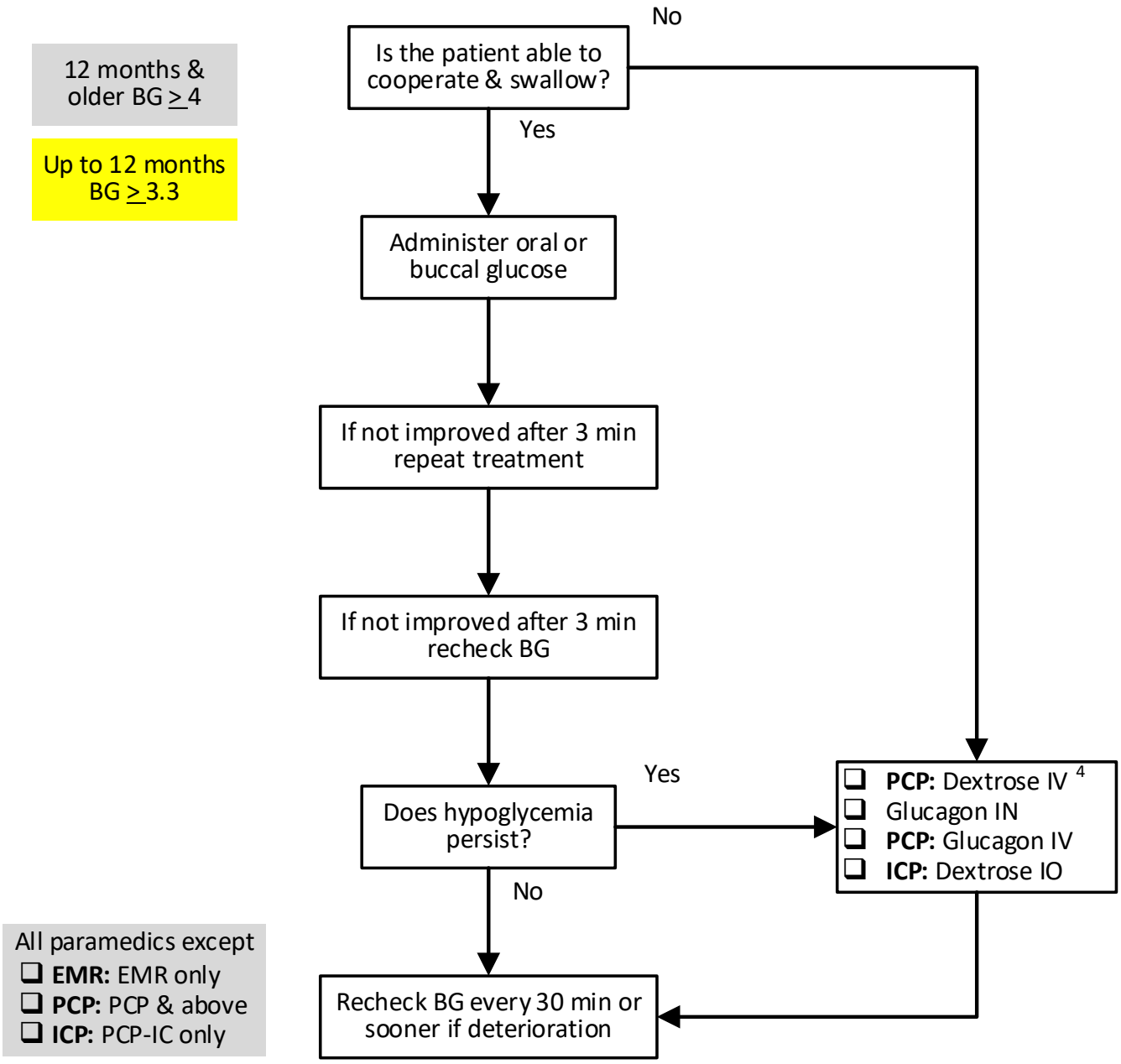
Shared health Soins communs Manitoba	E10 - HYPOGLYCEMIA	
	All ages	MEDICAL
Version date: 2023-06-08		Effective date: 2023-06-27 (0700 hrs)



INDICATIONS

- Confirmed hypoglycemia as indicated by a point-of-care blood glucose (BG) of:
  - 12 months & older = 4.0 mmol/L or less
  - 72 hours up to 12 months = 3.3 mmol/L or less [1]
- Suspected hypoglycemia when BG measurement is not readily available [2]

CONTRAINDICATIONS

- Not applicable

NOTES

1. After the initial newborn period BG values in infants may be lower than older patients. For the purposes of this protocol a lower threshold has been set for patients under 12 months.
2. Due to the development of *autonomic neuropathy* with longstanding diabetes, some patients may no longer exhibit the neurogenic "warning symptoms" of hypoglycemia, and directly proceed to lethargy, confusion, decreased level of consciousness (LOC) or seizures.

   Symptoms in infants & preverbal children are frequently nonspecific and include irritability, lethargy, poor feeding, cyanosis and tremor or jitteriness. Commonly infants may not manifest any signs until they present with a hypoglycemic seizure.
3. Hypoglycemia in infants and children may not response to glucagon (due to depleted hepatic glycogen stores). Paramedics may consider proceeding directly to intravenous dextrose.

   Hypoglycemia in infants and children may be an indication of poor oral intake. Evidence of starvation should raise the suspicion for child neglect or abuse.
4. When limited volume is required, paramedics may use 50% dextrose <u>in adults and adolescents only</u>. Infants and young children can develop severe neurological injury can occur with rapid shifts in serum osmolality, and volume restriction is rarely necessary.
5. After a prolonged period of hypoglycemia, a patient may require some time to return to their baseline cognitive level. However, there should be some evidence of improved LOC within a few minutes after treatment.

LINKS

M06.1 - GLUCOSE
M06.2 - DEXTROSE
M06.3 - GLUCAGON
M06.4 - GLUCAGON NASAL POWDER

APPROVED BY	
	
Medical Director - Provincial EMS/PT	Associate Medical Director - Provincial EMS/PT

VERSION CHANGES (refer to X05 for change tracking)
• Inclusion of glucagon nasal powder when glucagon solution is no longer available