Table of Contents

Evidence2Practice – Diabetes Tool v. 1.0.0 - User Guide

Introduction

The Evidence2Practice Ontario (E2P) diabetes tool is designed to support clinicians in early identification, comprehensive assessment, and timely diagnostic clarifications, using digitally embedded validated tools for prediabetes and type 2 diabetes. Each E2P tool contains condition-specific modules (scalable to multiple conditions) based on the core clinical functions of the quality standards. These modules include Clinical Assessment, Medication, Management, and Patient Care Plan and Resources.

This guide provides a walk-through of our diabetes tool with examples, highlighting the most important functionalities.

Background/Summary

In 2019, an estimated 4.4 million Ontarians were living with prediabetes and diabetes (type 1 diabetes, diagnosed and undiagnosed type 2 diabetes, and prediabetes combined). Roughly 90% of all cases of diabetes are type 2 diabetes. People with diabetes are at risk of developing serious, acute complications which include severe hypoglycemia, long-term microvascular complications affecting the eyes, kidneys, and nerves, and cardiovascular disease.

The factors that increase the risk of type 2 diabetes are multifaceted and can be social as well as genetic/biological. Certain populations experience higher rates of type 2 diabetes, such as those with low income, people of African, Arab, South Asian, or Hispanic descent, and Indigenous populations. In Ontario, the prevalence of self-reported diabetes is roughly twice as high for South Asian people (8.1%) and Black people (8.5%) as it is for White people (4.2%). Indigenous populations are three to five times more likely to have type 2 diabetes than non-Indigenous Canadians (Ontario Health**,** – Care for People of All Ages, 2023).

Purpose of the Tool

The objective was to create an EMR-integrated tool that supports clinicians in the screening and management of diabetes. The E2P diabetes tool for OSCAR Pro supports a more comprehensive picture of the different steps involved in diabetes care: clinical assessment, pharmacologic and nonpharmacologic treatment goals, shared decision-making, self-management, and ongoing monitoring by the clinician.

Using the Diabetes Tool in OSCAR Pro

Using the Diabetes Menu Bar and the Summary Tabs:

Summary Tabs:

Features:

- Quick action menu gives clinicians flexibility to support patient encounter needs while also keeping the patient metrics or labs or even the history window open
- Standardize data inputs captured to improve decision support within the tool as well as provide a means for evaluation
- 8 of 9 quality statements within the tool for adults who are at risk of developing prediabetes or type 2 diabetes or who already have a diagnosis of either

From the menu bar, the user has the option to:

- Review previous patient visit history
- Launch into a clinical module
- Provide tool feedback

From the Summary, the user can simultaneously:

- Update the suspected mental health condition
- View/update metrics for PHQ-9, GAD-7, WHO5, PAID
- Open the vitals flowsheet
- Filter graphing results for the previous assessments
- Review lab tests and values and launch the lab requisition form

Getting Started with the Diabetes Tool

The tool was designed to include decision support throughout the tool and has implemented tooltips, hover-overs, and pop-up windows to also help inform quality standard information.

recommended screening frequency.	Blue text with a dotted underline – indicates hover over text.
	Blue "i" icons – indicate hover over text.
Insulin initiation checklist	Blue text with a solid underline – indicates a hyperlink that will open in a new window.
Diabetes Canada Screening	Bolded Purple text w/a solid underline – indicates a expand/ collapsible section. **Clicking this will open the section and clicking it while the section is opened will close it.**
copy from prior	White buttons with a Yellow Outline – indicate a pop-up window. **Clicking this will open the pop-up window, which will have its own close button.**
Open consultations	White buttons with a Blue Outline – indicate a separate window for an OSCAR built-in service.

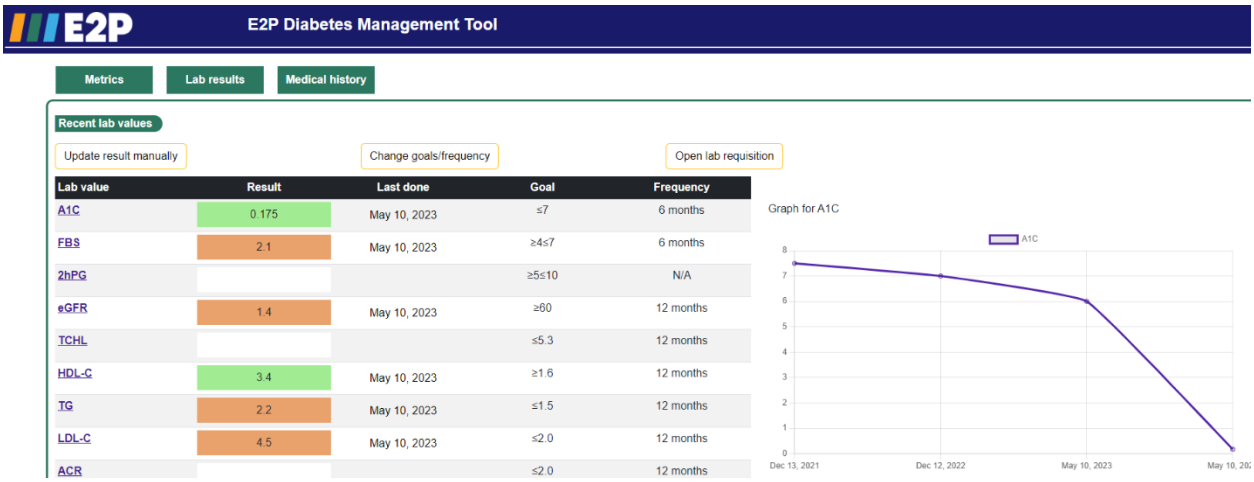
Tool Design

There are two distinct areas of the diabetes management tool at the top we have our patient summary dashboard that includes metrics, lab results, and medical history (see below). The lower portion of the tool consists of the visit form.

Patient Summary Dashboard

The patient summary dashboard can be referenced at any point during the visit to help inform clinical decision-making or support diagnosis. The first section is first the lab section. It provides an overall summary of relevant lab results, the last date done, a visual indicator of whether it's within a specified goal range, and the ability to trend values in a graph.

At the top of this section, there are 3 action buttons that allow a user to input results manually, individualize specific goals, or insert a lab requisition.



This tool aims to address both the physical and mental well-being of diabetic patients. The demanding nature of diabetes management, the potential for serious complications, and concerns regarding hypoglycemia can all result in significant emotional strain. By prioritizing mental health support, clinicians can help mitigate the psychological burden of diabetes and improve outcomes for their patients.

The metrics section provides access to validated screeners including the PHQ-9, GAD-7, PAID, and WHO5. The first two screeners are built into the EMR, and the measurements recorded here are integrated with other tools. The latter two screeners are linked externally with the opportunity to add in results manually. All scores can be trended on a graph.

Lastly, in the patient summary dashboard section is a medical history. This section contains form-memory, so any selection or documentation from previous visits can be reviewed. The intent of the section is to support clinicians through the identification of high-risk and prediabetic patients through to diagnosis.

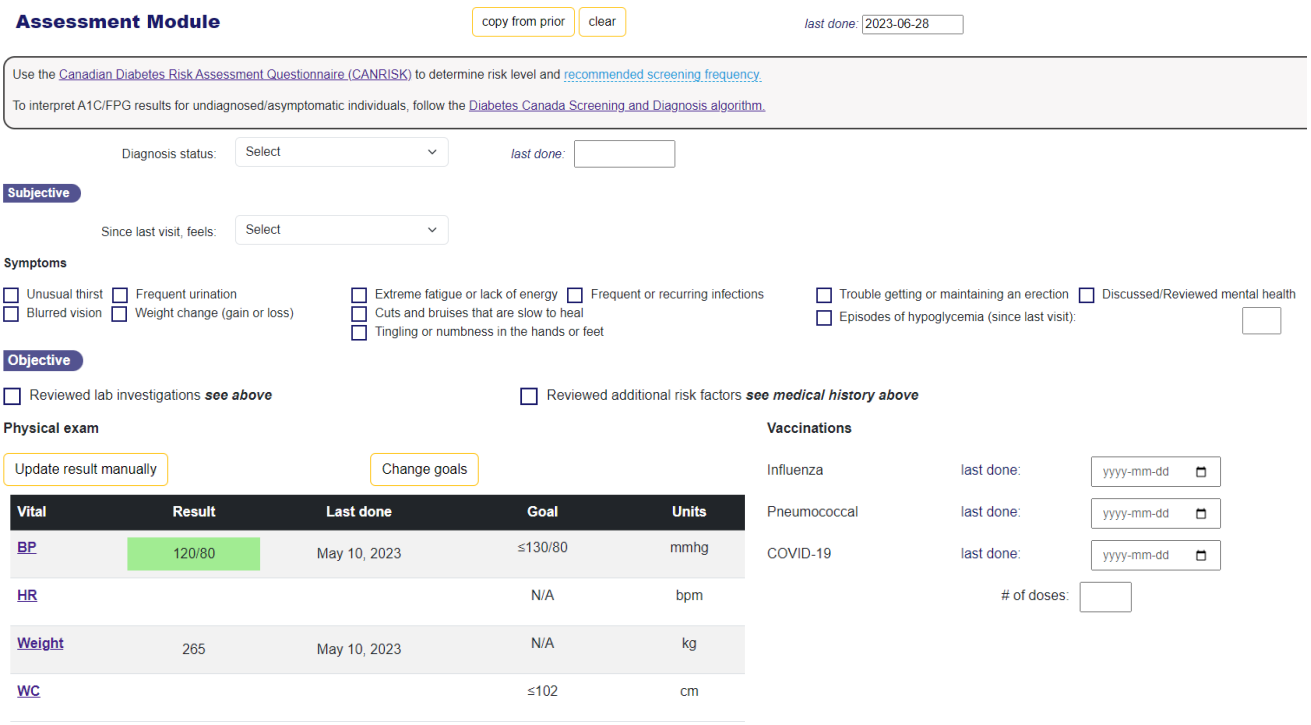
Launching Clinical Modules

The components related to the provision of care for diabetes and prediabetes have been broken into 4 modules, allowing for flexibility. By no means does this require all 4 modules must be completed during a visit but allows you to navigate to a module of your choosing that you would like to focus on during the encounter.

An example of the clinical assessment module is below.

Clinical Assessment Module

Assessment section - gathering information re: symptoms, side effects etc.



Screening and monitoring diabetes specific complications

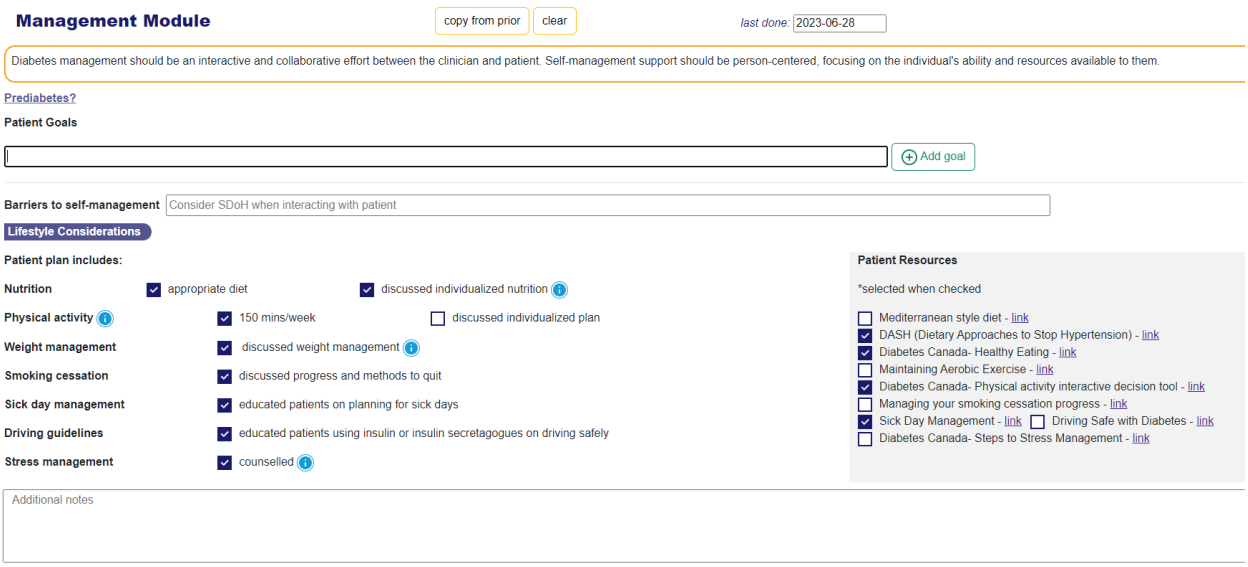
- Selecting the "+" button will indicate that results are abnormal or condition present and requires follow-up.
- Selecting the "-" button will indicate that results are normal or screened but not present/no immediate action required.

Management Module

The management module supports clinicians in identifying lifestyle changes that can be taken into consideration as well as creating individual goals with the patient. To support the patient in engaging self-management strategies, related patient resources can be identified here and automatically included as part of the care plan.

Checkboxes are used to indicate if referrals have been made as well as textboxes to include any additional information. These details will also generate a note in the patient care plan to act as a reminder of the next steps. A button to open the consultations tab has been included to complete the referral if necessary.

Identification of patient goals and lifestyle considerations

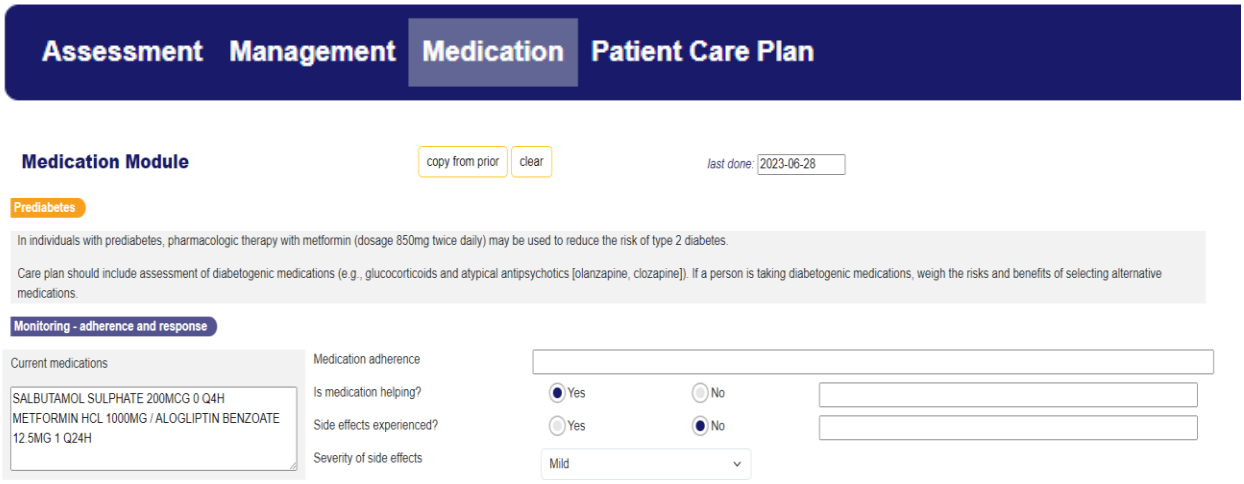


Referrals and next steps

Medication Module

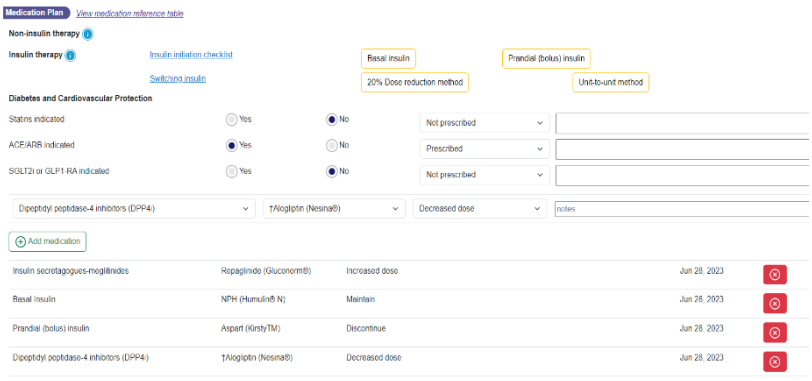
The purpose of this module is to aid in documentation and creation of a medication plan with regularly monitoring patient adherence and response to the prescribed medications.

Medication plan also populates the patient care plan with the most recent updates to their medication plan using the dynamic table available in this module.



Using this medication plan section creates an ongoing list that providers can use to ensure that they are optimizing pharmacologic treatment for their patients. It makes changes made to specific medications easily viewable, by capturing the specific action done (whether that was maintaining, increasing, or decreasing a specific medication) as well as notes around that decision. Also built into this section are information tooltips and guidance for both insulin and non-insulin therapy.

Dropdown medication lists can be used to select the specific medication along with documenting any adjustments (i.e., starting a new med, discontinuing, increasing dose, decreasing dose, maintaining)



Note: This module is strictly for planning and documentation purposes and prescribing medications will still need to follow the usual workflow in OSCAR by opening the built-in medications window.

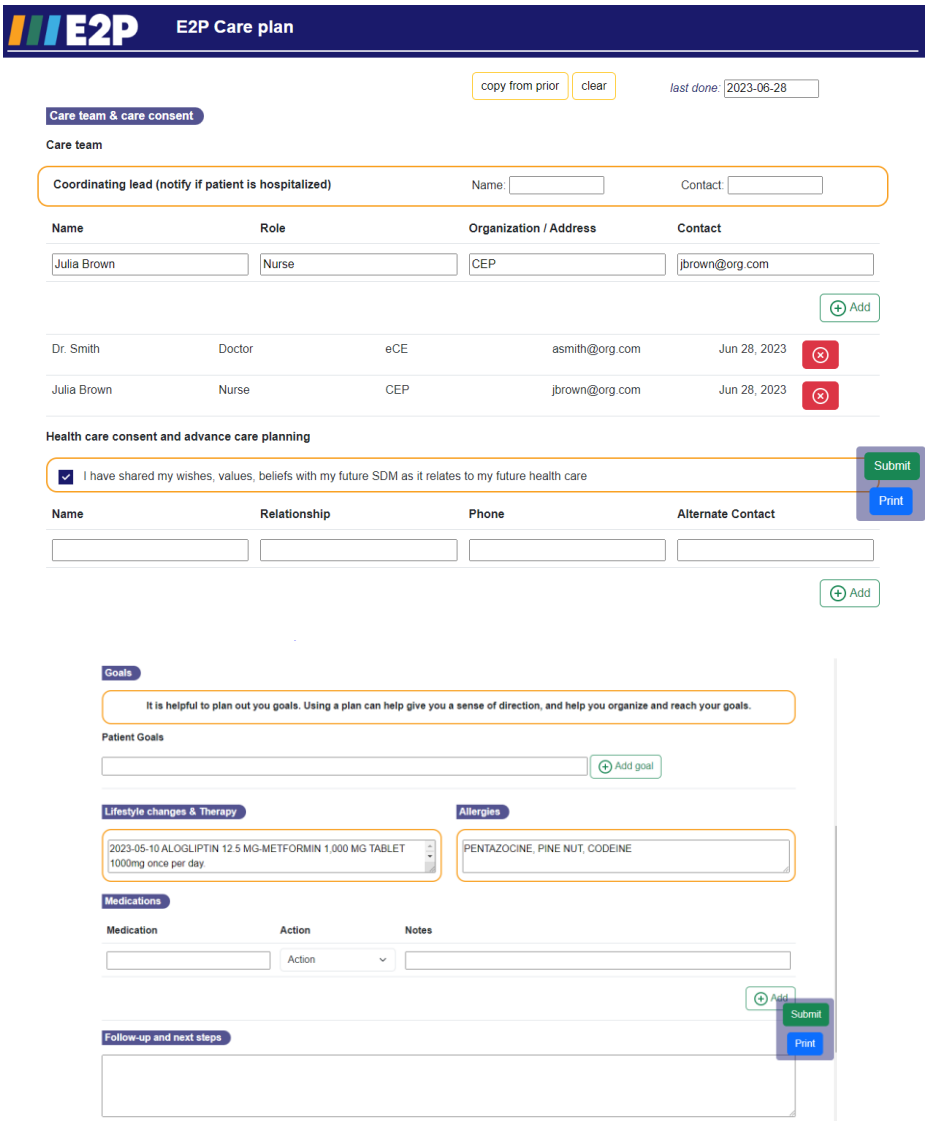
Patient Care Plan Module

Clicking on the Patient Care Plan button will open the care plan as a printable resource in another window. This can be provided to the patient as a complimentary aid to their visit.

It can be used to assist in planning the next or follow-up visit with the patient, giving you the option to document the next appointment date, plan the purpose of the appointment, review treatments and allergies, medications, and therapies.

The resources section contains a collection of curated resources for your patient and their caregivers. Clicking on the purple link will open the resource.

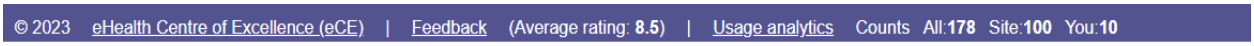
Both checkboxes and textboxes are embedded with form-memory that will populate the next time the form is opened by clicking Copy from prior.

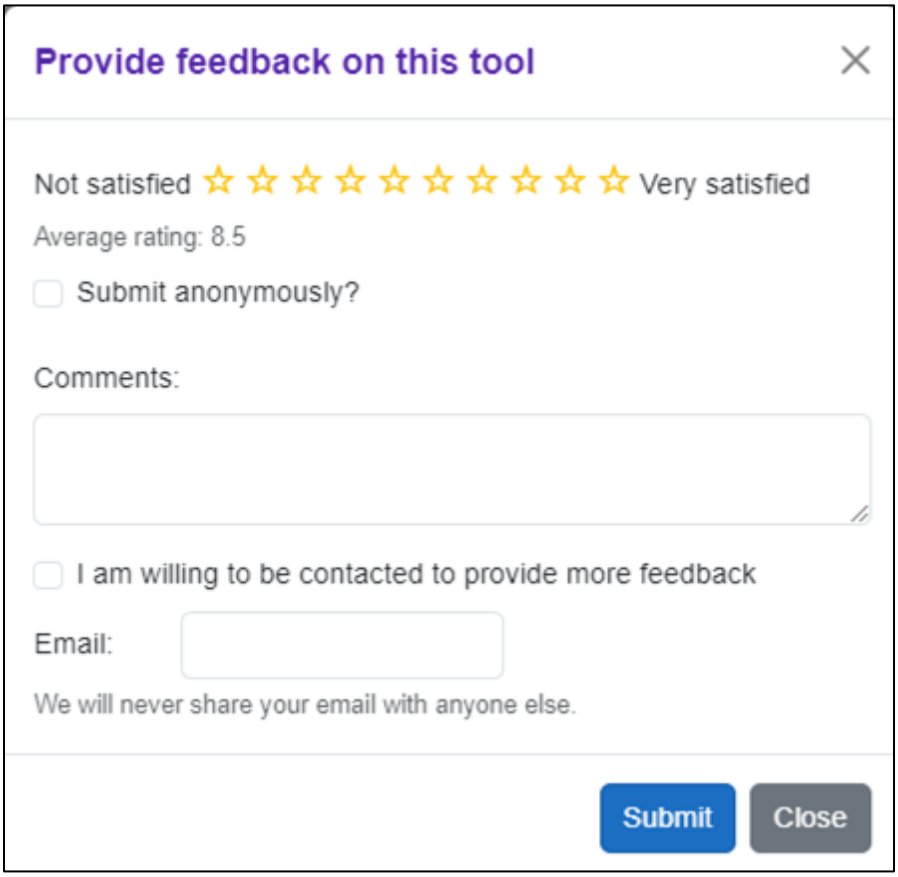


Feedback

Included in the tool is a link to provide feedback which allows users to submit their thoughts and communicate any issues they've encountered or any areas they wish to see added to the tool. This section allows you to submit feedback anonymously or allows you to add your email address and name if you wish to be contacted.

The links can be found at the bottom of every module. It will look like this:





Overview of Usage Analytics

The eHealth Centre of Excellence tracks usage to understand the extent to which our tools are being used. We are committed to protecting the data we are collecting and sharing. With our EMR usage analytics program, we collect general information about your usage (e.g., clinic name, name of tool used, date of usage, clinician type, anonymized clinician ID, and anonymized patient ID). **There is absolutely no Personal Health Information (PHI) collected by usage analytics**, and no assessment of clinical knowledge or expertise is made. Information

collected by usage analytics may be shared with external organizations, such as funding bodies and evaluators, to support program evaluation, sustainability, and future funding opportunities.

Participation in usage analytics is optional and you may withdraw your participation at any time.

Your participation ensures that E2P tools are meeting the needs of frontline clinicians. You would be supporting the meaningful adoption of clinical guidelines, as well as the development of future tools and updates. It's an easy method of supporting quality improvement - you don't have to do anything!

For more information, please contact privacy@ehealthce.ca or see our privacy statement. If you would like to learn more about our EMR usage analytics program and the benefits of participating, please visit our website.

Contact

As part of the Evidence2Practice Ontario (E2P) program, the eHealth Centre of Excellence is providing change management at no cost to support clinicians with the implementation and optimal use of E2P tools.

If you have any questions, please reach out to EMRtools@ehealthce.ca and we will be happy to help!

E2P brings together multi-disciplinary, cross-sector expertise under the joint leadership of the Centre for Effective Practice, eHealth Centre of Excellence, and North York General Hospital. Funding and strategic guidance for E2P is provided by Ontario Health in support of Ontario's Digital First for Health Strategy.

Appendix

Quality Standards for Diabetes

The E2P diabetes tool components address care for adults who have various types of diabetes, including the assessment and diagnosis of people who are suspected of having diabetes. It applies to community settings, including primary care, specialist care, home care, hospital outpatient clinics, and long-term care.

1. Screening for Risk Factors and Testing for Prediabetes and Type 2 Diabetes
    a. Clinical assessment
2. Reducing the Risk of Type 2 Diabetes
    a. Supplemental provider education / support
3. Identifying and Assessing Mental Health Needs
    a. Ongoing monitoring
4. Healthy Behaviour Changes
5. Setting and Achieving Glycemic Targets
    a. Clinical assessment
6. Access to a Collaborative Interprofessional Care Team
7. Promoting Self-Management Skills
    a. Patient Care Plan
8. Screening for Complications and Risk Factors
    a. Clinical assessment
9. Cardiovascular Protection