

Get even better at tracking how well your patients with depression are doing

You can use the EMR tools shown below to get even better at tracking how well your patients with depression are doing.

Why do we need to do better?

Depression affects about 5% of adults in Canada each year and double that (i.e. 12%) at some point in their livesⁱ. ALL Canadians are affected by depression, even if they don't have the disease themselves. This is because depression costs the Canadian economy at least \$32.3 billion each yearⁱⁱ. In spite of this, people still have real fears of what people around them (families, friends, people at work etc.) would think of them if they asked for help with depression. This keeps many people from asking for this help. This is where primary care teams come in. They have long term relationships with patients and can work with them to find the best ways to help them with their health.

What can we do to get better?

We can start by making sure we know which patients have depression. If you have a list of all patients that have depression, it will be easier to make sure all the right people are invited to the programs, with less risk of people falling through the cracks. The search tools below can help you find which patients in your EMR are likely to have depression.

What if I already know which patients have depression?

You might not need to use this tool if you already have a good list of patients who have depression in your EMR. The search is meant for teams that do not yet have a list of patients with depression and do not have a way to check the records of all their patients to come up with such a list.

How good is this search tool?

The search tool was based on the case definition from [CPCSSN](#) and the input from experts in depression at Hamilton FHT and St Michaels' Hospital. The tool has been tested with the help of the [eHealth Centre of Excellence](#) EMR environment. The search has few false negatives but does have some false positives. For every 100 patients that the search finds in your EMR, 62 patients will actually have depression but 38 might not. That means you will have to check the list of patients found in your EMR to be sure that they really do have depression. For a team with 10000 patients, you would likely have 500 patients to review. This is less work than looking at all 10,000 patients – or not looking at any at all.

Which EMRs does the search work on?

It is ready now for PSS or Accuro users, whether they are members of AFHTO or not. We are still working on the search for OSCAR and Nightingale.

How much data cleaning do I need to do first?

You do not need to clean your EMR data before you use the tool. The testing was done on EMR data as they are right now, for better or worse, so you can be sure there is a good chance it will help you too. You can just load it into your EMR and run it – ie it is plug-and-play.

Technical details of the query Criteria

<u>Depression</u> Patient Active AND Enrolled						
Billing	OR	Problem List ⁽¹⁾	OR	Medication ⁽¹⁾	OR	Lab Result
N/A		Any occurrence of the following conditions <u>unless exclusions apply (see at the bottom)</u> Keywords (if applicable): <ul style="list-style-type: none">• depression• depressive disorder• MDD• MDE• dysthymi• SAD• Seasonal Affective Disorder Codes: <ul style="list-style-type: none">• 296.2 (ICD9)• 296.3 (ICD9)• 300.4 (ICD9)• 311 (ICD9)• F32 (ICD10)• F33 (ICD10)• D9-52 (SNOMED CT, if applicable)• P03 (ICPC, if applicable)• P76 (ICPC, if applicable) <u>Exclusions:</u> Keywords (if applicable): <ul style="list-style-type: none">• bipolar• schizo Codes (if applicable): <ul style="list-style-type: none">• 295 (ICD9)• 296.6 (ICD9)• 296.7 (ICD9)• 296.8 (ICD9)• F20 (ICD10)• F31 (ICD10)• P72 (ICPC)		<ul style="list-style-type: none">• Citalopram• Escitalopram• Fluoxetine• Sertraline• Paroxetine• Duloxetine• Venlafaxine• Desvenlafaxine• Trazodone• Bupropion (except Zyban where applicable) <u>All medications except Bupropion:</u> the following diagnosis if exist in patient's Problem List makes the medication criteria insufficient: Keywords (if applicable): <ul style="list-style-type: none">• GAD• anxiety Codes (if applicable): <ul style="list-style-type: none">• 300 (ICD9)• F41 (ICD10)• P74 (ICPC) <u>Bupropion only:</u> the following lifestyle risk if exist in patient's Profile makes the medication criteria insufficient: <ul style="list-style-type: none">• current smoker		N/A

⁽¹⁾ The exact codes or keywords used depend on the specific EMR because of differences in functionalities (please, review screenshot or upload query).

Step by step process for using the search to build your depression registry

Step 1. Estimate how many patients you think this will affect. Multiply the number of patients your team serves by 0.05 (**the average rate of depression in Ontario**) to get a rough idea of how many of your patients likely have depression. If you still think this is a big enough group of patients for you to generate a registry for, carry on to step 2.

Step 2. Import the query into your EMR. Download the SRX file named '*AFHTO Depression PSS Frontend Search Final [Version]*' located right below this post in the 'AFHTO Algorithm Project' Group page of the PS Suite EMR Community portal.

Step 3. Run the query in your EMR. Again, you might need the help of your QIDSS, IT staff or other person who usually runs queries in your EMR. Running the query will produce a list of patients with depression. The list will not be perfect – probably 38% of the patients identified by the query will NOT have depression. The query gets you STARTED in building the depression registry but doesn't do the whole job for you.

Step 4. Find the patients who might not have depression. Review the list of patients generated by the query to separate out those patients that are clearly already coded as having depression. What's left will be the list of patients who MIGHT have depression based on other data in the EMR besides formal coding.

Step 5. Prepare your physicians to review the list. Subdivide the list of possible patients with depression into separate, shorter lists for each physician. Work with your physicians to find out if they would prefer a list on paper or electronically and how they might like it sorted (i.e. by name or most recent visit or some other parameter).

Step 6. Invite each physician to review their list of patients. They know their patients best and can likely quickly confirm which ones do or do not have depression, even though that information might not be easy for others to find in the EMR.

Step 7. Clean up your EMR data. Add depression codes to the EMR for each patient that the physician confirms as having depression. This so-called "data cleaning" work is a great job for a student.

Step 8. Re-run the query. After you have corrected the EMR, re-run the query to generate a list of patients with depression. This is your new depression patient registry. Going forward, you can run the query anytime you need to generate a list of patients with depression. You can use the list to invite patients to a depression program, track progress with outcomes on these patients or any other purpose.

Step 9: Recruit patients to your depression programs. .

Step 10: measure progress with patient prognosis, management, and overall care. Here are some example outcome measures to apply for this program:

- % of patients who show an improvement in PHQ-9 score
- % of patients who show improvement on CES-D
- % of patients hospitalized
- % of patients with action plans
- % of patients self-identifying as satisfied after a group session

This query was produced by and for QIDSS with assistance from [eHealth Centre of Excellence](#) in support of all AFHTO members. If you have any questions, please contact Greg Mitchell at greg.mitchell@afhto.ca.

ⁱ 5% of Canadians 15 years or over affected by depression any given year. 12% of Canadians affected by depression over their lifetime. Statistics Canada's 2012 Canadian Community Health Survey

ⁱⁱ The Conference Board of Canada: annual costs of depression due to lost productivity