Thames Valley
Family Health Team

Medical Directive

Title	**Diabetes Education, Ordering Laboratory Investigations and Prescription of Supplies and Capillary Blood Glucose Monitoring in Adults with Diabetes**	**Assigned Number:**	**003A**
Activation Date:	**July 1, 2011**	**Review By:**	**December 2025**

Approval Signature & Date

Medical Director: _____ Date Reviewed: Feb. 23, 2024

Clinical Services Director: Lisa Montgomery Date Reviewed: Feb. 23, 2024

Order and/or Delegated Procedure:	**Appendix Attached:** ☐ **Yes** ☒ **No** **Title:**

Education and Ordering Laboratory Investigations for the Management of Type 2 Diabetes Mellitus in adults by Registered Nurses, Registered Practical Nurses, and Registered Pharmacists. (RN/RPN, RPh).

Recipient Patients:	**Appendix Attached:** ☐ **Yes** ☒ **No** **Title:**

All active adult patients of the Thames Valley Family Health Team who have Type 2 Diabetes and those who have been identified as at risk of developing Type 2 Diabetes.

Authorized Implementers:	**Appendix Attached:** ☐ **Yes** ☒ **No** **Title:**

Thames Valley Family Health Team Registered Nurses, Registered Practical Nurses, and Registered Pharmacists. (RN/RPN, RPh)* herein referred to as the implementer.

The implementer must receive orientation from the Educator with regards to the task. The implementer must have completed orientation and educational requirements of Diabetes Level 1 medical directive. The implementer must sign the Implementer Performance Readiness Form electronically via HR Downloads after successful completion of the orientation (and quiz, if applicable) indicating acceptance of this medical directive

Indications:	**Appendix Attached:** ☐ **Yes** ☒ **No** **Title:**

1. Adult patients 18 years of age and older identified with Type 2 Diabetes
2. Adult patients 18 years of age and older identified as “at risk” for Type 2 Diabetes

Contraindications:	**Appendix Attached:** ☐ **Yes** ☒ **No** **Title:**

1. Patients under 18 years old or are identified having Type 1 Diabetes
2. No verbal consent obtained from the patient by the implementer
3. Patients identified by a provider as not being candidates for management under this medical directive.

Consent:	**Appendix Attached:** ☐ **Yes** ☒ **No** **Title:**

1. Patients of the Thames Valley Family Health Team.
2. Verbal consent is obtained from the patient by the implementer prior to implementation of care.

Guidelines for Implementing the Order/Procedure:	**Appendix Attached:** ☒ **Yes** ☐ **No** **Title:** Appendix 1 – Prescription of Diabetic Supplies and Performance of Capillary Blood Glucose Monitoring at Point of Care **Title:** Appendix 2 – Laboratory Tests in Adults with Diabetes

1. The implementer will educate, order laboratory investigations (Appendix 2) or diabetic supplies according to Appendix 1 – Prescription of Diabetic Supplies and Performance of Capillary Blood Glucose Monitoring at Point of Care.
2. The implementer will perform capillary blood glucose monitor according to Appendix 1 Diabetes Education and Medical Management in Adults with Diabetes
3. The implementer will consult with the patient’s primary care provider, on-call physician, or nurse practitioner if patients report any acute or urgent medical concerns, or any concerns arise from lab results.
4. Review patient chart for most recent laboratory investigations.
5. The implementer will order the appropriate laboratory tests on the EMR, using Laboratory Tests in Adults with Diabetes (Appendix 2) *
6. The implementer will instruct the patient as to the indications for the requisition and whether a fasting state is required for the test(s).
7. The implementer will advise the patient to complete laboratory test at least on week prior to appointment with an interprofessional health care professional/provider.

∗ Potter, P.A. & Perry, A.G. (2006). Fundamentals of Nursing. St. Louis: Mosby. College of Nurses of Ontario (2008). CNO Practice Standard: Documentation

Documentation and Communication	**Appendix Attached:** ☐ **Yes** ☒ **No** **Title:**

1. Documentation in the patient medical records need to include name and number of the directive, name of the implementer (including credential(s)), and name of the authorizer responsible for the directive and patient.
2. Information regarding implementation of the procedure and the patient responses should be documented in accordance with standard documentation practice.
3. Standard documentation is recommended for prescriptions, requisitions, and requests for consultation. *

∗ Potter, P.A. & Perry, A.G. (2006). Fundamentals of Nursing. St. Louis: Mosby. College of Nurses of Ontario (2008). CNO Practice Standard: Documentation

Review and Quality Monitoring Guidelines:	**Appendix Attached:** ☐ **Yes** ☒ **No** **Title:**

1. The Directive remains in force until and unless amendment occurs. Review will occur biennially. In case the Medical Director identifies the need to change the Medical Directive, at least one TVFHT member of the implementing disciplines will be consulted.
2. At any such time that issues related to the use of this directive are identified, the team must act upon the concerns immediately by identifying these concerns to the Medical Director. The Medical Director will review these concerns and consult with at least one TVFHT member of the implementing disciplines, before necessary changes are made.
3. If new information becomes available between routine renewals, and particularly if this new information has implications for unexpected outcomes, the directive will be reviewed by the Medical Director and a minimum of one TVFHT member of the implementing disciplines.

Approving Authorizer(s):	**Appendix Attached:** ☐ **Yes** ☒ **No** **Title:**

Authorizer Approval Form signed in HR Downloads.

Thames Valley Family Health Team	**Appendix 1: Prescription of Diabetic Supplies and Performance of Capillary Blood Glucose Monitoring at Point of Care**

Table 1: Indications/Contraindications for Prescription of Diabetes Supplies

Controlled Acts and Procedures	Indications	Contraindications, Considerations, Process for Implementing Procedure
Prescribing diabetes supplies including glucometers, flash glucose monitoring systems, lancets, test strips for glucometers, percutaneous sensors, and needles for insulin pens.	• To assess glycemic control in response to oral antihyperglycemic agents, insulin and lifestyle management, quality control activities and patient teaching. • The results are used to determine if a patient is euglycemic, hyperglycemic or hypoglycemic so appropriate interventions and education can occur. • Needles for patients injecting diabetic medications (e.g. insulin, GLP-1s, etc.)	• The patient or substitute decision maker refuses to monitor capillary blood glucose. • The patient is unable to monitor capillary blood glucose due to physical or cognitive limitations. • Consideration should be given to patients who are unable to monitor due to financial constraints • The length of needles should be determined according to the injection site and adiposity of the injection site. *

∗ FIT_Recommendations_3rd_Edition_2017.pdf (fit4diabetes.com)

Table 2: Indications/Contraindications for Performing Capillary Blood Glucose Monitoring at Point of Care

Controlled Acts and Procedures	Indications	Contraindications, Considerations, Process for Implementing Procedure
Perform Capillary Blood Glucose Monitoring point of care testing or apply percutaneous sensor and perform flash glucose monitoring (e.g., Freestyle Libre)	• To assess glycemic control in response to oral antihyperglycemic agents, insulin and lifestyle management, quality control activities and patient teaching. • The results are used to determine if a patient is euglycemic, hyperglycemic or hypoglycemic so appropriate interventions and education can occur.	• The patient or substitute decision maker refuses to consent to the procedure. • The patient's fingers are sore or the skin on the fingertips is compromised or show signs of infection. • Gently apply pressure to the site with tissue/cotton ball until bleeding has subsided. Apply bandage if required.

Guidelines for Lancing Device Use for Capillary Blood Glucose Monitoring in Practices

Subject: Safety Precautions to Reduce Risk of Cross-Contamination When Using Lancing Devices

Use of a Practice Demo Glucometer

When a practice glucometer is used to test capillary blood sugars:

- A single-use disposable lancing device must be used
- The lancing device and test strip must be disposed of in a sharps' container
- The glucometer must be cleaned according to the manufacturer's directions between uses.
- Gloves must be worn by the health care professional because there is risk of contact with blood.

TVFHT will provide single-use disposable lancing devices upon request. Alternatively, the practice may choose to order their own single-use disposable lancing devices. Reusable lancing devices are not acceptable for multi-person use due to the risk of cross contamination from improper sanitation or misuse.

Education of Patient with a New Glucometer Kit

When a patient is being taught with a new glucometer kit that has never been used:

1. The lancing device, lancets, test strips, percutaneous sensors and glucometer may be used to instruct and demonstrate use if the kit will be given to the patient to take home.
2. The lancing device, lancets, test strips, percutaneous sensors and glucometer maybe shown to the patient, but may not be used to obtain a glucose reading if this patient will not be taking the kit home.

Thames Valley Family Health Team	**Appendix 2: Laboratory Tests in Adults with Type 2 Diabetes**

Prior to ordering laboratory tests, the implementer will review patient record to ascertain

- When relevant laboratory tests were last ordered
- Refer patient to or consult with physician or nurse practitioner if there are concerns relating to previous laboratory results
- If any laboratory tests listed below are indicated to be ordered.

Laboratory Tests	Indication(s)
Creatinine/eGFR[1]	• If eGFR greater than or equal to 60, annual • If eGFR between 30 and 60, every 6 months • If eGFR less than 30, refer to or consult with physician or nurse practitioner to determine optimal interval for monitoring • Before initiating Metformin • 1-2 weeks after initiating or increasing ACE or ARB
HbA1C	• Approximately every 3-4 months
ALT	• Baseline required if known Liver Disease (example Fatty Liver disease or hepatitis) or Alcoholism
CK	• Patient reporting symptoms suspicious of rhabdomyolysis • Not to be used for screening prior to or after initiation of HMG-CoA reductase inhibitor
Na/K/Cl	• Before initiating or increasing diuretic therapy • Potassium only before and at 1-2 weeks after initiating or increasing ACE or ARB
B12	• Baseline if patient is taking Metformin • Every 2-3 years for those on Metformin * * Evaluation of vitamin B12 monitoring in patients on metformin in urban ambulatory care settings (nih.gov)
Lipid Panel (NON fasting) Total[2]	* Annually * 3 to 6 months if: • lipid medications changed within last 3-6 months, Or • LDL not at target (i.e., greater than 2.0 mmol/L or less than 50% reduction from baseline

Cholesterol/TG/LDL/HDL/TC:HDL	∗ A fasting sample will be needed if patients have a recent triglyceride level great than or equal to 4.5 mmol/L
Albumin/Creatinine Ratio-urine[1]	∗ If eGFR greater than or equal to 60, annual ∗ If eGFR between 30 and 60, every 6 months ∗ If eGFR less than 30, refer to or consult with physician or nurse practitioner to determine optimal interval for monitoring

References:

1. Ontario Health Cancer Care Ontario KidneyWise Clinical Toolkit (https://www.ontariorenalnetwork.ca/sites/renalnetwork/files/assets/Clinical_Toolkit.pdf). Accessed Sep 10, 2023.
2. Canadian Diabetes Guidelines. Chapter 6 – Dyslipidemia (https://guidelines.diabetes.ca/cpg/chapter25) Accessed Sep 10, 2023
3. https://www.ontariorenalnetwork.ca/sites/renalnetwork/files/assets/Clinical_Toolkit.pdf
4. Evaluation of vitamin B12 monitoring in patients on metformin in urban ambulatory care settings - PMC (nih.gov)
5. FIT_Recommendations_3rd_Edition_2017.pdf (fit4diabetes.com)