This workbook was created in partnership with Highland PCN and Toward Optimized Practice (TOP), and is endorsed by the EQuIP team (Elevating Quality Improvement in Practice) which represents the seven (7) Calgary and area PCNs.
Why do we need this workbook?

The Patient’s Medical Home (PMH) is the vision for the future of primary health care in Alberta. To become medical homes, clinics must work on implementing several elements.

‘Panel and continuity’ is a foundational element, meaning that if panel is not done well, making progress in the other elements will be difficult. ‘Panel Identification’, or clearly defining the list of patients whose care a physician or nurse practitioner (NP) is responsible for, is the starting point. Once a clinic team accurately identifies the patients whose care they are responsible for, they can ‘manage’ the panel by using the EMR and clinic team to provide proactive care for patients. (Note: If a clinic does not have an EMR, panel tips for paper charts can be found at http://www.topalbertadoctors.org/file/asapapertipsheet.pdf).

For example, Mrs. Jones books an appointment for a sprained toe. Susan, the MOA who rooms her, notices that the EMR has flagged Mrs. Jones as being due for a mammogram. Susan tells Mrs. Jones that her doctor recommends the screening test. Mrs. Jones is surprised that two years has already passed since her last mammogram – it seems like just yesterday! Susan prints the requisition for Mrs. Jones’ preferred diagnostic imaging centre, and documents this in the chart. When Dr. Smith arrives, she addresses Mrs. Jones’ toe concern. She sees in the EMR that Susan has given her a requisition and asks if she has any questions or concerns.

This example represents one scenario, related to preventive screening, with one clinic’s process. Every clinic will design its own panel processes, beginning with panel identification.

When should we start using this workbook?

This workbook will be most helpful when the clinic team becomes familiar with, and commits to becoming, a patient’s medical home. In the picture shown above, ‘engaged leadership’ is the first element to work on. This means clinic leaders (often a physician and/or clinic manager) agree to change the way things are done at the clinic to take them from where they are, to a new way of doing things.
It is also suggested that clinics are working on the second element in the picture, ‘capacity for improvement’. This means the changes in the clinic will be made in an organized way, and measures are taken along the way to make sure the clinic is getting the results it is looking for. This is improvement work and is best done by an improvement team. The improvement team will ideally have a representative from all staff in the clinic (e.g. reception, MOA, physician). In smaller clinics, the improvement team is often the whole clinic! In order to be successful, the improvement team must commit to regular meeting to discuss the work that they are going to do.

How should we use the workbook?

Each activity in this workbook builds on the previous and, in general, moves from basic to more advanced work. As well, each activity contains observable and measurable behaviours that will help guide progress to higher levels.

Make sure you complete all activities in each level; however, you should begin screening level activities as you progress through the panel identification levels.

Clinics may work through this book as a team (improvement team or otherwise), or with the help of an Improvement Facilitator (IF). An IF is a great resource to assist the clinic and/or improvement team, from facilitating meetings to providing helpful resources for completing the activities in this workbook. Perhaps most importantly, improvement facilitators are trained in quality improvement methods designed to help teams take a systematic approach to making changes. Through learning and applying these methods, teams often adopt a culture of continuous quality improvement that they are able to apply whenever change is needed, in any area of the clinic.

To support the workbook, there is an accompanying STEP Checklist – a document that will help teams work through the panel activities and track progress. The STEP Toolkit is another supporting document that provides options for helpful tools related to the activities outlined in this workbook. As well, this workbook is aligned with the Patient’s Medical Home Assessment, a tool to assist primary care practices in identifying the changes required for patient-centered care within their practices.

Use the workbook to record the details of your work, and attach and/or add documentation as needed. This workbook will become your team’s reference and guide as you work on panel, and will provide a great teaching tool for new members of your clinic.

What if we’re already doing some of the activities?

As you move through, if you find that you have already done some of the activities in your clinic, briefly review and record your processes in the designated area. Having processes clearly documented will ensure that everyone knows how things are done – especially new clinic team members.

What happens when we’ve completed the workbook?

The processes of panel identification and management are ongoing – it’s not a project that your clinic will complete and then put on a shelf. Each clinic will set its own pace to reach its panel goals. Some
of the activities may be completed in a few minutes; others might take weeks, months or even years to achieve. As well, you may find that you need to revisit and adjust steps you have previously completed if changes occur inside or outside of the clinic.

**Are there any tips for success?**

A clinic may have a highly trained and capable Proactive Office Encounter Technician (POET)/Panel Manager/Primary Care Coordinator (PCC)/Patient Care Coordinator (PCC)/Panel Liaison, but if the conditions for success are not in place in the background, his/her ability to support panel work will be hampered. These conditions refer to:

a) Recognition and reinforcement of good performance.

b) Access to resources and information.

c) Clinic policies, procedures and incentives that are aligned with panel goals.

d) “Signals” from practice leadership that the team working on panel matters to the practice.

More information on conditions for success can be found in Appendix A.
Before we get started, here are some basic questions to about your clinic software and the privacy processes in your clinic.

<table>
<thead>
<tr>
<th>Clinic Software</th>
<th>Yes</th>
<th>No</th>
<th>Comments/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you have the following programs installed on your clinic computers? (Many EMRs use these programs when exporting data sets or running reports)</td>
<td><img src="https://example.com/table.png" alt="Table" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Microsoft Word or equivalent</td>
<td><img src="https://example.com/table.png" alt="Table" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Microsoft Excel or equivalent</td>
<td><img src="https://example.com/table.png" alt="Table" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Adobe Acrobat</td>
<td><img src="https://example.com/table.png" alt="Table" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What EMR do you use?</td>
<td><img src="https://example.com/table.png" alt="Table" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How long have you had this EMR?</td>
<td><img src="https://example.com/table.png" alt="Table" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did you ever have another EMR?</td>
<td><img src="https://example.com/table.png" alt="Table" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you ever had data migrated or imported from another EMR?</td>
<td><img src="https://example.com/table.png" alt="Table" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Privacy</td>
<td><img src="https://example.com/table.png" alt="Table" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have all your clinic staff reviewed OIPC privacy guidelines or taken privacy training?</td>
<td><img src="https://example.com/table.png" alt="Table" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has your clinic assigned a privacy officer? Who is that person?</td>
<td><img src="https://example.com/table.png" alt="Table" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(This person should be assigned in your clinic Privacy and Impact Assessment.)</td>
<td><img src="https://example.com/table.png" alt="Table" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has everyone in the clinic read and signed their confidentiality oath?</td>
<td><img src="https://example.com/table.png" alt="Table" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Hint: It is part of your Privacy Impact Assessment)</td>
<td><img src="https://example.com/table.png" alt="Table" /></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Panel Identification

Panel identification (Panel ID) is the process of ‘cleaning’ a panel list to include only those patients who consider a physician or NP to be their primary provider, and that provider agrees. Panel ID is typically accomplished by ‘verifying attachment’ to a primary provider when a patient checks in or books an appointment. This step is known interchangeably as patient verification, patient validation and/or confirming attachment. It also involves removing patients who are not actively part of the panel (e.g., moved, left practice, deceased, etc.), and using processes to maintain an up-to-date, clean panel. When a team has successfully identified active patients and has panel maintenance processes in place, lists of specific patient groups can be generated using the EMR, and those lists can be trusted to be accurate and can be used by the clinical care team to improve the care of all patients.
The STEP Toolkit contains links to suggested documents to assist you with your panel identification and screening activities.
1. **Identify active patients that are attached to a primary care provider**

   There are 2 key questions that help clinics know whether they have panel identification processes in place:

   1. Does each patient record indicate the responsible physician/provider?
   2. Can the physician or team generate a list of the patients attached to each physician?

   We will be visiting the first question in this activity and the second question will be covered in activity #5.

   Your clinic may already have processes for panel identification. These may have developed over time and may not have been discussed with the whole team or documented.

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**EXERCISE**

In this exercise we will be discussing how your clinic identifies whether a patient is attached to a provider.

How is provider attachment confirmed with the patient?

________________________________________________________________________________________

Who asks the patient? _________________________________________________________________

Does everybody in the clinic ask the question the same way (using a script)?  □ Yes  □ No

Is it documented?  □ Yes  □ No

How often do you ask? _________________________________________________________________

When you look at the demographic screen in the EMR, what field tells you that this patient belongs to particular physician?

________________________________________________________________________________________

________________________________________________________________________________________
2. **Roles and responsibilities are outlined and assigned for panel identification**

As you work through panel identification processes, you will see that many clinic team members are involved in the process; panel work is team work.

It is important that the roles and responsibilities for panel work are recorded. This will help all clinic team members know exactly what their role in panel work is and will help when you have new members come onto your team. If your clinic already has formal job descriptions, you may wish to have any new roles or responsibilities added to them. If you don’t have formal job descriptions, you can use this workbook to help you record this information at each activity.

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**EXERCISE**

As you work through each activity in this workbook, use the available fields to record who is responsible for each task.

If you are updating your already existing job descriptions, name who is responsible for this: ______________________________

- Share updates with your clinic team and let them know where this information can be found.

You may find that creating a policy and procedure manual could be useful for your clinic.
3. **EMR configurations and settings are managed by one or more clinic staff**

Every EMR has the ability to be customized in a way that works the best for your clinic; this is referred to as configuring your EMR. As you work through this workbook some activities are going to require configuration of your EMR.

Some examples include:
- Configuring patient statuses
- Developing searches
- Building triggers, rules, flags, reminders, goals etc.
- Entering data in the chart

It is recommended that only one or 2 people are responsible for setting these configurations. Some things to consider:
- Who currently has configuration privileges?
- Who should have configuration privileges?
- Who has them, but shouldn’t use them?

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**EXERCISE**

At least one person generally has administrative privileges in the EMR; they can configure statuses and settings. Who is that person/are your people for you and your clinic?

________________________________________________________________________

What happens if this person is on vacation or leave for an extended period of time? Is there a back-up?

________________________________________________________________________

☐ Do an inventory of the administrative privileges that each user in the clinic has. Discuss as an improvement team if some privileges need to be changed, and understand in your EMR what can and cannot be changed.

☐ Discuss any changes you make with the users. If users continue to have administrative privileges they shouldn’t use, be sure this is discussed with them.
4. **Patient statuses are defined, configured and shared with the clinic team.**

Statuses are a way to help you categorize different kinds of patients. Some EMRs allow you to customize patient statuses based on the needs of your practice.

Some examples of patient statuses are:

- Active
- Inactive
- Deceased
- Left Practice
- Walk-in
- Long Term Care
- IUD Clinic

It is important that each status is defined and relevant team members know exactly when each should be used and who is allowed to change them.

**EXERCISE**

Who manages the status configurations in your clinic?

In an improvement team meeting:

- Go through the panel maintenance tool – *Found on the next page, this tool is designed to assist clinics in assessing or developing their current processes for maintaining their panel lists.*
- Create the list of statuses for your clinic
- Document the list
- Configure the statuses in the EMR
- Share with your clinic team

In some EMRs where statuses cannot be configured or where it is just a preferred process, instead of using statuses to categorize patients, a ‘fake’ provider can be created. Examples of this are ‘Dr. Walk-in’ or ‘Dr. IUD’. Before deciding on a process, be aware of how this impacts how you search for patients in your particular EMR. Document your process.
## Panel Maintenance Tool (From the Guide to Panel Identification)

<table>
<thead>
<tr>
<th>New Patients Added to Panel</th>
<th>How is this Confirmed?</th>
<th>How is this Documented?</th>
<th>Who is Responsible?</th>
</tr>
</thead>
<tbody>
<tr>
<td>New patient phones and requests a physician.</td>
<td>Patient calls reception, requests a physician, and is accepted by a physician with an open panel.</td>
<td>Patient is assigned a primary physician in EMR field or paper chart/manual database</td>
<td>Front of office staff</td>
</tr>
<tr>
<td>Patient requests/receives a “Meet and Greet” appointment, but is not yet assigned.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unassigned patient does not belong to any panel, but has been accepted into the practice.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-panel child or relative attends appointment or separate visit is generated.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newborn patient.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Patients Removed from Panel</th>
<th>How is this Confirmed?</th>
<th>How is this Documented?</th>
<th>Who is Responsible?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient deceased.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient moved away, has stated ended relationship with clinic.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient moved away for extended period, but intends to return to community (e.g., university/college, mission).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lapsed patient: has not attended clinic in 36 months (or other specified time period).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orphaned patient: physician leaves the clinic, resulting in unassigned panel.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient belongs to a physician panel, but is seen by other physician more frequently.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diagnostic Imaging visit: non-clinic patients.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency Department / &quot;O/P&quot; visits: Non-panel patients.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Patients Seen, Not Added to Panel</th>
<th>How is this Confirmed?</th>
<th>How is this Documented?</th>
<th>Who is Responsible?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walk-in patient: has a primary physician in another clinic in region.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transient patient: has a primary physician in a clinic outside of region.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specialty care (seen for specialized services, not accepted to panel).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5. **Patient panel list for each provider is available internally to the clinic team.**

In the very first exercise we reviewed the 2 key questions that help clinics know whether they have panel identification processes in place. We completed an exercise for the first question: Does each patient record indicate the responsible physician?

Let’s now consider the second question: Can the physician or team generate a list of the patients attached to each physician?

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**EXERCISE**

- Using your EMR, run a list of patients for each provider and record the number patients they have on their list. If you need help with this speak to your improvement facilitator, refer to the TOP EMR Tip Sheets, or check your EMR vendor resources.

  a. Dr. ___________________________  # of patients ___________________________
  b. Dr. ___________________________  # of patients ___________________________
  c. Dr. ___________________________  # of patients ___________________________
  d. Dr. ___________________________  # of patients ___________________________
  e. Dr. ___________________________  # of patients ___________________________

- Run a list to get the total number of patients in the clinic (all providers combined). This will tell you how many patients are active in your EMR.

  Total # of clinic patients ___________________________

In this exercise we are not concerned with what the numbers are, only that we can run the list and know the number of patients we are starting with. We will use the lists we made here in the next level to clean up the panel(s). In turn, we will use the cleaned-up lists as our foundation for much of the work we do in panel screening.

- **Searches can potentially slow down your EMR, so it is recommended to run large searches like this outside of busy clinic times.**
6. **A standardized process for patient validation is established and documented. A validation rate is produced and shared with the team.**

Each patient visit to the clinic is an opportunity to confirm patient information, including the name of his/her provider. Best practice is to make this a routine part of the patient check-in process; this simple step builds a reliable panel list.

Most EMRs have a field that allows the front office staff to mark when the patient attachment has been verified or updated. Using this field stamps the chart with the date. For the EMRs that do not have a verified field, updating the status date can be used for this purpose.

It is recommended that patient information is validated at each visit.

---

**EXERCISE**

- Patients are asked by front office staff at each visit to confirm their demographic information, including provider attachment
- The clinic has a script so that the question is asked the same way every time. Document your script here:

  ________________________________________________________________

  ________________________________________________________________

  ________________________________________________________________

- All front office staff use the available EMR field for confirming demographics and attachment

Once you have established a process for validation, you want to be able to see how well the front office staff is doing with the process. To do this, use the EMR search tool to find the numbers needed to calculate a ‘validation rate’. First, let’s look at the simple formula to calculate the validation rate for one day:

\[
\text{# Of patients validated today} \times 100\% = \text{??}\%
\]

\[
\text{#Of patients seen today}
\]

Throughout this document you will see the words *validation*, *verification* and *confirmation* refer to the process where we ask the patient who their primary provider is, and then indicate this in the EMR. They all mean the same thing and will be used interchangeably.
First, use your EMR search tool to calculate how many patients were seen today: 
____________
This is your denominator.

Next, use your EMR search tool to calculate, of the patients seen today, how many were verified: _________________
This is your numerator.

Use these numbers in the formula above: Divide the top number (numerator) by the bottom number (denominator), multiply it by 100 to get your percent validation rate for today.

Validation Rate: _______________%

This is just one example, instead of using just the numbers from today, you can calculate your rate for a week, a month, a 3-month period, a year, and so on.

☐ Refer to the TOP EMR Tip Sheets for information on how to validate attachment in each EMR as well as instructions on how to run the searches to get the numbers to calculate your validation rate

☐ Share the results with the clinic team. If needed, your improvement facilitator will assist your clinic team with activities to help improve the rate.
Panel Identification

Level 2
1. **Patient panel lists are regularly:** (1) **produced for each primary care provider;** (2) **shared internally;** and, (3) **discussed as a team to review for accuracy.**

In Panel Identification Level 1 you ran an EMR panel list for each provider. In Level 2, you will be using these lists to inform your provider and clinic team about their panel. What do you notice about the panel list? You may notice that some patients:

- no longer come to the practice (moved away, deceased, etc.)
- have not been seen in more than 5 or 10 years
- are ‘walk-in’ patients
- are seen at the nursing home or in emergency room
- have duplicate charts
- are temporary (vasectomy, pre-natal, aviation medical, cosmetic, etc.

**EXERCISE**

Write down what you notice about the panel lists or unique things about the practice and what action you need to take to take to clean up the panel list.

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

Once you feel the panel is fairly clean, have the provider(s) review their panel list to verify and validate their patients. If there are any names on the list that the provider cannot verify, the assigned panel manager will need to contact these patients to make the appropriate changes in the EMR.

This process supports the production of an accurate panel list for screening and reporting.

Once you feel your panel is accurate, it must be maintained to keep it clean. This means that panel clean-up is an ongoing process and it will require good clinic workflow processes as well as periodic proactive searches to keep it clean.

Remember, in the EMR if you ‘inactivate’ a patient, the patient can always be re-activated if they come back to the practice. Inactivating patients from the EMR does not delete them permanently.
2. **Conduct EMR searches to actively clean the panel.**
   There are a number of EMR searches that will help you with your initial panel clean up and with keeping the panel clean. In the TOP EMR Tip Sheets you will find some suggested searches such as patients who have:
   
   - only been in for a ‘meet & greet’ appointment and have never had a follow up appointment. This appointment was greater than _____ months ago
   - never been in for an appointment (and have no appointments booked within the next six months)
   - never been billed
   - a billing code or procedure code used for patients who are not a member of the practice

   Spend some time with your improvement facilitator to determine what searches are valuable for your clinic.

   **EXERCISE**

   Start by choosing three searches that you will do in the near future to start cleaning up the panel.
   
   I. _______________________________________________________________________
   
   II. _______________________________________________________________________
   
   III. _______________________________________________________________________

   Many EMRs offer exporting options so that lists can be further sorted and analyzed in Microsoft Excel or Open Office Calc. Basic spreadsheet training is recommended.

   Patient panels are constantly changing so you may need to run the same searches again after a certain period of time. Determine with your improvement team the frequency for each search.
To make things go faster, most EMR’s have the ability to make ‘bulk’ changes to lists however, for some EMRs you may have to ask the vendor to do the bulk changes for you. At times it may be best to go into the patient chart to double check information before you change the status.

Don’t get discouraged if it takes significant time to complete this activity. Each clean up search will add up and will help make the panel list more and more accurate. Once you get through the basic-searches, start working on more advanced ones.
3. Patient demographics, provider assignment and/or status definitions are updated as a result of the EMR clean-up searches.

By running EMR searches, you will uncover patient records that need to be updated for various reasons, (e.g. new demographics, no longer a patient, do not belong to the provider, etc.). These searches are a valuable tool to assist you in updating and maintaining the panel.

**EXERCISE**

For each of the three searches you previously identified, document the following:

Who is running the search and how often? (Divide up the work if you can)

I. ____________________________________________________________

II. ____________________________________________________________

III. ____________________________________________________________

Who is making the updates required? (Are the panel managers allowed to make bulk or specific changes as required?)

I. ____________________________________________________________

II. ____________________________________________________________

III. ____________________________________________________________

Who will keep track of all the above work? (Provider, Office Manager, Admin Lead, Panel Manager?)

__________________________________________________________

__________________________________________________________

__________________________________________________________

Insert more paper to document things as you make decisions. Add more notes or paper as needed. This activity will be ongoing so think of it as bookkeeping for your panel!
4. **For patients seen within the last 3 months**, patient validation rate is greater than 90% and results shared with the clinic team.

A validated patient panel is foundational for proactive screening (opportunistic and outreach) and reporting screening rates. Therefore, it is important to have a way to measure how often the front office staff is verifying patient demographic information (address and phone) and provider attachment.

By measuring the clinic’s validation (aka verification) rate for the past 3 months, you will see if your validation workflow and process changes are working. Are you meeting the goals for clinic validation rate? If your rate is low, you will need to review your workflow and processes to understand what the gaps are.

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**EXERCISE**

In your EMR, perform the following two searches to get the:

- Number of patients validated in the last three months. This becomes your numerator.
- Number of patients seen in the last three months. This number becomes your denominator.

Use the following formula to calculate the validation rate:

\[
\text{Validation Rate} = \left( \frac{\text{Number of patients validated in the last three months}}{\text{Number of patients seen in the last three months}} \right) \times 100\%
\]

You can calculate your validation rate here:

If you wish, you can calculate this rate weekly or monthly for quicker feedback. Just change your time interval when you do your searches. For example, instead of three months (date range) put in one month.

Determine the frequency of your verification rate calculation and share the rates with the clinic team. Celebrate when the numbers increase. When you get the verification rates above 90%, you will know your processes are working well and you will be ready for the next step. It doesn’t matter how quickly you reach your goal, don’t get discouraged. Most important, look for continuous improvement.

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Each EMR does validation a bit differently and a few EMRs have no direct functionality to do this activity. However, there are workarounds that will support accurate panel validation. Refer to the TOP EMR tips sheets for help.
In Panel Identification Level 1 you created a script for the front desk staff for confirming demographics and attachment. This is a good opportunity to review how the script is working and trial a new script if there are any issues with the current one.

Document your EMR workflow for validating patients. Who does it? How often is this done?
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

As an improvement team, create a chart in your lunch room that everyone can see. Write down your rates each quarter so everyone can celebrate improvements. Encourage discussion to help reinforce sustained change.

If you find that patients complain about being asked repeatedly to review demographics and answer verification questions, design a sign for your front desk so patients are educated about why this is important and to thank them for their patience! Remember, that a high validation rate will also ensure that the clinic will have the correct information to contact a patient about a critical result without delay.
Panel Identification

Level 3
1. **Research, compare and discuss the value and use of available external reports to inform quality improvement and patient care. Provider applies for and receives the chosen external report(s).**

   ‘Internal Reports’ are extracted from the clinic’s EMR.

   ‘External Reports’ are produced using data not sourced from the EMR (e.g., billing data, hospital data). These reports must be requested by a provider. Clinic staff are not able to request external panel reports. Sharing these reports with the clinic team is at the discretion of the individual provider.

The clinic EMR is not the only source for identifying physician panels. Reports requested from Health Quality Council of Alberta (HQCA), Primary Care Networks (PCN), CPCSSN (Canadian Primary Care Sentinel Surveillance Network) and Alberta Health (AH) can provide information that can support work in areas such as:

- Evaluating access in the practice
- Establishing an ideal panel size
- Determining ‘return visit rates’ (RVR)
- Defining the degree of attachment to providers, (know how often patients are accessing primary care outside the practice)
- Highlighting access and continuity by reporting visit rates to the emergency department or urgent care for family practice related conditions

This activity is more advanced because it assumes that you have done some significant work to establish a clean panel. In some cases, a validated patient panel must be provided to request certain reports.

A provider can request external reports at any time; however, if you provide a patient list that is not validated, the accuracy of the data may not be representative of patient panel.

---

**EXERCISE**

- Learn more about these reports and discuss with the provider(s) and/or clinic team whether the reports would be valuable at this stage. There is a lot to learn about these types of reports and again you will need to also discuss what you would do or actions you might take with this information.

- Consider contacting an AIM Improvement Consultant to understand the Alberta Health Panel Report. In addition, the ‘AIM Online Panel Tool’ allows teams to determine a good panel size by entering their panel numbers and the number of appointment slots each provider supplies into the tool.

- For help with interpreting the HQCA report, please contact ________________________, your PCN improvement facilitator or your Toward Optimize Practice representative.
2. **Based on selected external reports, goals and actions for improvement are planned and assigned.**

In the previous activity, you started learning about the data from sources outside of your EMR that can give you more information about your panel. What will you do with that information? Is it relevant to the clinic? External reports such as HQCA (Health Quality Council of Alberta) and Alberta Health Panel Report can provide information on:

- Continuity to the provider
- Emergency department visits for family practice related issues
- Degree of attachment to the provider
- Prescribing rates

Data collected outside of your EMR can determine activities going forward. For example, you might notice a significant number of patients are using the emergency department for prescription refills or some patients having multiple providers (poor continuity). This information can drive both basic and advanced quality improvement activities. What activities you choose to work on will be specific to your clinic or provider(s).

Below is a scenario of what this activity would look like.

**Scenario:** Clinic ABC has worked for more than two years cleaning up and sustaining clean patient panels and reporting verification rates. Dr. John Smith suspects that a number of his patients may be going to the emergency room for family practice related concerns so he decides to order an HQCA report; this report can show Dr. Smith how often his patients are going to the emergency room during certain times of the day for issues that could be managed at the clinic. If the proportion of patients using emergency care is high, the clinic and specifically Dr. Smith may wish to address this. If the Dr. Smith wants to ensure his patients have access to him when they need to, he may choose one or more of the following actions:

- Establish an after-hours strategy for access such as offering one day a week of evening hours
- Use an EMR patient portal that will allow patients to access their results as appropriate
- Discuss with patients when to use urgent care and encourage continuity of care

**EXERCISE**

- Identify one external panel report that is of interest to the provider and clinic team

- Request the report from the appropriate source (your PCN improvement facilitator can assist you with this)
- Analyze the data provided. Look to your improvement facilitator or someone from the agency that produced the report to help you interpret the data and possibly compare it against data from the clinic EMR.

- Develop a quality improvement activity to target an area that would be worthwhile addressing.

Some interesting things you saw in the report:

______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

Work with your improvement and/or clinic team to come up with an action plan:

______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
3. During the last 3 years, patient panel validation rate is greater than 90% and results shared with the clinic team. The panel report indicates the current validation rate and the rate tracked over time.

In Panel Identification Level 1, you established a panel verification process. The front office staff is verifying the patient demographic information (address and phone) and physician attachment when patients come to the clinic.

In Panel Identification Level 2, you ran a set of searches to measure whether your verification workflow is working by calculating the verification rate for the past three months.

In Panel Identification Level 3, you will calculate the verification rate for the past three years. This rate will reflect the accuracy of verification of the entire active patient panel (those seen in the last three years). This rate is likely to be slower to increase - even with excellent processes in place especially early into the panel verification process due to the longer time interval. You are looking for continuous improvement and once you have reached over 90% verification of your patient panel, you are well positioned to have the clean panel lists needed for proactive screening.

**EXERCISE**

In your EMR, run the following two lists:

- Number of patients validated in the last three years. This becomes your numerator.
- Number of patients seen in the last three years. This number becomes your denominator.

Use the following formula to calculate your verification rate for the last three years:

\[
\frac{\text{# Of patients validated in the last three years}}{\text{# Of patients seen in three years}} \times 100\% = ??\%
\]

As you may recall, this formula is much the same as Panel Identification Levels 1 and 2. The time interval is the only thing that has changed.

Once you have determined what your panel verification rate is, discuss it with the improvement team. Are there any surprises? Is it lower than you expected?

If you think the rate does not reflect the verification efforts, do some investigating in the EMR. Here are some things to consider:
- If the monthly or quarterly rates are over 90%, you should hopefully have a similar rate at the end of three years
- If the panel validation rate is vastly different from your monthly or quarterly rates, check the searches for errors
- Flip the search around; run the search to give you a list of those patients not verified. What do you notice?

☐ Does the list reflect a significant number of children? Could it be that all charts are not verified when a family checks in?

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4. **Expertise is demonstrated by independently conducting quality improvement activities based on internal and external reports and unique clinic traits.**

At this level of panel identification, you have done a significant amount of work to clean up your panel, developed validation processes, managed issues that arose along the way and became savvy in the art of panel identification. From this point on, you should feel comfortable with ongoing maintenance of your physician’s patient panels. You should be able to:

- Adapt to changes in providers, applying these principles when physicians join or leave a practice
- Monitor fluctuations in the monthly/quarterly and panel verification rates; and address a declining rate if needed
- Develop quality improvement activities using internal and external reports to target problem areas
- Share knowledge with new physicians and staff to ensure clinic processes and goals are sustained

Progress in this activity is more subjective. If you are at this level, your skills and expertise are evident. At this level, you are now able to mentor/ support others who are in earlier stages of this journey.
Panel Management: Screening

When a clinic team has identified and is maintaining clean patient panels for each provider, they have a true foundation where they can work to improve the care they are providing to all patients. This section of the workbook will look at designing preventive screening processes. In the past, preventive screening has typically occurred when a patient books a specific screening appointment (e.g. complete physical). However, for various reasons, many patients don’t make these appointments. By effectively using the panel, EMR and team, all patients can be offered preventive screening when they need it outside of a complete physical.

Opportunistic screening occurs when a patient makes an appointment for any reason. Through use of EMR capabilities that automatically ‘flag’ the patient as being due for screening, the clinic team or provider can ensure that the patient is offered the right tests at the right time – regardless of the reason for the appointment.

Outreach screening involves using the EMR to ‘comb’ the panel for patients who are due for preventive screening, and inviting them to come in to pick up a requisition or for an appointment – by mail, email or phone.
Panel Management: Screening

Level 1
1. **Clinic team establishes standardized clinic workflows for proactive patient care (opportunistic screening) for chosen maneuvers (e.g., ASaP).**

You and your team have spent a considerable amount of effort on panel identification. Through the rest of this document we will focus on the processes that will optimize preventive screening care for all patients on each provider’s panel.

It is suggested that you begin this work with some of the screening maneuvers recommended by the Alberta Screening and Prevention (ASaP) initiative. The maneuvers focus on screening for diseases where the evidence suggests the provider can have the most impact.

A key feature of ASaP is developing your processes with a *smaller* number of patients and a *larger* numbers of maneuvers. In ASaP we call this a ‘bundle’ of maneuvers. Offering a bundle develops a patient-centred approach to care where the whole patient is considered.

For most clinics, opportunistic screening – or, offering screening when the patient presents for another reason - is a new way of working. It is going to take some time with the team to develop, test and integrate new workflows. As you progress through this work, you will find that each change you make will pay off not just with improved patient care, but it will also make your work easier over time.

### EXERCISE:

- Plan an improvement team meeting where you will select a minimum of 5 preventive screening maneuvers to work on for opportunistic screening processes. If you have an improvement facilitator, have them assist at this meeting. Also be sure to have representation from the whole clinic team (e.g., front office staff, MOA, clinic manager, physician, allied health team members).

- Discuss as an improvement team the 5 or so maneuvers you will start with. Be thoughtful on why you are choosing the maneuvers you are. Consider:
  - If you have patient populations who you wish to target first
  - Who will be responsible for completing each maneuver
  - If there are any EMR considerations such an ability/inability to effectively capture the maneuver

The ASaP program is focused on supporting primary care providers and team members to offer a screening and prevention bundle to all their patients through enhanced opportunistic and planned outreach methods, targeting patients who do not present for screening care.
Record your selected maneuvers here:

- ___________________________
- ___________________________
- ___________________________
- ___________________________
- ___________________________

Document the workflows for each maneuver.

Consider:

- What is the process to identify patients due for screening? Will you run lists the morning of and review with the team at a huddle? Will you check the patients’ charts as they arrive?
- Who will complete the screens?
- How will you test your processes to see if they are working as planned?

You can write out your processes or consider creating a table like the one below that lists all selected maneuvers, explains how patients are identified for opportunistic screening, and specifies the person(s) who will complete the screening.

Sample table:

<table>
<thead>
<tr>
<th>Maneuver</th>
<th>How are patients identified?</th>
<th>Who will complete the screen?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>At check-in</td>
<td>MOA</td>
</tr>
<tr>
<td>Weight</td>
<td>At check-in</td>
<td>MOA</td>
</tr>
<tr>
<td>Blood Pressure</td>
<td>At check-in</td>
<td>MOA</td>
</tr>
<tr>
<td>Pap</td>
<td>EMR list reviewed in the morning huddle</td>
<td>Physician</td>
</tr>
<tr>
<td>Mammogram</td>
<td>EMR list reviewed in the morning huddle</td>
<td>Req. printed by panel manager and provided to patient by physician</td>
</tr>
</tbody>
</table>
2. **Clinic team establishes standardized data entry workflows for proactive patient care for chosen maneuvers in EMR reportable fields (document keyword lists, etc.).**

Entering EMR information consistently in searchable fields is important for all of the screening maneuvers. Not only does it allow all providers in the clinic to find the information quickly while in the patient chart, but this information will later be used to run lists and set up reminders in your EMR. The importance of having all team members aware and on board with your standardized EMR data entry processes cannot be underestimated.

Each EMR is different in how and where information is entered, but there are some scenarios that will be common across EMRs. We suggest you discuss your clinic processes related to the following:

- Vitals (height, weight, blood pressure) have a designated field in the EMR; be sure all team members know where these are and that they are used
- Most labs are pushed into your EMR, but you may have some cases where you manually enter data or get lab data by fax or via Netcare
- Documents received from outside sources need to be uploaded to your EMR; commonly received documents should be labeled using an agreed **keyword list** so there are no typos or spelling errors

In the last activity you selected discussed and documented the workflows for 5 screening maneuvers. Now you will look at who enters the data, where it is entered, and discuss the considerations for your clinic’s EMR.

---

**EXERCISE**

In the previous activity you selected your screening maneuvers and defined who is doing the screening.

- Add to your written workflow or table who enters the information into the patient’s chart
- There may be some considerations to the EMR data entry process that you may wish to note (see list in the preamble to this exercise). Sample table on following page.
The STEP Toolkit contains links to suggested documents to assist you with your panel identification and screening activities.

---

Sample Table:

<table>
<thead>
<tr>
<th>Maneuver</th>
<th>How are patients identified?</th>
<th>Who will complete the screen?</th>
<th>Where is it entered in the EMR? By who?</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>At check-in</td>
<td>MOA</td>
<td>Vitals Height field by MOA</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>At check-in</td>
<td>MOA</td>
<td>Vitals Weight field by MOA</td>
<td></td>
</tr>
<tr>
<td>Blood Pressure</td>
<td>At check-in</td>
<td>MOA</td>
<td>Vitals BP field by MOA</td>
<td></td>
</tr>
<tr>
<td>Pap</td>
<td>EMR list reviewed in the morning huddle</td>
<td>Physician</td>
<td>Lab result pushed into EMR</td>
<td>What do we do if a pap is done outside of the clinic?</td>
</tr>
<tr>
<td>Mammogram</td>
<td>EMR list reviewed in the morning huddle</td>
<td>Req printed by panel manager and provided to patient by physician</td>
<td>Results scanned into EMR (specify area) by scanning staff</td>
<td>Only use mammogram keyword when entering</td>
</tr>
</tbody>
</table>

- Consider doing some chart reviews to check how information is currently entered by clinic team members
- Share your agreed upon EMR entry processes for your screening maneuvers with the whole team
3. **Identify exclusion criteria for chosen screening maneuvers (if any).**

Exclusion criteria refers to identifying if there is any reason a patient should be excluded from a screening maneuver. Common examples of exclusion criteria from the ASaP (Alberta Screening and Prevention) maneuvers are:

- Total hysterectomy (cervical cancer screening/pap test)
- Bilateral mastectomy (breast cancer screening/mammogram)
- Existing cardiovascular disease diagnosis/on statin drug (CVD risk screening)

In the cases above, a patient may not be screened because there is a clinical reason for excluding them from the screening. It is always the provider’s choice whether to screen or not, based on their clinical judgement.

In order to exclude such patients from our screening lists and EMR reminders, you need to make sure their exclusion is documented in the EMR in a standardized way that is searchable. Once this is done, you can reliably exclude them from screening lists you run and the triggers you set.

You may be tempted to exclude patients diagnosed with certain conditions from other screening maneuvers but in many cases their diagnosis means they get the maneuver more often than the rest of the patients do. Some examples include:

- HbA1c blood test for patients diagnosed with type 2 diabetes
- Blood pressure monitoring for patients diagnosed with hypertension
- Lipid blood test for patients diagnosed with dyslipidemia

Panel-based care for patients who are diagnosed with diseases will be discussed in later documents.

---

**EXERCISE**

- Review your chosen maneuvers and identify any exclusion criteria for each. Make sure you include your providers in the discussion.

- Discuss and record for each, where and how exclusions will be entered into the EMR. Make sure the field and the way you enter the data is searchable.
  - The vendors often have recommended fields, check your help files

- Consider an initial ‘clean-up’ if the exclusions have not been entered in a standardized way.
  - Ask your provider how they’ve entered the information to date to see if you can run a series of searches to identify the patients and enter the information in their charts
• Run the list of patients who are outstanding for a certain maneuver and ask the provider if they can identify any of the patients with exclusions on the list. Many providers know their patients well enough to identify at least some.

☐ Recording exclusions in a standardized way will require a new workflow and will take some time to implement; have all team members keep an eye on how the new workflow is going.

☐ Share the information about exclusions with the whole clinic team
4. **Clinic/Provider(s) agrees to participate in the data sharing strategy.**

As you are working in a clinic in Alberta you will be aware that there are rules to protect the privacy of an individual’s health information. These rules are laid out in the Health Information Act (HIA).

Section 66 of the HIA tells us that there must be a written agreement in place between a custodian and a person or body performing information management activities. An Information Management Agreement (IMA) or Data Sharing Agreement (DSA) is what is required.

The situations where an IMA is required include, but are not limited to:

- Improvement facilitators or other external consultants are being given access to EMR data
- PCN staff are performing information manager functions as identified in the *HIA* (e.g., panel managers)
- Data is processed, stored, retrieved, or disposed of by a party other than the custodian, including non-clinical PCN staff

There is a good chance that your Primary Care Network (PCN) has developed an IMA/DSA for activities like those mentioned above. If you are PCN employee working in a member clinic, there should be one in place for that purpose.

Many clinics will also have a separate IMA with their EMR vendor.

---

**EXERCISE**

- Check with your clinic if they have an IMA/DSA with their PCN
  - If there is no IMA/DSA in place, discuss with your clinic who you could connect with in the PCN to find out if you should have one
- Check with your clinic if they have an IMA/DSA with the EMR Vendor
  - If there is no IMA/DSA in place, discuss with your clinic management if one may be needed
- Review your clinic’s IMA/DSA’s
5. **Review charts manually to proactively determine eligibility for screening.**

*Screening needs are communicated to the team.*

During the past few activities you have set clinic workflows for opportunistic screening and standardized your screening data entry, including exclusion criteria. Before you move into some in-depth work to set up reminders in your EMR, you are going to test the processes you have come up with so far.

To do this you will start with some manual chart reviews of patients with upcoming appointments. This means you are going to go into a few charts and look in each area to see if the patient is due for any of your chosen screening maneuvers. This may feel like a cumbersome process, but it helps us with a couple of things:

- It lets you see how well you are doing with standardized data entry. (E.g., Is it easy to find the information you are looking for? Is the data still found elsewhere in the chart?)
- It allows you to begin to test and refine the workflows in the clinic while you continue to standardize your data entry.

**EXERCISE**

- Run a list of patients with appointments the following day (or the same day if you have sufficient time before clinic starts)
- Review a few patient charts and list the screening maneuvers they are due for (from your list of chosen maneuvers)
- Provide the list to the individuals who are responsible for completing the maneuver with the patient
- Ask each team member to try the maneuvers on 1-2 patients; they can do more if the process is working well for them
- Review as a clinic team how the process went
- Refine processes as needed and repeat
- Over time, increase the number of patients opportunistically offered preventive screening

This activity may take a few tries before it is working smoothly. Keep at it, you will learn a lot through the process.
6. **Investigate or trial EMR features and functionality to support the automation of proactive screening.**

   Each EMR has functionality that can be leveraged to support opportunistic screening; these functions can significantly reduce the time that would otherwise be required to manually review each chart. Some of the features in Alberta’s commonly used EMRs include:

   - Telus Health Wolf – Rules
   - Telus Health Med Access – Goals and/or Triggers
   - Telus Health PS Suite – Reminders
   - Microquest Healthquest – CDS Notifications
   - Telin Mediplan – POEM template

   It takes time to learn, build and implement these features and their related workflows. As with many workflow changes, it is best to approach them systematically and build upon them as the clinic team is ready. If you have several providers, start with one willing provider to trial the feature and then encourage the spread of the work to the other providers. Start by building a reminder for one of your chosen maneuvers and then add one at a time. In the meantime, you can continue to use manual chart reviews for your opportunistic screening.

---

**EXERCISE**

- Learn about the functions in your clinic’s EMR that may support the automation of opportunistic screening:
  - Check the vendor help files
  - Check the TOP EMR Tip Sheets and videos
  - Connect with other clinics using the same EMR in your PCN or around the province, ask you PCN to connect you if needed
  - Ask your PCN about opportunities for peer mentorship

- Consider building and testing the function for one of your selected maneuvers

- Create an action plan for how your clinic will roll out the use of the reminders

---

For ease, throughout this document, the feature will be generally referred to as a ‘reminder’.
Panel Management: Screening

Level 2
1. Identify the numerator and denominator for each chosen screening maneuver including exclusion criteria (PCN or clinic chosen maneuvers).

This exercise is setting us up to calculate a screening rate for the maneuvers that have been chosen in Screening Level 1. Producing and reporting screening rates for each provider is a key activity to help the clinic refine processes that will improve patient outcomes. It is important first to have a full understanding of how you might go about getting the right information so you can calculate the rates.

(Although the denominator goes on the bottom, it is easier to calculate the denominator first.)

**Identifying the Denominator**

The denominator is the total number of patients eligible* in the panel for a particular screening maneuver.

**Identifying the Numerator:**

The numerator is the total number of eligible* patients in the panel where screens were completed in the appropriate time interval for a particular screening maneuver.

*The eligible population would include all the active, paneled patients for a provider whether they came into the clinic or not; all rates are calculated over the paneled population of the age group for the screening maneuver. You may opt to exclude certain individuals who are not eligible for screening.

---

**EXERCISE**

As an improvement team, go through the maneuvers the clinic has chosen.

- First discuss as a team if you will be calculating the screening rates for completed screens or completed screens + offers of screening. (Depending on your EMR and how you chart, you may or may not be able to search offers.) Will you be recording completes or completes + offers?

- For each maneuver, describe what you will search for with each numerator and denominator and record this information using the table below.

- If you defined exclusion criteria in Screening Level 1, include these in your denominator. If you have not defined your process for exclusion criteria yet, this is not an obstacle for moving forward. You can start this process anytime and work on recording exclusions from here on.
Use this table to complete the information for the screening maneuvers you have chosen.

<table>
<thead>
<tr>
<th>Maneuver</th>
<th>Numerator</th>
<th>Denominator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example: Mammogram</td>
<td>All paneled women, aged 50-74 with a mammogram on record in the past 2 years</td>
<td>All paneled women, aged 50-74, who have not had a bilateral mastectomy</td>
</tr>
<tr>
<td>Blood Pressure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Height</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tobacco</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influenza</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mammogram</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colorectal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pap</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plasma Lipid Profile</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes Screen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CV Risk Calculation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This is an excellent time to revisit the importance of panel identification. During your panel identification activities, you will hopefully have created consistent processes to ensure a clean panel and be working on any panel ‘clean up’ needed. Your denominators are most frequently a reflection of your validated panel numbers. Discuss how not having a clean panel can affect your screening rates.
2. **Generate numerator and denominators for each chosen maneuver from the EMR.**

Now that you have written out what you will be searching for each numerator and denominator, the next step is finding a way to get each number from the EMR. Every EMR is different in how and where each maneuver is recorded and how (and in some cases, if) it can be searched. This activity will require a more in depth knowledge of your EMR’s search engine.

If your clinic team is still working on standardizing data entry your numbers may not be accurate, but don’t worry about that yet, this is a work in progress. For now, start with where you are at and with all the work you are doing, the accuracy will improve over time.

---

**EXERCISE**

- Build your EMR searches for each numerator and denominator
- Don’t forget about the exclusion criteria
- Test the accuracy of your searches by reviewing some chart of patients that came up in the searches
- Record the numbers you get from each search; you can use the table below – you will use these in the next activity to calculate your screening rates

<table>
<thead>
<tr>
<th>Maneuver</th>
<th>Numerator</th>
<th>Denominator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example: Mammogram</td>
<td>152</td>
<td>207</td>
</tr>
<tr>
<td>Blood Pressure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Height</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tobacco</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influenza</td>
<td></td>
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<tr>
<td>Mammogram</td>
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<td>Colorectal</td>
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<td>Pap</td>
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<tr>
<td>Plasma Lipid Profile</td>
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<tr>
<td>Diabetes Screen</td>
<td></td>
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<tr>
<td>CV Risk Calculation</td>
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</tbody>
</table>

Refer to TOP’s EMR Tip Sheets for detailed information on searching many of the ASaP maneuvers.
3. Calculate screening rates for each chosen maneuver and determines goals for improvement, (%pts screened / #pts eligible) X 100 = %

In the last 2 activities you identified the numerator and denominator for each screening maneuver, and figured out how to get the actual numbers for each using your EMR. Now you are ready to calculate your screening rate for each maneuver. But why go to all of this effort to get the screening rates?

Screening rates serve several purposes:

- Rather than having a feeling that you are doing well (or that you need to do more work in a certain area), the screening rate tells you exactly how you are doing with each maneuver. For example, reporting that you have a blood pressure screening rate of 72% tells you more about how you are doing than if you report you have completed 255 blood pressure screens.
- The rates can help a team decide where and how they’d like to begin some improvements
- With rates you can compare over time how you are doing with each maneuver, even if your panel numbers change over time
- With rates, you can also compare across providers, or even with your PCN

**EXERCISE**

With all the information you pulled from the EMR in the last exercise, you should now be able to determine your screening rates for your chosen maneuvers. Plug in the numbers you have pulled for your numerators and denominators for each maneuver. Use the equation below to determine your screening rates.

For every maneuver, the formula is very similar:

\[
\text{Numerator} \times 100\% = \text{Screening Rate}\\
\text{Denominator}
\]

(Or said another way):

Numerator divided by Denominator times 100% = Screening Rate (%)

- What do you notice? __________________________________________________________
- Is the percentage what you expected? __________________________________________
- Report it back to your clinic team. If the number is low, does it spark conversations about why it is low?
  _________________________________________________________________________
- What are some suggestions as to how you might increase the screening rate?
  _________________________________________________________________________
Are you confident everyone is entering the information in a standardized way and in a reportable field?

You are now well on your way with quality improvement activities. Quality Improvement is a formal approach to the analysis of performance and systematic efforts to improve it. Keep in mind that no matter what percentages your clinic is able to demonstrate, it is not solely a reflection on the individual provider: It is only a reflection of how you are measuring information; where the data is captured, and; whether it is standardized so that you can capture it, etc. Each screening measure reflects how the healthcare team is operating at a system level.

Your screening rates are statistics: Statistics are estimates that describe trends in large numbers of people. The goal is to increase the likelihood of disease prevention or early detection.
4. Proactive patient screening needs are automated in the EMR (e.g., rules, triggers, reminders, flowsheets).

In Screening Level 1 you began to learn about your EMR’s feature that supports the automation of opportunistic screening (e.g. rules, goals, reminders, etc.). You may have also started to build a reminder.

As you start to use the feature in your EMR, there is a lot of change management needed. It takes some time to adapt to having this information supplied via the EMR and to ensure that it’s reliable. Much depends on how well your data entry is standardized and how well you have configured these features. Remember in earlier activities all the work you did around standardization? This is where it is going to pay off.

In a previous exercise you will have identified a person or people who handle the configurations in the EMR in your office; you may need to call on this person to help you set up these features.

**EXERCISE**

- What is the feature called in your EMR? __________________________________________

  Is it being used for screening?  Yes  No

- Is there additional training that you may need to do that help you understand these features?

- Start building your first reminder

Tips for building and implementing the reminders:

- Start with building one simple reminder with limited criteria (weight or blood pressure are great examples)
- Run the list of patients the reminder applies to and do manual chart audits to check that the reminder is correctly applying to them. Also review some charts of patients who meet the criteria for the screening maneuver but who are not on the list to make sure that the reminder isn't leaving them off when they should be on.
- Turn them on for just one provider who is willing to test it, and is okay that it might not be reliable at first
- Turn them on for a limited patient population, for example, turn on a blood pressure reminder for just males aged 50-60 years. Expand them when your team is ready.
- Start simple and refine them over time as you get more savvy with using the feature and as all team members get better with standardized data entry.
- Get constant feedback from the clinic team on how they are working and if the triggers need to be improved.
With the agreement of your whole clinic team, add on reminders *one at a time* using the tips provided above.

Refer to the TOP EMR tip sheets and look for peer-to-peer workshops facilitated by TOP to support your work in this area. Often these workshops provide a forum to see what other clinics and your peers are doing to discuss the advantages and disadvantages to EMR features, what offers the best clinical value and what you can try to improve EMR use, data collection and reporting. Connect with your peers. Your PCN may also be able to help you do this.
5. **Clinic team increases number of chosen maneuvers and develops standardized workflows.**

In the Screening Level 1 activities you started on standardized workflows for a few screening maneuvers. Now that you have some strong processes in place for these first few, you can begin to add more. Work with your clinic team to determine which ones you will work with next.

You have built a lot of new processes so far, be sure to use them as needed for this activity. Don’t rush through. You will likely move through this a little faster than before, but allow time for changes in the workflows to become fully integrated.

---

**EXERCISE**

Document the next set of maneuvers the clinic would like to focus on in the coming months. Make sure you revisit all the steps you went through to implement your initial set of maneuvers.

- Identify and list what maneuvers the clinic would like to add:
  - __________________________________________
  - __________________________________________
  - __________________________________________
  - __________________________________________
  - __________________________________________

- Discuss the clinic and EMR workflows needed to capture the correct data for your new maneuvers. Ensure standardization.

- Identify what EMR features you can use to support the entry of the data and pulling the data

- Identify the exclusion criteria you will include, if any. Do a clean-up if needed and create the workflows to support the entry of this data from here forward

- Identify the numerator and denominator for each screen

- Begin by calculating the current screening rates for each measure
6. Clinic team members are encouraged to pursue learning opportunities specifically in the areas of panel, screening and reporting. Clinic demonstrates advanced EMR skills. (e.g., modify rules and reminders appropriately, troubleshoot/ conduct searches).

Providers and clinic staff who have been using their EMRs for several years have hopefully developed the expertise to leverage many of the features of their EMR. Those who are new to EMRs are mastering the basics. To help providers get beyond the basics and realize the benefits an EMR has to offer, Ontario has developed an EMR maturity model\(^1\) laid out as follows:

a. **Entry of data:** EMR is essentially an electronic version of a paper chart. Data is entered primarily for the purpose of reference.

b. **Early Data Use:** Acting upon the output of episodic searches, quick entry tools, forms, calculators; the EMR features are starting to be utilized.

c. **Prediction Tools:** EMR Rules, Triggers and Reminders are used at the point of care. Searches are done regularly and reviewed.

d. **Population Data Use:** Dashboarding and/or screening rate data is reviewed for panel populations; acting upon the whole, performing analysis at the practice level.

e. **Integration:** Use of patient portals, hubs, attachment to e-health platforms and sharing of live data from the EMR.

Developing EMR knowledge and skills in your clinic will save you time and effort as well as provide you robust information that will support a clinic team to deliver panel-based patient care.

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**EXERCISE**

- Review the EMR maturity model shown above and determine with your improvement team what stage the clinic is at on that model
- Participate in additional EMR training sessions such as EMR conferences or peer learning sessions to progress to the next level on that model
- Apply skills/features learned at these sessions to the EMR in your clinic – review with your team as appropriate
- After assessing yourself and your clinic, are there any areas where you feel you need more experience or training?

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\(^1\) https://www.ontariomd.ca/portal/server.pt/community/emr_practice_enhancement_program/emr_maturity_model/
7. **Opportunistic screening processes are fully developed for chosen maneuvers.** Reports are produced and shared with the team.

So far in this level you have developed your workflows for opportunistic screening including setting up your EMR’s automation feature. You have also built searches to provide the numbers to calculate the screening rates. Over time you will want to continue to share the screening rates with the clinic team so the team can continuously improve.

---

**EXERCISE**

- Determine who will be responsible for reporting out the screening rates for the clinic for the maneuvers you have chosen: _________________________________

- Determine often will these rates be presented to the clinic (monthly, quarterly, etc.):

  ________________________________________________________________

- Plot your screening data on run charts – putting a dot on a piece of paper is great, you don’t need to get fancy with the computer (unless you dig that sort of thing)

- Establish regular meetings with the clinic team to review the screening rates

- Work as a team to improve rates to meet clinic goals; work with your improvement facilitator to help set and meet your goals.

- Consider sharing your screening rates with your PCN. They may be able to share with you how you are doing compared to your PCN colleagues.
8. Outreach screening principles are used by the clinic team which includes standardized workflows and documented processes. Reports are produced and shared with the team.

Outreach screening is the act of contacting patients who are overdue for screening and inviting them for a screening appointment or to pick up a requisition. This differs from opportunistic screening where patients are proactively screened when they come in for another clinical issue. Outreach patients can be those individuals that are not coming to the clinic often (e.g., the healthy 20-year-old) and as well as the patient who comes to the clinic frequently with multiple issues, often distracting from the more routine concerns.

In previous activities, in order to calculate your screening rates, you searched the EMR for patients that had screening maneuvers completed. For outreach screening, we now need to find the opposite: Those patients who are due for screening. Once you can identify these patients, you can review the list and reach out to each of them (either by phone or letter), advising them to come to the clinic for their screening.

Clinics have come up with many strategies for how to approach their outreach screening and distribute the work over many months.

Some examples include:

- Maneuver of the month
- Birthday month
- Alphabetically

Some strategies work better than others with certain EMRs.

---

**EXERCISE**

- Pick one or two screening maneuvers to get started with outreach screening. Discuss and decide with your improvement team where it makes sense to start.
- Produce a list from your EMR and verify the list is correct by manually searching the charts of a few patients on the list (you may have done this already in a previous exercise).
- If you outreach to a patient, use this opportunity to advise the patient of all the screens they are due for. Patients will get annoyed if you call them today for an overdue pap, next week for an overdue mammogram and the following week for a diabetes screen.
- Create and test an outreach script with you staff. Begin by calling a couple of friendly patients who you anticipate will react favourably to your call. Refine the script as needed. Use the space on the following page to write out your script.

Be discerning about what maneuvers you outreach for, you may wish to avoid outreaching for blood pressure, height or weight which can be captured opportunistically.

Although not specifically a part of the ASaP (Alberta Screening and Prevention) maneuvers, some physicians agree that one approach to methodically capture screens is by producing a list...
(from your EMR) of overdue complete physicals. Staff can call the patient in for this reason and all screens can be captured in one visit. In Alberta, there is some debate in healthcare circles around eliminating the need for a regular complete physical exam. At the time this document was written, this is left to provider discretion. Choosing Wisely Canada has made recommendations that will help physicians prioritize which patients should have a complete physical exam.
Panel Management: Screening

Level 3

The STEP Toolkit contains links to suggested documents to assist you with your panel identification and screening activities.
1. Clinic team tracks screening and validation rates over time. Clinic conducts QI activities informed by reported rates.

Tracking how you are doing over time is a hallmark of quality improvement (QI). While you are actively working on your screening and validation rate improvements, you will need to take frequent measures to see if the changes you are making are resulting in improvements. Once you have reached the goals the team set for screening and validation rates, you can move to a state of monitoring the rates; usually this means you don’t have to take the measures quite so frequently (e.g., quarterly instead of monthly or weekly).

Think of these measures as your dashboard, similar to the dashboard on your car. You don’t look at the dashboard in your car every moment, but you do glance at it occasionally to see how fast you are going, or to see how much fuel you have left. If you notice on your ‘screening dashboard’ that a certain rate is slipping, the clinic team can take action to improve it. This is how you sustain the gains you’ve made.

You also want to make sure that you are sharing what you are monitoring and improving. The whole clinic should have access to the measures, preferably on a wall in the clinic where it can be seen at any time. You could even put it in a place where your patients can see it.

**EXERCISE**

- Validation rates are monitored every ___________ months
- Screening rates that are monitored on a regular basis include:
  - Screen: ____________ How often: ________________
  - Screen: ____________ How often: ________________
  - Screen: ____________ How often: ________________
  - Screen: ____________ How often: ________________
  - Screen: ____________ How often: ________________
  - Screen: ____________ How often: ________________
☐ Other activities monitored that are meaningful to the clinic:

- What: ______________  How often: ______________
- What: ______________  How often: ______________
- What: ______________  How often: ______________

☐ We measure both per provider and for the whole clinic

☐ The measures are available for the whole clinic to see at any time.

- They are located: ________________________________
- Who updates them? ______________________________

When you move from active improvement to monitoring, start with measuring quarterly. When you feel things are stable and depending on the measure, you can gradually extend the intervals at which you report them to the clinic team. If you have changes in staff or reporting requirements, shorten the interval for reporting to catch issues before they snowball into a larger issue or spot check whether your clinic and EMR workflows are working.
2. Clinic team identifies panel driven preventive goals that extends beyond ASaP screening maneuvers.

Up to this point you have focused on the screens specific to the Alberta Screening and Prevention (ASaP) maneuvers. The ASaP maneuvers represent a set of screens that focus on diseases where the evidence suggests the provider can have the most impact for the general population who are at average risk of developing those diseases. While the ASaP ‘bundle’ is a high value screening set to start with, there are other screens that have strong evidence that you may wish to begin to implement in your clinic.

With all of the time and effort you have put into the workflows and quality improvement activities with ASaP, you can now consider what other screens you may wish to add.

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**EXERCISE**

- Discuss as an improvement or clinic team if there are other screens that you feel your general patient population might benefit from.

- Choose 1 or 2 more preventive screening maneuvers that are not included in the ASaP maneuver menu

  - If you don’t know where to start, consider looking at the Choosing Wisely Canada recommendations for some ideas

- Document your selected maneuvers

  __________________________________________________________

  __________________________________________________________

- Document your new processes, including your EMR changes.
3. **Panel Manager coordinates or facilitates daily/ weekly/ monthly/ quarterly huddles and/or quality improvement activities extending beyond EMR reminders.**

Huddles and meetings are key activities for effective teamwork and quality improvement activities in the clinic; a combination of huddles and meetings are recommended. It’s important to ensure that your whole team (panel managers, admin staff, multi-disciplinary team members and providers) are all on the same page and marching in the same direction with all the improvements you are trying to achieve.

There may be a number of teams and combinations of huddles/meetings within your clinic:

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**Daily/weekly huddles:** These are usually a quick morning huddle with the care team working with a specific provider. This team generally goes over who is coming in that day or week and reviews what care is due based on the EMR reminders. You may also review for patients who may not have necessary tests completed before their appointment and rebook them, freeing up an appointment for another patient.

**Monthly quality improvement meetings:** On a monthly basis you may meet for about an hour with the ‘improvement team’ that coordinates the clinic’s quality improvement activities. This is the time to review your goals (aims), the measures you are taking and determine if the changes you are making are resulting in the improvements you are seeking.

**Quarterly meetings with full clinic team:** On a quarterly basis you may meet with the full clinic team to update them on the improvement activities around panel and screening. This is your opportunity to share information beyond what they see posted in the clinic and to answer questions and get their feedback.

Every clinic will be different based on size and activities. In a small clinic the 3 teams described above might be all the same people.

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**EXERCISE**

Who is responsible for coordinating the huddles and/or meetings? There may be more than one person: _____________________________

- We do daily/weekly huddles.
  - We talk about the following activities in our huddle: ___________________
    ____________________________
    ____________________________

---

The STEP Toolkit contains links to suggested documents to assist you with your panel identification and screening activities.
We have regular quality improvement meetings, about monthly.

☐ We have an agenda and review our aims, measures and discuss the changes we are making.

☐ We meet with the full clinic team to share our challenges and successes.
4. **Clinic team develops processes for screening patients with risk factors for certain diseases.**

The panel management screening activities you have looked at so far, including the ASaP (Alberta Screening and Prevention) maneuvers and others selected by the clinic, have focused on ‘average’ risk patients. There will be some patients on the panel who are at a ‘greater than average’ risk of developing a disease. A common example is a woman with a first degree relation with a breast cancer diagnosis would start screening annually at age 40. They fall outside of the general screening guidelines, but they still need to be screened.

In many cases, the provider will make decisions on when to begin screening for higher risk patients on an individual basis. Most EMRs have features for creating a reminder for individual patients. In other cases, you may be able to set a population reminder such as with the breast cancer screening example above. You will just have to have your EMR data entered consistently in a searchable field.

---

**EXERCISE**

- Identify patients or populations who are at a higher than average risk of developing a disease. Decide which of these you will set reminders for:

  ______________________________________
  ______________________________________
  ______________________________________

- If you will be using a population reminder, make sure that data is entered consistently and in a standardized way in order for the searches. What data entry will have to be standardized?

  ______________________________________
  ______________________________________
  ______________________________________

- Where individual reminders will be set, review which clinic team members are responsible for this (e.g., provider):

  ______________________________________

  Identify if the relevant team members know how to use the individual reminder function and provide training where needed.
5. **Opportunistic and outreach screening are fully realized and integrated into clinic processes (ASaP and beyond).**

You now have a firm handle on the ASaP (Alberta Screening and Prevention) maneuvers and perhaps a few extras. You are doing everything you can to capture this data within the limitations of your EMR. You have clinic workflows that will maximize opportunistic screening and you also have processes in place to outreach to patients who have gone beyond their recommended screening intervals. You have made significant improvements and have reached the screening goals that you set as a team. You continue to monitor how well you are doing on run charts that are shared with the clinic team. When you notice that any of the screens are falling short of your goals, the team mobilizes to regain the improvements.

**EXERCISE**

- Sustain regular meetings with your team – huddles and quality improvement meetings
- Commit to constantly improving your processes – you are never done improving
- Most importantly, celebrate your successes!

This is not a one-time activity. Sustained change for improved patient outcomes are achieved by making this a regular activity for your clinic team.
6. **Panel Managers become peer leaders and share knowledge with other clinic teams.**

During the process of learning and operationalizing panel identification and panel management/screening, your team, physicians, allied health professionals have learned an incredible amount information that supports the Patient’s Medical Home model. There are many clinics in the beginning stages or only part way though developing their own processes, workflows and gaining expertise in the functionality of their EMR. You, your team and your physicians may now be in an excellent position to share what you have learned.

**CONSIDER FOR YOUR EXERCISES:**

- Going to conferences to share your lessons learned
- Mentor a clinic struggling or offer to support them with ideas or your expertise
- Stay current with innovative ideas, continue looking for ways to advance your clinic
- Cultivate relationships with people leading positive change
- Attend ongoing Peer to Peer EMR workshops or vendor conferences to keep in touch with EMR advances in functionality
Appendix A

Conditions for Success:

☐ Championship for Patient’s Medical Home includes:
  - clinical champions (medical lead/admin lead)
  - clinical champions linked to goals and actions
  - organization champions (e.g. clinic managers, clinic owners, corporate leadership)
  - formation of a panel-based care team (to be determined by individual clinics)

☐ Patient’s Medical Home goals:
  - can be identified for proactive panel-based care
  - are shared with the team
  - are linked to an action plan with assigned roles and responsibilities

☐ Progress on goals is:
  - documented
  - reported based on goals and actions
  - evaluated
  - shared back with the team

☐ Patient’s Medical Home work in the practice is supported by:
  - job descriptions for team members that reference the work
  - dedicated resources for the work
  - protected time to do the work
  - policies and procedures to allow team members to improve the work
  - training plans for team members
  - recognition of team members’ efforts

*At every stage the clinic can revisit these conditions to reassess the level the team is at.

Special Note: Standardized data entry is required to report and aggregate screening rates and population-based information collected at the point of care. Maturity of the Patient’s Medical Home is proportional to a clinic’s ability to leverage and capture information for meaningful use. This is an essential condition for success, and significant work in this area is foundational.