patients that were created for training or practice purposes, for reporting and analysis they should not be included in the family practice panels.

Select Demographics > Surname > Contains > “Test”

**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 way they were not intended and this may impact the accuracy of reports.

**Bulk/Batch Actions**

Once the patient list is produced and sorted, you can apply a bulk change to the status to the entire list or a group within the list. Making bulk changes makes the process of initial clean-up and ongoing panel maintenance faster and easier. In PS Suite the clinic needs to produce the list and then contact PS Suite (1-800-265-8175) to obtain a permission code (changes daily) to make the bulk change.

Once you have your list and the permission code, in the search results window select Report > Utilities > Change Status for These Patients. Then enter in the permission code when prompted. Select the new status you wish the apply to the patients in the list.

Other bulk actions available in PS Suite include:

- Provider change (call Telus Health for assistance)
- Patient exports
- Bulk letters and labels
- Create a message for all patients on the list

**TIP:** Carefully verify data with the primary provider and/or care team before making a bulk change. You cannot “undo” bulk changes!
Panel Maintenance

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

Verification at Patient Check In

Ongoing phone/address data, physician attachment and status verification should be completed at every patient check in. Developing and monitoring a process for all staff that work at the front desk (see the recommended PS Suite Process by clicking here), with expectations for data verification, is required.

This process can be checked using Searches by running 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. An example search and rate calculation for this process is found later in this document in the section Verification Rate.

- Standard clinic and EMR workflows 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

Routine Searches to Maintain Panel

Conducting searches 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 are the same set described in the previous section on Initial Panel Clean-Up.

- Last Seen 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
- Patient Outreach
  - Some practices identify active 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 members of the practice. The outcomes of
the outreach involve updating the patient demographics, physician attachment and offers of preventive screening care.

Your PS Suite Panel Search

Once you have gone through the panel identification process and are actively maintaining your panel, including routine patient verification, ideally you will run your panel searches based on the date patients were last verified. This will be the most accurate panel list your clinic can create. Clinics will have to be confident that they have been verifying their patients at each visit.

For your criteria you can add to Doctor Number and Patient Status:

Demographics > Patient Status Date > whole date > is later than > <<insert date>>

The search window should look similar to this:

<table>
<thead>
<tr>
<th>Search Name: Panel – McCaffrey 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor Number = (1) Dr. Barbra McCaffrey and</td>
</tr>
<tr>
<td>Patient Status = Active and</td>
</tr>
<tr>
<td>Patient Status Date whole date is later than Aug 15, 2013</td>
</tr>
</tbody>
</table>

The search will find active patients of Dr. McCaffrey who were verified after August 15, 2013.
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.¹

The Patient’s Medical Home implementation element of ‘Organized Evidence Base 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 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 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 as due

Outreach

An outreach method to panel management involves identifying active, paneled patients overdue for clinical services that do not have appointments and ‘reaching out’ to offer care. This process involves using the Searches and Reminder Reports in PS Suite 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 verifies that he is still a patient in the practice attached to his paneled physician. * As


In Alberta, there are many different names for the individuals who coordinate the opportunistic and outreach care of patients. Some examples include Panel Manager, Panel Coordinator, or Patient Care Coordinator.
per clinic protocol, 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 if/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: Practices can combine contacting patients for panel clean-up with offers of screening. Once it is confirmed that the patient is attached, the offer of screening can be made in the same call.

Panel Management: How to Get Started

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

Panel Identification & Maintenance

Panel Lists
Patient Verification

Preventive Screening Care

Foundational Learning
Simple to Complex Reminders
Reporting

Disease Management

Disease Registries
Proactive Panel-based Care
More Complex Reminders

Complex Patients

Automated processes to support uncommon care requirements
With ICD-9 codes in place identify complex patients for systematic care
Preventive Screening Care

- Preventive screening care involves a smaller number of data elements than disease management.
- There is benefit to starting with some reliable of data like electronic lab feeds that don’t require standardization of data entry.
- Clinic team will learn:
  - the importance of standardization and naming protocols for scanned documents (e.g., mammograms and colonoscopy reports)
  - to understand patterns in their data entry and can make corrections for future meaningful use
  - practice standard operating procedures on how to leverage the EMR to enable proactive panel-based care
- The searches and global reminders 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 global reminders are set for (e.g., gender and age)
- Provides a foundational experience for process improvement.

Disease Management

- Clinic team takes 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.
- Clinic is able to mine the EMR and produce a list for subpopulations (e.g., diabetics) to target care or patient needs.
- Providers will learn the importance of consistent and standardized coding in the Problem List in 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 Complex Patients

- A solid foundation in preventive screening care and disease management processes will enable the planned and proactive care of patients with complex or rare diseases and/or those with multiple, co-existing conditions.
Panel Management Examples

Preventive Screening (ASaP Maneuvers)

As per the Alberta Screening and Prevention (ASaP) Program

Revised Screening Maneuvers Menu for Adults 2016
Alberta Screening & Prevention Program (ASaP)

<table>
<thead>
<tr>
<th>Maneuver</th>
<th>Age (years)</th>
<th>Interval General Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood Pressure</td>
<td>18+</td>
<td>Annual</td>
</tr>
<tr>
<td>Height</td>
<td>18+</td>
<td>At least once</td>
</tr>
<tr>
<td>Weight</td>
<td>18+</td>
<td>3 years</td>
</tr>
<tr>
<td>Exercise Assessment</td>
<td>18+</td>
<td>Annual</td>
</tr>
<tr>
<td>Tobacco Use Assessment</td>
<td>18+</td>
<td>Annual</td>
</tr>
<tr>
<td>Influenza Vaccination Recommendation</td>
<td>18+</td>
<td>Annual</td>
</tr>
<tr>
<td>Mammography</td>
<td>50-74</td>
<td>2 years</td>
</tr>
<tr>
<td>Colorectal Cancer Screen</td>
<td>50-74</td>
<td>2 years</td>
</tr>
<tr>
<td>One of:</td>
<td></td>
<td>5 years</td>
</tr>
<tr>
<td>• FIT</td>
<td></td>
<td>10 years</td>
</tr>
<tr>
<td>• Flex Sigmoidoscopy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Colonoscopy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pap Test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do Pap test</td>
<td>25-69</td>
<td>3 years</td>
</tr>
<tr>
<td>Optional Pap test</td>
<td>21-24</td>
<td></td>
</tr>
<tr>
<td>DO NOT DO Pap test</td>
<td>&lt;21</td>
<td></td>
</tr>
<tr>
<td>Plasma Lipid Profile - Non Fasting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>40-74</td>
<td>5 years</td>
</tr>
<tr>
<td>Female</td>
<td>50-74</td>
<td></td>
</tr>
<tr>
<td>CV Risk Calculation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>40-74</td>
<td>5 years</td>
</tr>
<tr>
<td>Female</td>
<td>50-74</td>
<td></td>
</tr>
<tr>
<td>Diabetes Screen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One of:</td>
<td></td>
<td>5 years</td>
</tr>
<tr>
<td>• Fasting Glucose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Hgb A1c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Diabetes Risk Calculator</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>40+</td>
<td></td>
</tr>
</tbody>
</table>

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.
Use the EMR capabilities to identify patients due for preventive screening care by creating Global Reminders

In PS Suite, Reminders and Searches are 2 different features, although very similar in format. It is worth noting that you are required to build them separately, you cannot turn a search into a reminder or vice-versa.

A good starting point for your ASaP Reminders/Searches is with your physician panel search. This should limit your reminder to just active patients of the selected providers. (You must limit the provider(s) the reminder applies to or it will run for all providers.) An example is shown on the right.

You will apply this foundation to all of the Reminders/Searches you create below; just some suggested criteria and considerations with the ASaP screening maneuvers are covered below. Depending on charting in your clinic, your criteria may have to be different to yield accurate results. Additional tips on creating Searches and Reminders are in those sections later in this document.

Identify patients 18 + with no height recorded on the chart

Demographics > Age > “>=” 18  
and  
Vitals > Height (Ht:) > number of times done > “<” 1

This will identify patients older than 18 years who have not had their height taken at least once. A limitation of this search is that the patient may have had their height recorded several times before the age of 18; the search will pick up these entries.

Identify patients 18+ years with no weight recorded on the chart in the past 3 years

Demographics > Age > “>=” 18  
and  
Vitals > Weight (Wt:) > months since latest > “>=” 36

Identify patients 18 + years without a Blood Pressure recorded in the last year

Demographics > Age > “>=” 18  
and  
Vitals > Systolic BP (BP:) > months since latest > “>=” 12  
and  
Vitals > Diastolic BP (BP:) > months since latest > “>=” 12
Identify patients 18 + years without a Tobacco Risk Assessment recorded in the last year

The default area for entering the Tobacco Risk assessment is a searchable field but limited as it does not allow you to search the date it was completed. Telus Health is currently working on a solution; this document will be updated when this solution is available.

Identify patients 18 + years without an Exercise Assessment recorded in the last year

The default area for entering the Exercise assessment is a searchable field but limited as it does not allow you to search the date it was completed. Telus Health is currently working on a solution; this document will be updated when this solution is available.

Identify patients 18+ years without an Influenza Vaccination Recommendation recorded in the last year

Demographics > Age > “>=” 18
and
Immunizations > Influenza Virus Vaccine > months since latest > “>=” 12

Identify females 25–69 years that have not had a Pap test in the past 3 years

Demographics > Age > “>=” 25
and
Demographics > Age > “<” 70
and
Demographics > Sex is female
and
Lab Text Containing… > Pap result > months since latest > “>=” 36
and
Patient Profile > HPH/Past Hx/History of Past Health > does not contain > Complete Hysterectomy

TIP: Start your reminders with basic information and add over time to refine them to your clinic’s needs and as your document improves. In addition to the exclusion criteria for complete hysterectomy shown above, many clinics also choose to exclude patients being followed up with colposcopy.

Depending on your lab service provider the example of “Pap result” here may be different in your system.

Defining this criterion of hysterectomy will be dependent on how and where you label this in your system.
Identify males 40-74 and females 50-74 that have not had plasma lipid profile in the last 5 years

Lab Values > Low Density Lipoprotein Cholesterol [LDL] > months since latest > “>” 60 and

Demographics > Sex is male
Demographics > Age > “>=” 40
Demographics > Age > “<” 75

or

Demographics > Sex is female
Demographics > Age > “>=” 50
Demographics > Age > “<” 75

Additional information on the use of the qualifiers “and” & “or” and the indentations is found in the section on Searches

Identify females 50 – 74 y that 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)

Demographics > Age > “>=” 50
Demographics > Age > “<” 75
Demographics > Sex is female
Diagnosti Imaging > Mammogram > months since latest > “>” 24
Patient Profile > HPH/Past Hx/History of Past Health > does not contain > Complete Bilateral Mastectomy

(Note: <75 or <=74 should give you the same result)

Defining the criterion of complete bilateral mastectomy will be dependent on how you have captured it in your system

Identify patients 40 + that have not had a fasting glucose OR a HbA1c test in the last 5 years

Demographics > Age > “>=” 40
Lab Values > Fasting Blood Sugar (FBS) > months since latest > “>” 60
or
Lab Values > Hemoglobin A1C [Hb A1C] > months since latest > “>” 60
Identify patients 50 – 74 y that 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)

Demographics > Age > “>=” 50
and
Demographics > Age > “<” 75
and

Lab Values > Fecal Immunochemical Test [FIT] > months since latest > “>=” 24
or
Diagnostic Test Report > Colonoscopy > months since latest > “>=” 120
or
Diagnostic Test Report > Sigmoidoscopy > months since latest > “>=” 60

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 males 40 – 74 or females 50 – 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/calc2.html#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:
  - Males 40 – 74 y, not taking a ‘statin’, that have not had a CV Risk calculation in the past 5 years
  - Females 50 – 74 y, not taking a ‘statin’, that have not had a CV risk calculation in the past 5 years

PS Suite comes loaded with a cardiovascular risk calculator in the form of a stamp. To access the stamp: Edit > Insert Calculated Stamp > CVDRisk.
PS Suite calculates the Framingham risk score.

Reference: Canadian Journal of Cardiology 29 (February 2013) 151–167 Table S2
Once you select the stamp, the system will search for any of the criteria available to complete the calculation. It will ask the user to complete any of the missing information. It must have the cholesterol values in the system in order to stamp the chart with the result, otherwise you can use it without recording a value. If smoking status has been recorded in either the PERS or RISK section, the calculator will find and use this value.

Once completed, the result of the CVD risk calculator will be stamped in the patient’s chart:

\[
\text{10 Year CVDRisk:} \geq 30\% \quad (\text{Assumes no existing CVD; optimal for age is 5\%, CVDRiskRatio: 30.0/4.7})
\]

The result can then be searched. You can search when the test was completed (Vitals > Specify Text Vital… > “CVDRisk” > ) and/or by the value of the result (Vitals > CVDRisk > latest value > ). The option to search the value can aid where clinics are monitoring at risk patients.

This example shows the reminder criteria to find a patient overdue for the CVD risk assessment.

\[
\text{Vitals > CVDRisk:} \geq \text{months since latest} \geq 60
\]

and

\[
\text{Demographics > Sex is male}
\]

and

\[
\text{Demographics > Age} \geq 40
\]

and

\[
\text{Demographics > Age} < 75
\]

or

\[
\text{Demographics > Sex is female}
\]

and

\[
\text{Demographics > Age} \geq 50
\]

and

\[
\text{Demographics > Age} < 75
\]

Registries

A “patient registry” is a list mined from your EMR that can group chronic conditions such as diabetes or hypertension. Ideally, all patients with a condition will have the condition noted in their ‘Problem List’ in a consistent and standardized 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’, ‘D M’, etc.

\text{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.}
Creating a Registry: Search by Problem

If you add the ICD-9 code to each problem, you enter then you can create reliable searches. You can add the criteria to your search using the example below. This example shows the ICD-9 code of 250 for diabetes mellitus. Be aware that by using the “any item that starts with” option, it will pick up any problem that has the code 250 in it.

Also note the other options for searching in your problem list. You can also search by description or the long details you have entered. The limitation of using these criteria is if there are variations or spelling errors. If there has been variation in your entry you can always add some “or” options in to assist with a data clean up.

Coding to a Problem List

To add the problem and associated code click once on the “Prob” on the problem area of the CPP.

This will open up the window Add to Problem List. The “Description (to fit in profile)” is typed in manually: Enter here what you would like to appear on the problem list; upper or lower case is fine. Whatever you prefer is fine, the linkage to the ICD-9 will happen in the next step. Then select “Add” at the bottom the “Associated Diagnosis” box.
This will open up another dialogue box, **Choose a Diagnosis**. Based on the wording in the description (i.e. multiple sclerosis), a related selection of ICD-9 codes will present in the list below. Highlight the one with the code “340” and select **Choose** at the bottom right of the screen.

This will associate the ICD-9 of 340 with the description of Multiple Sclerosis. Select **Add to List** at the bottom right of the dialogue box to finish adding this to the list.
This will add the Problem, Multiple Sclerosis and the associated ICD-9 code to the Problem List in the CPP.

If the listed problem is not associated to an ICD-9 code, the text will appear in blue font. The above example is linked to the ICD-9 so it appears in black font.

This process should be repeated for at least a minimum set of problems agreed upon by the clinic to facilitate searches and reminders for certain groups.

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.

<table>
<thead>
<tr>
<th>Feature of EMR</th>
<th>Example 1</th>
<th>Example 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Data that would inform Diabetes Mellitus Registry</td>
<td>Data that would inform Hypertension registry</td>
</tr>
<tr>
<td>Billing</td>
<td>Diagnostic code 250</td>
<td>Diagnostic code 401</td>
</tr>
<tr>
<td>Medications</td>
<td>Currently taking metformin or insulin</td>
<td>Currently taking an antihypertensive</td>
</tr>
<tr>
<td>Lab</td>
<td>HbA1c over 7 %</td>
<td>BP &gt; value specified by clinic MDs</td>
</tr>
</tbody>
</table>
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.

Service Codes

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.

Searching by services or billing codes can be useful for panel clean up and maintenance.

Disease Management

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

- Problem list
- Point-of-care reminders set for a population of patients or by individual patient
- Flowsheets

Tools for Panel Management

Clinical documentation so that data may be searched

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

There are several areas, especially within the cumulative patient profile (CPP) that drop down lists are available. This example shows adding in allergy information for a patient.
Radio Buttons

The CPP has many examples of radio buttons that make the information searchable.

<table>
<thead>
<tr>
<th>Reaction Type</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Allergy</td>
<td>☐ Side Effect</td>
</tr>
<tr>
<td>☐ Exaggerated Effect</td>
<td>☐ Other</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reaction Severity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Unknown Severity</td>
<td>☐ Severe Reaction</td>
</tr>
<tr>
<td>☐ Moderate Reaction</td>
<td>☐ Mild Reaction</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Status</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Confirmed</td>
<td>☐ Suspected</td>
</tr>
</tbody>
</table>

Categories for Standard Numerical Data (designed to record certain information like blood pressure or weight)

PS Suite has a number of categories for entering numerical data; mainly vitals information. They are pre-defined categories (full list available in the User Guide/Help Files). They are typically short forms followed by a colon. The colon makes the information both reliably searchable and it also enables the graphing of the information. These categories can be incorporated into a stamp or you can manually enter them while charting.

Searchable Text Fields

Even in an area where free text can be entered if certain information is entered with a consistent term, it may be searched. In both fields pictured below you can search the data. You can manually enter free text or you can insert a stamp (using the keystrokes {Ctrl I/CMD I} for stamp entry, you will not be able to click the mouse).

Encounter Assistants

Information captured in an encounter assistant is all searchable. Once the EA is created the fields are available in the search engine as in the example below. The EAs are found under the custom forms criteria.
Additional information on Encounter Assistants (including links to Help Files) is found in Appendix 5.

Stamps

Stamps are macros that enable searching. Where you have information you will enter repeatedly or you need an item reliably searched, you can create a stamp for it. In this example a stamp was created to indicate that a manual breast exam was completed. The information in this stamp can then be searched.

Stamp in chart:

![Stamp in chart](image)

Additional information on Stamps can be found in Appendix 2.

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 should 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. You can also search for a document name at the individual patient level.

2) In the EMR search / reports 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 or a flowsheet.
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).
  - PS Suite comes loaded with some default options

- Configure your own where needed and use the drop down list in the EMR; avoid free typing
- Certain clinical reports need to be distinguished to enable panel management
  - Distinguish mammogram and bone density 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 keywords 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 clinic EMR administrator(s) should be allowed to add, delete or modify the main list

PS Suite divides the different reports into pre-defined categories:
- Consultation Report
- Diagnostic Imaging
- Diagnostic Tests
- Medical Reports
- Miscellaneous Letters

Within these report categories are more pre-defined options to choose from. Using these instead of free text is highly recommended. Users with administrative privileges can add additional options to the drop down menu.
Manual Entry of Lab Data

Most EMRs have the ability to 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 region. If this lab data is entered as a “Manual Result” rather than a scanned document, it can usually be trended and searched.

Select **Data>Lab Manual Result**

![Lab Manual Result](image)

Enter the lab data in the pop up box and **Save into <<Patient Name>>**.
Searches – Getting Started

General Tips:

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

- Be informed on how data is recorded in the EMR; 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 by performing 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

Using the Searches Feature in PS Suite

Several searches have already been shown in this document; this section will review some of the useful functionalities to create the searches for patient’s medical home. If you are new to searches in PS Suite, it is recommended to access the resources at the end of this section.

Searching Basics

Starting on page 11 there are details that take you through the initial steps below for creating a search for a provider panel with several screen shots.

Enter the search engine from the Records window (screen shots for these 5 steps are on page 11):

- Settings
- Edit Searches...
- Add Search
- Search Name
- Add line

Some other features in the Edit Searches window to highlight include:

1. Delete Line: This line is pretty intuitive, where you can highlight the line of your search with one click and then select Delete Line to delete just that line of the search.

2. The Up and Down Arrows: These move the lines up and down in your search. The search engine uses Boolean logic. As much as possible you want to start you search broadly and then funnel down. If you were to test the search after each line, the number of search results should decrease each time.

   An example would be starting with the Doctor number, then all of the active patients, then all female patients, then all female patients who have a mammogram on file the last 2 years. At each level of the search, the number of patients should decrease or stay the same.
3. Edit Line: If you need to change a line of your search, highlight the line with one click of your mouse and use the edit button to take you into the editor for that line.

4. Indent Line/Outdent Line: The use of the indent and outdent line can be a challenging concept for users unfamiliar with Boolean logic. The search function allows you to search “and” and “or” between each criteria you add. It will not allow you to have an “and” and “or” at the same level. See more about this in the Indent/outdent section below.

5. Test Search: It is recommended when you are new to searches, or when you are using new criteria you have not used in searches in the past, to test your search after you add each line. It can help you to see that you are using the correct logic. It can also help you to make sure you are selecting the correct criteria. (It’s easy to put in the wrong greater than/less than signs!) In addition, not every criterion in PS Suite works as it was intended and events like updates to lab codes can render a search incorrect. Testing can help you to find where a search may be going awry.
Other features to highlight are in the Edit menu at the top left of the search window.

- **Duplicate**: Use this to duplicate an entire search. This is very useful if you have already built a search and you’d like to add different criteria to it. An example might be a basic panel search, then you can add on ASaP criteria.

- **Delete Search**: Use this to manage your list of searches. Be sure that others in the clinic are not still using the search as you cannot recover them.

- **Import Searches/Export Searches**: You can easily import searches that other users or Telus Health have built for PS Suite by using the import feature. Likewise, you can easily export searches that you have built to other users. Depending on the search, you may need to edit some of the data in the search. An example would be where you specify the Doctor Number, you would need to change this in your clinic to the Doctor Number you want to apply the search to.

**Indenting/Outdenting: Boolean Logic in PS Suite**

The example search below shows 3 levels of indenting/outdenting. You will notice the first 2 “ands” in one column; with the second 2, lined up in a second column. The “ors” are in a third column. The system will not let you put an “and” and “or” in the same column. You must practice with the logic to get it right; testing each line as you building your search is helpful. If your search has many criteria where you are using “ands” and “ors”, it can be helpful to write out your search on a piece of paper first. It can also be helpful to talk it through to see if it makes sense. The example below is looking for patients due for colorectal cancer screening.

```
Age < 75
and
Age >= 50
and
    Lab Text Containing... "The FIT is a" months since latest >= 24
    or
    Lab Text Containing... "The FIT is a" number of times done = 0
    and
    Sigmoidoscopy number of times done = 0
    or
    Sigmoidoscopy months since latest > 60
    and
    Colonoscopy number of times done = 0
    or
    Colonoscopy months since latest >= 120
    or
    Note Containing Text... "Description: Colonoscopy" months since latest >= 120
```
Executing your Search

Once you have set the desired criteria and tested it out the search, you are ready to perform the search. After clicking on Perform Search from the Edit Searches window, you can set a few additional pieces to complete the search as you need it.

1. You can choose to note include the Doctor Number in your search criteria, or when you get to this screen, you can select the doctors you wish to execute the search for. In the example to the right, we could delete the “Doctor Number =…” line and just select Dr. McCaffrey in this window.

2. If you are in this window and realize you need to return to do further edits, you can select Edit Searches to take you back.

3. There are a couple of good reasons to add columns to your searches. For staff engaging in panel activities, you may wish to add phone numbers or addresses. Adding columns can also assist with searches where the criteria are limited. An example shown earlier in this document uses the column of “Next Appointment Date” as future dates are not searchable. By adding this column to a search, we can easily identify the patients in the search output who have an upcoming appointment. The columns can also be sorted.

Process for Adding Columns

By selecting Add Column, almost anything that can be searched in PS Suite, can be added as a column.
After you select Add Column, you will get a window with many choices. You can explore the options in each area; the Patient Property option contains all of the options that are available for searching. Double click this option and the search window will open.

In the example below we are adding a column to with the latest value for the Hemoglobin A1C lab result. Click OK.

Finally, you can execute your search by selecting, Search.

You can use the search output from within PS Suite, or you can also export it to another program such as MS Word, MS Excel or equivalent.
The Telus Health Community Portal has a reference document titled, Understanding Searches (you must be logged into the portal to access the link):

https://telushealthcommunity.force.com/pssuitecommunity/servlet/fileField?id=0BE800000008SUd

There is also a series of videos on searches on the portal (you must be logged into the portal to access the link):

https://telushealthcommunity.force.com/pssuitecommunity/articles/en_US/Learning_Material/Video-Searches?popup=false&navBack=H4sIAAAAAAAAAALuuVipWslLyzssv0INSU_1yM9NVdJRYgaKFSSmp4ZkluSA-KVAvn5BcXFpZklqcn5ubmleZkmIflxppn42Tk-c-kNjH1xamJRcoYthEotVqqNBQAY2B5dbgAAAA

Clinical Decision Support: Global Reminders

Most EMRs have a tool that will search the database for identified criteria to identify patients due for clinical service. They are searches that run in the background of the EMR and provide notifications when a patient meets the criteria. In PS Suite these are called Global Reminders.

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 global reminders will automatically go away when the search criteria are met. Global Reminders 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, reminders have the ability to be individualized for patients and modes of documenting exemptions.

Global Reminders are one line notes that appear in a patient’s profile in the REM (Reminder) field. It tells the providers that patients are due for an intervention. They are set to automatically show up in the profile for just the patients that meet the criteria selected for each reminder. A reminder can be set to medium priority; when they are set this way they show up in red on the profile and they also show up in the Reminder Report (discussed below). Alternately, a reminder can be set to low. They show up in blue in the profile and do not show in the Reminder Report. If a reminder is coming due within the next 2 weeks, it shows up in black with the date it is coming due.

Building Reminders

Building reminders is completed the same way as for searches described in the section above. You enter the Reminder feature through the main toolbar in the Records window.

![Reminder Example](image-url)
You can select an existing reminder, you can duplicate a reminder and alter it, you can import and export your reminders, or you can build one from scratch. As with Searches, you need to first name your Reminder, then you can begin to add lines. Build your reminder the same as you would a search.

Once it is built you need to set the text that will show up in the Reminder field in the patient record.

You can select

[ ] Show Intervention as Reminder

[ ] Show Custom Form or Stamp: N/A

Priority:

[ ] High (scan daily)

[ ] Medium (reminder report)

[ ] Low (next visit)

Colon Cancer Screening Due

It will default to a medium reminder which means it will show up in your Reminder Reports.

Select **Done** to set your reminder

**Responding to Reminders**

Reminders will disappear when the criteria for a reminder are met. For example, if the reminder is indicating that a female patient, aged 50-75, is due for a mammogram every 2 years, the reminder will disappear when the mammogram is loaded into the patient’s record. It will reappear when the mammogram is due again.

If the reminder comes up for the patient but they are not eligible for the reminder, you can manually respond to the reminder by double clicking on it from the **REM** field. There are a number of different options that can be selected by the provider depending on the reason provided.
If one of these fields is used, the reminder will still display in the REM field with a strike through it. This can be a useful feature if it has been postponed until or to be done on, however where patients have a permanent exclusion it may be a nuisance. As much as possible the reminder criteria should be set to exclude patients who meet certain criteria that make them ineligible for a certain intervention.

Another way to exclude a patient is to override the reminder for just that individual. If they meet a different set of criteria, you can override the reminder and set a new one that applies just to that individual. Instructions to do this can be found in this video on the portal “Overriding Global Reminders with Individual Reminders:
http://www.screencast.com/t/bOdKcyLGOW3

Reminder Reports

Reminder reports are reports that display all patients with active, medium priority reminders as well as quick individual reminders. The report also includes all reminders that have been manually responded to (e.g. postponed until...).

To create a Reminder Report, go to Patients > Reminder Report...

From here you can select to run all medium reminders or you can run it by one reminder at a time. The left side of the screen will show you the criteria in the reminder. You may run a report for an individual physician by checking/unchecking the physician’s name. Title the report and then as with Searches, you can add and delete columns as needed for the output.

(If you are using the report for outreach screening you can add the birth month as a column if you wish to do outreach screening by birth month.)
Click on **Reminders** to execute the report. It is recommended to run this outside of clinic hours as it can slow the system down dramatically.

<table>
<thead>
<tr>
<th>Patient ID</th>
<th>First Name</th>
<th>Surname</th>
<th>Age</th>
<th>Home Phone</th>
<th>Business Phone</th>
<th>Mobile Phone</th>
<th>Interventions</th>
<th>Reminder Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>102</td>
<td>Baby</td>
<td>PSS</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td>Toolbar, A...</td>
<td>A5Pa - Aco...</td>
</tr>
<tr>
<td>163</td>
<td>Mommy</td>
<td>PSS</td>
<td>38</td>
<td></td>
<td></td>
<td></td>
<td>COPC, Sere...</td>
<td>A5mp - B/P...</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Flu Vaccine ...</td>
<td>Height Due</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A5pf - Tob...</td>
<td>pap due</td>
</tr>
<tr>
<td></td>
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<td></td>
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<td>toolbar, A...</td>
<td></td>
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<td>A5pf - Aco...</td>
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<td></td>
<td></td>
<td></td>
<td>COPC, Sere...</td>
<td></td>
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<td></td>
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<td>A5pf - B/P...</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>A5pf - Diabe...</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Flu Vaccine ...</td>
<td></td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Height Due</td>
<td></td>
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<tr>
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<td>A5pf - Tob...</td>
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<td>pap due</td>
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<td></td>
<td></td>
<td>Mommy for ...</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
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<td>toolbar, A...</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>105</td>
<td>Female</td>
<td>Test</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td>Toolbar, A...</td>
<td>A5pf - Aco...</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>166</td>
<td>Ronnie</td>
<td>MacDonald</td>
<td>50</td>
<td>786-433-1234</td>
<td>786-555-1234</td>
<td></td>
<td>Toolbar, A...</td>
<td>A5pf - Aco...</td>
</tr>
<tr>
<td></td>
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<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

Number found: 25

This report works well for outreach screening as all of the patient’s reminders are visible, columns can be added and the list can be sorted in the system or exported for further analysis.

Many clinics find this report limiting for opportunistic screening as there is no way to limit by patients coming in within a certain timeframe (which would facilitate opportunistic screening processes) or by reminders that have recently become due that would facilitate clinicians looking for certain reminders coming due for certain patients. It runs the whole panel at one time.

The Telus Health Community Portal has a series of videos on Reminders and the associated functionalities (you must be logged in to access the link):


**Individual Patient Alerts**

At the individual patient level, PS Suite has 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.

PS Suite has different options for creating patient alerts depending on the need:
Appointment Alert

The Appointment Alerts feature is intended to be used for non-clinical issues and are seen at the time of booking. The alert can ensure staff manage a patient’s specific appointment requirements such as requiring more time or urgency of certain conditions.

Click the Appointment alert checkbox and put comments you wish to appear for the appointment in the Comments box.

Each time an appointment is booked for a patient with an alert, the alert will pop up in a new window and must be acknowledged to continue the booking process.
Individual Patient Alert

The Individual Patient Alert feature is intended to be used for clinical issues. From **Settings > New Alert for <<Patient Name>>**.

Put in the relevant Description and Details and dates. You may also select the box to display the alert at booking. (Only the description you have entered shows at the appointment.)

The alert will display in the Reminder Field in blue with both the description and details you have entered. It will stop showing at the end date you have selected.

Special Notes

The Special Notes feature creates a note that remains at the bottom of the chart regardless of the date it was created. It can be a note, custom form, encounter assistant or medical report. Because of its location on the chart, it acts as a prompt or reminder to the provider. It is often used where the same custom form needs to be accessed for repeated visits. You can convert a special note into a regular note when it is no longer required as a special note.

To create a new special note: Click **Data> New Special Note**
To convert an existing note into a Special Note double click on the note date and select **Make into Special Note**.

In the example below, we have created the prenatal record into a special note. For as long as it remains a special note, it will always be at the bottom of the chart.

Expand
Change Note Date...
Attach Diagnosis Code...
Attach Diagnosis Pregnant (Dx: V22.2)
Bill This Note

Finish
Mark Note as Reviewed

Send a Message About This Note

View Note Change History
View Note Reviewers

**Make Into Special Note...**
Lock Note

---

To convert a Special Note back into a regular note, double click on the **Special Note** and select **Make Into Regular Note**.
Quick Individual Reminder

This feature applies a reminder to a single patient. Create a Quick Individual Reminder by selecting **New Quick Individual Reminder for <<Patient Name>>**

The system provides you with a range of fields to create this reminder; you will note there are not as many available fields as there are for Global Reminders.

Global Reminders: Create for one patient

Create a reminder in the format used for population reminders but limit the reminder to one patient number or chart number; this will have the alert only show for this patient. This can be useful where the criteria you select is not available in the menu on the Quick Individual Reminders feature.
Measurement

While moving toward 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:

Verification Rate

One tool that can be useful is to measure how often the team is verifying the patient demographic information (address and phone) and physician attachment. When a clinic is new to patient verification it can be measured in the search tool. For example, a team that wants to measure how they did in a month:

\[
\text{# patients verified this month} \times 100 = \text{verification rate (\%)}
\]
\[
\text{# patient visits this month}
\]

An example search for the denominator (# patient visits this month) for the month of August 2016:

The result of this search will give you the list, including the number, of the patients seen at the clinic during the month of August.
An example search for the numerator (# patients verified this month) for the month of August 2016:

The result of this search will give you the list, including the number, of the patients who were verified using the Patient Status Date field at the clinic during the month of August.

You can use the results of this search to populate the equation.

A clinic may also have an expectation over a period of time and can determine if they are meeting their goals. For example, if a practice has an expectation that their verification rate over a year should be 95% the formula would be:

\[
\frac{\text{# patients verified in the last year}}{\text{# patient visits in the last year}} \times 100 = \text{verification rate (})\%
\]

You would create the search in the same way only change the month to the year you are looking for.

**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:
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)

\[
\# \text{ active adult patients}^* (18 +) \times 100 = \text{BP screening rate (\%)}
\]

* 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

\[
\# \text{ active adult patients}^* (40 +) \times 100 = \text{Diabetes Screening Rate (\%)}
\]

* 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:

\[
\# \text{ active adult patients with an offer of screen or completed screen during screening interval} \times 100 = \text{screening rate (\%)}
\]

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

---

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:

\[
\frac{\text{# active patients}^* \text{ with diabetes}^* \text{ with an HbA1c result below 7% in the last year}}{\text{# active patients}^* \text{ with diabetes}^*} \times 100 = \text{rate (5)}
\]

* Patients are identified as diabetic when Diabetes is listed as an active problem in their Problem List
Appendices

Appendix 1: High Value Efficiency Tips from Alberta Peer Leaders

1. Make use of stamp function
   - You can create stamps within stamps
   - Avoid complexity in your stamps
   - Create stamps to address gaps in EMR functionality
   - Don’t be afraid of having too many stamps in your system – make use of them!
   - Stamps should be consistent across the clinic

2. Keyboard Shortcuts
   - Practice using the shortcuts
   - There is a shortcut reference list (see Appendix 8 for links)
   - Shortcuts are also displayed in the drop down menus from the Records page

3. Custom Forms
   - There is a cost and a time investment to purchasing the license and completing the training but it is worthwhile as it enables not just the creation of custom forms but the toolbar and encounter assistant features as well
   - Use one custom form but customize with multiple buttons

4. Searches
   - There are several glitches or limitations in the system – if you search isn’t working right away and you are pretty certain you have the right criteria, call PS Suite right away – don’t waste time
   - Continuity: No billing data for service in the search criteria; search without the bill book – use stamp-initials of physician instead
   - Make use of the PHN – Netcare Search Field – from within Netcare

5. Portal
   - Make use of the portal feature, work together to get things done
   - Designate staff to populate the portal

6. Take Advantage of Advanced Features
   - Toolbars
   - Encounter Assistants (Custom Forms)
   - Dashboard
   - Clinic Efficiency Reports
Appendix 2: Stamps

Stamps are tools that act like simple templates or as macros to enable users to quickly enter a block of text. You can build your own or import stamps built by others. Your system also comes loaded with a select few calculating stamps that are created and maintained by Telus Health. The standardized entry that stamps enable makes much of the information entered using a stamp searchable.

This document will review a few key features of stamps useful for panel management activities. Details on building stamps can be found through Telus Health; links to these resources are found at the bottom of this section.

There are several types of stamps as described by Telus Health. This document will focus on the first type, text stamps; the remaining are described briefly.

Text Stamps

These are general stamps to facilitate the easy and consistent entry of text. Special characters are used depending on what you are entering.

- Colons indicate the spot where you can enter text. An example is a SOAP stamp:

```
S: You enter your text following the colon
O: Press tab to move to the next line and begin typing
A:
P:
```

- A bullet acts similar to a colon where as you tab it will move to the next bullet. In the example below it makes sense to move to the next bullet when entering blood pressure instead of using a colon between the systolic and diastolic values.

```
h: wt: bp: •/•
```

- Guillemts/chevrons/double angle brackets are used to enclose a standard or default phrase. You can tab over the guillemts to save the text enclosed or you can type over or delete the content. In the example below you can see the guillemts around the options you would select for an exercise and tobacco use assessment.

```
LIFESTYLE
Exercise # Minutes/week: «sedentary» «<150 min/week» «>150 min/week» «Exercise assessment declined»
Tobacco Use Assessment «current tobacco user» «past tobacco user/quit» «non tobacco user» «tobacco assessment declined»
```

Once you tab through the options to the correct responses, you are left with just the desired text.
Keywords are a great feature for pulling in data to your chart note. They are pre-coded and almost every searchable item can be pulled in. Wherever they are entered into the architecture of a stamp, they will be replaced by the data they represent. They are useful in letter stamps where patient demographics can be entered, such as the patient name, date of birth, age, sex, address, and so on.

Stamp Name: ConsultAppointment

We would like to inform you that patName has an upcoming appointment with Dr. currMdSurname.

Appointment Details:
pat.Demographics.Next_Appointment_Date.whole_date
pat.Demographics.Next_Appointment_Time_

Should you have any questions, please contact our office at currMdPhone.default.

We look forward to meeting patPreferredOrFirstName at patHisHer upcoming appointment.

When applied to patient it will pull in the coded information. Below is the result of the stamp.

Aug 12, 2016

We would like to inform you that Sylvia Sieroczyk has an upcoming appointment with Dr. Choma.

Appointment Details:
Wednesday, October 13, 2016
10:00am

Should you have any questions, please contact our office at 866-505-3302.

We look forward to meeting Sylvia at her upcoming appointment.

You can also pull in values and dates. The example below shows the ASaP Maneuvers with the date of latest. This is the draft of the stamp with the coded values.
This picture to the right shows the outcome of the stamp in the patient’s chart. It pulls in all of the dates of the latest values for each maneuver.

<table>
<thead>
<tr>
<th>Stamp Name: ASaP Maneuvers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Latest ASaP Maneuvers - Female</td>
</tr>
<tr>
<td>Weight: pat.Vitals.Weight_[Wt:]_date_of_latest</td>
</tr>
<tr>
<td>Height: pat.Vitals.Height_[Ht:]_date_of_latest</td>
</tr>
<tr>
<td>Blood Pressure: pat.Vitals.Systolic_BP_[BP:]_date_of_latest</td>
</tr>
<tr>
<td>Tobacco: pat.Custom_Forms.ASaP_-<em>Encounter</em>-_Tobacco_Risk_Assessment.date_of_latest</td>
</tr>
<tr>
<td>Exercise: pat.Custom_Forms.ASaP_-<em>Encounter</em>-_Exercise_Assessment.date_of_latest</td>
</tr>
<tr>
<td>Lipids: pat.Lab_Text.Lab_Text_Containing&quot;ldl&quot;.date_of_latest</td>
</tr>
<tr>
<td>A1C: pat.Lab_Text.Lab_Text_Containing&quot;a1c&quot;.date_of_latest</td>
</tr>
<tr>
<td>Pap: pat.Lab_Text.Lab_Text_Containing&quot;pap&quot;.date_of_latest</td>
</tr>
<tr>
<td>FIT: pat.Lab_Text.Lab_Text_Containing&quot;fit&quot;.date_of_latest</td>
</tr>
<tr>
<td>Colonoscopy: pat.Diagnostic_Test_Reports.Colonoscopy.date_of_latest</td>
</tr>
<tr>
<td>Influenza: pat.Immunizations.influenza_virus_vaccine.date_of_latest</td>
</tr>
</tbody>
</table>

**Questionnaire Stamps**

These stamps can be created as interview-administered or patient-completed questionnaires. They can be formatted to take the user through the questionnaire with ease. They will calculate and stamp the chart with the score of the questionnaire.

Your system comes loaded with the MMSE; many others can be found on the portal or through Cognizant MD website. There may be restrictions for posting and sharing some questionnaires due to copyright considerations.
Calculated Stamps

As mentioned above, there are a select few calculated stamps that come with the system. They cannot be edited nor can new ones be created by users. The available stamps loaded for most primary care clinics are:

- BMI (Body Mass Index)
- CrCl (Creatine Clearance)
- CVDRisk (Cardiovascular Disease Risk)
- LMP or EDB or GA (Pregnancy Date)

The stamp will pull the relevant information (i.e. the most recent values) required to do the calculation into the stamp. Where information is not available, the user will be alerted that it is not available and/or prompted to enter the information. The system may also identify if patients do not meet the criteria for the calculation.

Letter Stamps

A letter stamp can be created to quickly create a referral letter.

Prescription & Treatment Stamps

This stamp feature is beneficial where there are complicated and frequently used text for medication names and instructions.

For More Information

Details on building stamps can be found in the PS Suite User Guide/Help Files. A Handout “Creating and Editing Stamps” can also be found on the Telus Health Community Portal at (you must be logged in to access the link):

https://telushealthcommunity.force.com/pssuitecommunity/servlet/fileField?id=0BE800000008SU4
Appendix 3: Custom Forms

Custom forms are electronic versions of standard forms such as a lab requisition or referral form. They are created to have fields that can pull standardized information from PS Suite into the form.

This example shows the custom form with the fields coded to pull data in such as the patient’s demographic information.

You can both import custom forms other users or Telus Health has built or you can build your own. In order to build your own, you must purchase a license from Telus Health and complete the custom forms training course. Users without the license and training can make basic edits to existing forms.

Even if you have a custom forms license, check the portal to see if the form has already been created. It may save you a great deal of time and effort.
Custom forms are convenient tools for users who issue forms for patient care. They are featured in this document focusing on patient’s medical home due to 2 specialized functions that enable planned and proactive care for patients: Toolbar Custom Forms and Encounter Assistants. These function are covered in the next 2 appendices.

**For More Information**

In addition to the information contained in the PS Suite User Guide/Help Files, Telus Health has produce a User Guide especially for building custom forms (you must be logged into the portal to access the link):

https://telushealthcommunity.force.com/pssuitecommunity/articles/en_US/User_Guide/Custom-Forms-Guide?popup=false&navBack=H4slIAAAAAAAAAluuVipWsILyzssvz0INSU_1yM9NVdJRygaKFSSmp4ZkuSA-KVAvn5BcXFpZklqcn5ubmleZkmIfnxppn42TKc-kINijH1xamJRcoZtcmIxSX6udlp-UW6xUm0sADHf6oJyAAAA

Telus Health maintains a library of custom forms it has built, as well as those that other users have built and agreed to share. There is a Canada Wide library for forms relevant to all users (you must be logged into the portal to access the link):

https://telushealthcommunity.force.com/pssuitecommunity/articles/en_US/Custom_Forms/Custom-Forms-Library-Canada?popup=false&navBack=H4slIAAAAAAAAAluuVipWsILyzssvz0INSU_1yM9NVdJRygaKFSSmp4ZkuSA-KVAvn5BcXFpZklqcn5ubmleZkmIfnxppn42TKc-kINijH1xamJRcoZtcmIxSX6udlp-UW6xk5mULFiUaVSbSwAQz_9xnoAAAA

There is also a custom forms library for Alberta-specific forms (you must be logged into the portal to access the link):

https://telushealthcommunity.force.com/pssuitecommunity/articles/en_US/Custom_Forms/Custom-Forms-Library-Alberta?popup=false&navBack=H4slIAAAAAAAAAluuVipWsILyzssvz0INSU_1yM9NVdJRygaKFSSmp4ZkuSA-KVAvn5BcXFpZklqcn5ubmleZkmIfnxppn42TKc-kINijH1xamJRcoZtcmIxSX6udlp-UW6xdmJUmpRSaJSbSwAGaICRHoAAAA
Appendix 4: Toolbar Custom Forms

Toolbars are an advanced function in PS Suite that use the Custom Forms and Reminders features to activate specialized menus on the CPP (cumulative patient profile). They can provide shortcuts (i.e. many fewer clicks) to commonly used functions such as stamps, custom forms, handouts, graphs and diagrams. You can also insert web links or bill using toolbars. In addition to providing shortcuts, they can also be used as a prompts for interventions for certain patient populations. In order to build toolbars, you must have the custom forms license and training from Telus Health.

There are different approaches to using toolbars; this appendix will show 3 approaches useful in panel management. Building the toolbar is beyond the scope of this document but links to instructions are available at the end of this section.

General Toolbar

In the example below a general toolbar has been created for a family physician using her favourite requisitions, stamps and most commonly used hyperlinks. It is set up to show up on the records page for all of her patients.

With the toolbar, the physician can select her desired requisition in 2 clicks. Without the toolbar it is 3 clicks plus scrolling through the entire library of custom forms in her clinic.

Once this general toolbar is created in the Edit Custom Forms section, it is activated through setting a reminder for the whole patient panel of the physician. A toolbar can be set to display in the patient record based on any of the criteria available in the Reminder feature.

Condition Specific Toolbar

If a clinic is using their Problem List consistently and associating the diagnostic code, then this is a powerful way to add a toolbar to a group of patients with a certain condition.

In this first example this patient has the diagnosis of Multiple Sclerosis and the clinic has associated this to the ICD-9 problem code (associated codes are displayed in black).
Using this diagnosis, we use the reminder function to search all patients with the diagnosis of Multiple Sclerosis in their problem list. The toolbar below was created for Alberta physicians to apply the TOP UTI Guidelines for UTI in MS and Depression in MS. The toolbar includes links to both guidelines, the MS Bladder Action Plan handout, the PHQ-9 Stamp and a hyperlink to the MS Society of Canada with a resource for physicians. It will only show up for patients with multiple sclerosis (linked to the ICD-9 code) in their problem list.

| MS UTI Guideline | MS Bladder Plan | MS Depression Guideline | PHQ-9 | MS Society Linkage Consent |

In this next example, the toolbar is set to show for a patient who has an abnormal lab result who may not yet have a diagnosis. The reminder was set to show for patients who had an eGFR lab value at least once in their record and where the value of that test was <60ml/min. This toolbar shows up for just the patients that meet this lab value criterion. In this case, the toolbar also acts as a flag to catch patients for certain interventions. Also note, you can add in such features as the date and value of a lab test.

Here is the lab result as shown in the record (please note it is manually entered data):

<table>
<thead>
<tr>
<th>Aug 15, 2016</th>
<th>CLS Manual Entry Lab Data</th>
<th>LC</th>
</tr>
</thead>
<tbody>
<tr>
<td>eGFR</td>
<td>58</td>
<td>ML/MIN/1.73M±2</td>
</tr>
</tbody>
</table>

The reminder can be set up in a number of different ways depending on the criteria you desire. There are many more criteria that can be used such as limiting by physician, age or user. This reminder just shows a few basic criteria to activate the toolbar. The second criterion is an “abnormal” result, users also have the ability to set their own value for cut off.

Here is the resulting toolbar on the records of patients who meet the criteria:
Using Toolbars for Preventive Screening Processes

There are many more applications for this approach, but this document will show how toolbars can be effective for preventive screening.

You can set a reminder to show in the reminder field (REM). Another option is to create a toolbar that is triggered by a preventive screen coming due. The example below is for an overdue mammogram. You will note that the criteria selected can be the same as for a reminder to show in the reminder box. When you ask the reminder to “show as a custom form or stamp” and select the relevant toolbar it will show up in those charts that meet the criteria:

The criteria may be the same as they would be for a reminder that is not associated with a toolbar.

Click the radio button to Show Custom Form or Stamp, then from the drop down menu, select the relevant toolbar.

(Another useful feature shown in how the reminder is set up is the ability to limit who sees the toolbar. In the example above the criteria also include that the current user must be an LPN and whose initials are “LC”. That means if a physician or pharmacist were to enter this patient’s record, they would not see this toolbar. This enables teams to decide who sees what based on their roles in patient care.)

In this case the toolbar includes 2 features. It has a link to an Encounter Assistant that prompts the user through the process to initiate the mammogram screen for the patient. This toolbar also includes the date of the latest mammogram for the user’s reference.
When the “Mammogram Due” link is clicked, an encounter assistant is inserted into the record that leads the user though some relevant questions and has links to the local imaging centres. This allows the function to be carried out with fewer clicks and toggles between screens.

Some features of Encounter Assistants will be covered in the next appendix.

Toolbars have a range of functionalities for assisting in planned and proactive care. They are also quick and simple to build for users who have the Custom Forms license and training.

For More Information

In addition to the information contained in the PS Suite User Guide/Help Files, Telus Health has produce a User Guide especially for building custom forms which includes a detailed section on building toolbars (you must be logged into the portal to access the link):

https://telushealthcommunity.force.com/pssuitecommunity/servlet/fileField?id=0BE34000000CbnD

Telus Health has also produced a series of 3 short videos that outline the functionality of toolbars (you must be logged into the portal to access the link):

https://telushealthcommunity.force.com/pssuitecommunity/articles/en_US/Learning_Material/Toolbar-Custom-Forms?popup=false&navBack=H4sIAAAAAAAAluuVipWsIlyzsvz0INSU_yM9NVdIrygKFSSmp4ZkluSA-KVAvn5BcXFpZklqenSUMbleZkmIfnpn42TkC-kINjH1xamJRcoZtSXS-TIjikVJtLADh9ZVMbQAAAA
Appendix 5: Encounter Assistants

Encounter Assistants (EA) in PS Suite are interactive templates that provide the user with a structured form for a patient encounter. They are often described as a cross between a stamp and a custom form: They collect information similar to a stamp but include additional automated functions and refined formatting like custom forms. Similar to a stamp, they generate a formatted progress note. They are built using the Custom Forms feature and as with custom forms, users can import and export EA’s to and from their system. The information captured in an EA is searchable.

The EA displayed on the right is a simple EA built for preventive screening, specifically mammography. When selected it is set to pull in the patient’s gender, age and date of last mammogram.

When the checkbox is selected “Patient has previously had a complete bilateral mastectomy” the EA is programmed to append the note, “Complete Bilateral Mastectomy” to the History of Past Health Section on the CPP.

The last feature to highlight are the links to the various imaging centres where the user can click to access the desired custom form.

There are several additional items that can be included next to the text in an EA. Some of these items are:

- Y/N
- ✓/x/!
- +/-
- Text field
- Treatment (e.g. prescriptions)
- Bill
- Reminder

When some of the items are selected the EA can expand based on the response to include additional questions.
In this example the response to the tobacco screen is “No”. The EA can then be completed.

In the same EA when “Yes” is selected, the EA expands to ask several more questions. You will see there is a selection of checkboxes, text fields and drop down menus.

Another great feature is that they can be completed by more than one user (both users’ initials will get stamped in the record) so this enables the team to be involved seamlessly with different aspects of the appointment.

These are 2 simple examples of EAs. There are samples available on the Telus Health Community Portal (see link below) or purchase the custom forms license and training to build your own.

For More Information

In addition to the information included in the main User Guide/Help Files, Telus Health has also produced a guide for building Encounter Assistants (you must be logged into the portal to access the link):

https://telushealthcommunity.force.com/pssuitecommunity/servlet/fileField?id=0BE340000008SWA
There are also a few sample EAs that Telus has built that you can download and import into your instance (you must be logged into the portal to access the link):

https://telushealthcommunity.force.com/pssuitecommunity/articles/en_US/Learning_Material/Encounter-Assistants-Training-
Video?popup=false&navBack=H4sIAAAAAAAAAAluuVipWsIlyzssyz0lNSU_1yM9NVdJrygaKFSSmp4ZkluSA-KVAvn5BcXFpZklqcn5ubmleZkmlfnppn42TKc-kINijH1xamJRoZtaI5yfmleSWqRUM0sABoCOlpvAAAA

There is also a video tutorial on getting started with building EAs (you must be logged into the portal to access the link):

https://telushealthcommunity.force.com/pssuitecommunity/articles/en_US/Learning_Material/Encounter-Assistants-Training-
Video?popup=false&navBack=H4sIAAAAAAAAAAluuVipWsIlyzssyz0lNSU_1yM9NVdJrygaKFSSmp4ZkluSA-KVAvn5BcXFpZklqcn5ubmleZkmlfnppn42TKc-kINijH1xamJRoZtaI5yfmleSWqRUM0sABoCOlpvAAAA
Appendix 6: Flowsheets

Flowsheets are custom reports that can pull together information from the patient’s chart. This includes items such as vitals, lab values, medications, diagnostic imaging or most other searchable items. Flowsheets display key elements of care for chronic disease management or preventive care.

A flowsheet can be created for an individual patient or you can create a global flowsheet that is available for all patients. Flowsheets are recommended for monitoring routine screening maneuvers such as those in Alberta Screening & Prevention (ASaP). They are also very useful for chronic diseases such as diabetes and for monitoring INR.

This example is a global flowsheet that has been created for female preventive screening. It includes the maneuvers from the 2016 Maneuvers Menu for Adults.

This example shows a diabetic flowsheet.
Flowsheets are very simple and quick to build and can be an effective way to monitor preventive screening and chronic disease management.

Instructions on building both global and individual flowsheets can be found in the PS Suite User Guide/Help Files.
Appendix 7: Cohorts

Cohorts can be used to pull groups of patients together in a list. You can create a cohort of patients based on a condition such as diabetes or cancer. You can also use the function to create groups based on providers such as those patients seeing a diabetic nurse educator or pharmacist. Cohorts are also useful when a patient is a part of a class that is offered within your clinic such as a tobacco cessation class or a group visit. Patients can belong to more than one cohort.

You can assign patients to a cohort individually or by creating a search and selecting the patients from the resulting list to add to your cohort.

To create a cohort, select Edit Cohorts from the main menu.
The box will appear to manage your cohorts. You can “Add New Cohort” to create one.

Once you have named your cohort you can use the buttons on the right to add (or remove) patients individually by searching and adding their names. Or if you have created a search for the patient population you wish to include you can click on the Search button to select from your list of searches. Once you perform the search, select the patients from the search results to add to your cohort.

The list of cohorts appears on the left and when selected, the patients associated with the selected cohort will show on the right. This list is not interactive. Users need to maintain the list.
Cohorts are searchable in the search engine.

For additional information please see the User Guide/Help files.
Appendix 8: Practice Solutions Keyboard Shortcuts

Keyboard shortcuts are a feature for users who prefer using keystrokes to maneuver the system rather than a mouse. There are several functions that can be accomplished using keystrokes.

Telus Health has created both a Quick Reference Guide found on the portal (you must be logged in to access the link):

https://telushealthcommunity.force.com/pssuitecommunity/servlet/fileField?id=0BE800000008QC4T

Telus Health also has a document with the complete list of keyboard shortcuts found on the portal (you must be logged in to access the link):

https://telushealthcommunity.force.com/pssuitecommunity/servlet/fileField?id=0BE340000008ScS