

PATIENT NAME: \_\_\_\_\_

DOB: \_\_\_\_\_

HRN: \_\_\_\_\_

(addressograph)

**MEDICAL DIRECTIVE: Adult Hypoglycemia Management**

**DEPT.** Hospital Wide (Inpatient, Outpatient and Emergency Department)

**SUPERCEDES:** NEW

**ADMINISTRATIVE AUTHORITY:** Medical Advisory Committee **Date:** Oct 18/17

**NAME AND DESCRIPTION OF TREATMENT:**

Registered Nurses (RNs) and Registered Practical Nurses (RPNs) at the Royal Victoria Regional Health Centre (RVH) may initiate the following directive.

This Medical Directive applies to adult patients 18 year or older admitted as an inpatient, registered as an outpatient or being seen in the Emergency Department of the hospital presenting with signs and symptoms of hypoglycemia and for treatment for adult patients with a Blood Glucose (BG) level less than 4 mmol/L by venous specimen or point of care testing (POCT). Initiate the orders below immediately.

**INDICATIONS FOR USE OF DIRECTIVE:**

Indications for utilizing this directive include adult patients with one or more of the following:

- Diabetes (type 1, type 2 or gestational) and/or
- Hypoglycemic symptoms

Symptoms of hypoglycemia may include but are not limited to:

- o Inability to concentrate, confusion, drowsiness
- o Slurred speech, weakness, vision changes
- o Unsteadiness when standing or walking
- o Muscle twitching, tingling
- o Personality changes such as anger, uncontrollable crying, anxiety
- o Sweating, pallor, shakiness, headache, trembling, palpitations
- o Hunger, nausea

If the patient meets the indications above check BG using POCT or serum sample (where POCT not available). The practitioner will report the glucose POCT or serum sample to the Most Responsible Provider (MRP) if the value is less than or equal to 4 mmol/L. If the POCT value remains critical, a STAT serum BG will be obtained. Refer to RVH Laboratory Departmental Policy and Procedure for Point of Care Testing.



PATIENT NAME: \_\_\_\_\_

DOB: \_\_\_\_\_

HRN: \_\_\_\_\_

(addressograph)

**Treatment:**

**The RN/RPN: If the patient is conscious with no swallowing difficulties and able to follow treatment directions:**

Mild to Moderate Hypoglycemia (BG 3 – 3.9 mmol/L)	Severe Hypoglycemia (BG 2.9 mmol/L or less)
<ul style="list-style-type: none"> <li>• Treat immediately post POCT or serum BG sample (if POCT not available)</li> <li>• Give 15 grams (60 mL or 1 bottle) of carbohydrate (CHO) glucose drink (i.e. Dex4 Liquiblast®)</li> <li>• Repeat POCT BG or serum BG sample (if POCT not available) in 15 minutes to ensure BG is greater than or equal to 4 mmol/L.</li> </ul>	<ul style="list-style-type: none"> <li>• Treat immediately post POCT do not wait for BG results from lab</li> <li>• Serum BG sample (if POCT not available)</li> <li>• Give 20 grams (75 mL or 1 bottle plus 15 mL from second bottle) of carbohydrate (CHO) glucose drink (i.e. Dex4 Liquiblast®)</li> <li>• Repeat POCT BG or serum BG sample (if POCT not available) in 15 minutes to ensure BG is greater than or equal to 4 mmol/L.</li> </ul>
<ul style="list-style-type: none"> <li>• If BG remains less than 4mmol/L may repeat above orders x 1 (maximum of 2 doses) until BG greater than or equal to 4 mmol/L.</li> <li>• Notify MRP STAT for further treatment orders.</li> </ul>	

**The RN only:**

**If patient is NOT able to take oral liquids/solids, due to swallowing difficulties or decreased level of consciousness or is identified as nil by mouth (NPO):**

Mild to Moderate Hypoglycemia (BG 3-3.9 mmol/L)	Severe Hypoglycemia (BG 2.9 mmol/L or less)
<ul style="list-style-type: none"> <li>• Treat immediately post POCT or serum BG sample (if POCT not available)</li> <li>• Initiate Intravenous (IV) Access</li> <li>• If IV in situ: 50% Dextrose (D50W) 12.5 grams (25 mL) IV push over 1 to 3 minutes x 1.</li> <li>• If D50W is not available substitute with Dextrose 10% in water (D10W) 12.5 grams (125 mL) IV over 1 to 3 minutes X1</li> <li><b>or</b></li> <li>• If no IV in situ: Glucagon 1 mg IM/Subcut x 1.</li> </ul>	<ul style="list-style-type: none"> <li>• Treat immediately post POCT; do not wait for BG results from lab.</li> <li>• Serum BG sample (if POCT not available)</li> <li>• If IV in situ: 50% Dextrose (D50W) 25 grams (50 mL) IV push over 1 to 3 minutes x 1.</li> <li>• If D50W is not available substitute with Dextrose 10% in water (D10W) 25 grams (250 mL) IV over 1 to 3 minutes X1</li> <li><b>or</b></li> <li>• If no IV in situ: Glucagon 1 mg IM/Subcut x 1.</li> <li>• Notify MRP STAT.</li> </ul>



PATIENT NAME: \_\_\_\_\_

DOB: \_\_\_\_\_

HRN: \_\_\_\_\_

(addressograph)

<ul style="list-style-type: none"><li>• Notify MRP STAT.</li><li>• Repeat POCT BG or serum BG sample (if POCT not available) in 15 minutes to ensure BG is greater than or equal to 4 mmol/L.</li></ul>	<ul style="list-style-type: none"><li>• Repeat POCT BG or serum sample (if POCT not available) in 15 minutes to ensure BG is greater than or equal to 4 mmol/L.</li></ul>
<ul style="list-style-type: none"><li>• Notify MRP for further treatment orders.</li></ul>	

***Once BG is greater than or equal to 4 mmol/L, ensure patient follows treatment with a scheduled meal or snack consisting of a serving of protein and carbohydrates (i.e. 237 mLs (1 bottle) of Glucerna which supports 23 g of carbohydrates and 11 g of protein).***

**CONTRAINDICATIONS:**

Contraindications for utilizing this directive include:

- Patient refusal
- Sensitivity to Glucagon
- Patient under the age of 18 years
- Patient NPO pre-operatively (use MD # A-5)

**PERSONNEL APPROVED FOR IMPLEMENTATION OF DIRECTIVE:**

RN or RPN: If patient is conscious and able to follow treatment directions and exhibits no swallowing disorder.

RN only: If patient is NOT able to take oral liquids or solids.

Certified or active POCT glucose testing user.

**CO-IMPLEMENTERS:**

Certified Diabetes Educators  
Critical Care Outreach Team when calling criteria is met  
POCT Coordinator  
Medical Laboratory Technologist  
Medical Laboratory Assistant  
Nurse Practitioner  
Pharmacist





Medical Directive

Page 4 of 4

PATIENT NAME: \_\_\_\_\_

DOB: \_\_\_\_\_

HRN: \_\_\_\_\_

(addressograph)

**EDUCATIONAL REQUIREMENTS FOR PERSONNEL APPROVED TO INITIATE DIRECTIVE:**

- Successful completion of yearly education regarding the use of medical directives including attainment of 90% on competency exam.
- RNs and RPNs with the knowledge, skill and judgment to appropriately provide treatment and ongoing monitoring of hypoglycemia in the adult patient.
- Certification of Glucose POCT including demonstrating competency in user techniques and successful completion of posttest.

**DOCUMENTATION AND COMMUNICATION:**

1. A copy of this Medical Directive will be placed in the Physician’s Order section on the patient chart with the name, status, and signature of the implementer, the name of the authorizing physician, the date and time of implementation.
2. Document the notification of physician in the Interdisciplinary Progress Record (RVH 0818) or in the electronic medical record (EMR).
3. Documentation shall be completed according to RVH documentation policies.

**PHYSICIANS TO WHOM DIRECTIVE APPLIES:**

All physicians with privileges at RVH

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

