CHEO Medical Directive

1. **Name of the Medical Directive:** Point of Care Testing - Glucose and Ketones

Approval Status (Dates)

Version/Revision	MDC Submission	MDC Approval
New	September 2022	September 2022
Version 2	May 2025	May 2025

Effective Date: September 2025 **Directive Number:** 2128
Renewal Frequency: ☒ 3 years ☐ Other (may not exceed 3 years):

2. Purpose Statement

- To facilitate blood collection and early assessment of glucose or ketones through point of care testing for patients, staff, medical staff, learners and/or visitors to CHEO meeting the criteria below.

3. Personnel Authorized to Implement the Medical Directive

- Nurse/AA/RRT must demonstrate knowledge, skills and judgment related to the procedure prior to applying the medical directive.
- Nurse/AA/RRT must achieve and maintain current POCT competency as per Accreditation Canada and Accreditation Canada Diagnostics (ACD) standards. The staff member must utilize their own valid identification number.

4. Patient Population and Indications

The requested glucose or ketone investigations are indicated as part of the routine care for the patient and situational criteria (broad indicators) are indicated below:

- Patients who are receiving glucose tolerance testing and require a baseline glucose measurement
- Patients, staff, medical staff, learners or visitors suspected of hypoglycemia. Patient examples could include but are not limited to those patients known to have diabetes, are dehydrated, septic, experiencing syncope, confused or decreased level of consciousness, requiring major resuscitation, have an eating disorder or are showing signs of dizziness, weakness, pallor, sweating, numbness, tingling of tongue/lips.
- Patients, staff, medical staff, learners or visitors suspected of hyperglycemia
- Patient examples could include but are not limited to those patients known to have diabetes, are dehydrated, septic, or are showing signs of extreme thirst, frequent urination, irritability, nausea, confusion.
- Patient suspected to be in diabetic ketoacidosis (DKA)

5. Contraindications

- Any patient, staff, medical staff, learners or visitor that does not meet the situational criteria outlined above
- Co-morbid factors are present that increase the patient's risk for adverse outcome if the test is undertaken
- Legal guardian or patient's refusal of test

6. Description of the Procedure

- Identify patient and conduct an assessment per criteria outlined above.
- An order may be placed by a physician or via this medical directive. The result will transmitted to the patient's chart with the following comment "In absence of a direct order Medical Directive 2128 applies to the unsolicited POCT glucose/ketone result."
- Use glucose meter to obtain glucose and/or ketone reading as per procedure: Nova StatStrip Patient Test Procedure.
- Communicate results per procedure: Nova StatStrip Result Reporting and Reference Intervals
- Verify that the glucose/ketone results have appeared in the appropriate patient health record or

other documentation tool. If necessary, manually document the result in Epic. Temporary MRNs obtained from the temporary MRN booklet/sheet will be used for ED patients and SPOT and 444444444 will be used for staff, medical staff, learners and visitors for identification purposes. If 444444444 is used an email will be sent to the POCT coordinator with the name of the patient, DOB and if known, the MRN.

7. Consent and Documentation

- Obtain a verbal consent from the patient/family prior the initiation of this directive. In emergency situations, consent may be implied.
- Implementation of this medical directive is documented by way of the comment added to each test result.
- Results should transmit automatically to the patient's chart. Verification of results transmission should be done in a timely manner. In the event that a result does not transmit, it must be entered manually and indicate that medical directive 2128 was used.

8. Quality Management Process

- Glucometer orientation will be provided by POCT laboratory personnel.
- An updated list of certified trainers will be maintained in the laboratory and/or the testing site.
- The respective areas will track annual recertification of glucose/ketone meter testing.
- This medical directive will be part of the Nurse/AA/RRT orientation (education and training).
- Incident reports related to the use of this medical directive will be reported using the on-line Safety Reporting System (SRS) and communicated to the appropriate Director, Clinical Manager, Educator and Medical Lead. A copy will also be sent to the Chair of the Medical Directive Committee.
- The appropriate unit leadership team will address issues related to process and outcomes related to this medical directive.
- Prior to the renewal of this medical directive, an audit will be conducted to verify that the directive is being applied correctly.

9. References and Resources

- CHEO:
  - CHEO "Do Not Use" List: Abbreviations, Acronyms, and Symbols
  - CHEO Pediatric Doses of Commonly Prescribed Medications
  - Consent Policy
  - EPIC Procedure Catalogue
  - Patient and Client Safety Event Reporting Policy
  - Labeling for Bone Biopsy Form No 2337 E/F
  - Lexi, Micromedex and CPS on line
  - Medical Directives Policy
  - Nova StatStrip: Patient Test Procedure (updated 2024)
  - Nova StatStrip: Result Reporting and Reference Intervals (updated 2024)
  - Patient Identification Using Two Patient Identifiers Policy
  - Point of Care Testing Policy
  - Routine Practices Policy
  - Telephone Practice Policy
  - Verbal and Telephone Orders
- College of Nurses of Ontario (CNO):
  - Practice Guidelines:
    - Consent (updated 2023)
    - Directives (updated 2023)
  - Practice Standards:
    - Documentation, Revised 2008 (updated 2019)
    - Medication Revised 2023
    - Scope of Practice (2023)
  - The Regulated Health Professions Act (RHPA): Scope of Practice, Controlled Acts Model (2018)
- College of Physicians and Surgeons of Ontario: Delegation of Controlled Acts 2012
- College of Physicians and Surgeons of Ontario: Prescribing Drugs September 2017

- College of Respiratory Therapists of Ontario
- Federation of Health Regulatory Colleges of Ontario (2007). An Interprofessional Guide on the Use of Orders, Directives and Delegation for Regulated Health Professionals in Ontario
- Accreditation Canada, and Accreditation Canada Diagnostics, Accreditation Requirements

10. Contact Information

Area of Practice: All areas where patients may be seen, as well as including where staff, medical staff, learners, family members or visitors may be assessed as a result of a medical emergency

Medical Director:	Chief, Division of Endocrinology	Ext. 3357
Developed By:	Deborah Long, POCT Coordinator	Ext. 2599
	Alison Girouard, Director Nursing Practice, Education & Clinical Technology	Ext. 6840