1. **PURPOSE**
   To ensure a consistent standardized practice for administering medications via intramuscular injection.

2. **POLICY STANDARDS**
   A paramedic will administer medications via intramuscular (IM) injection in compliance with the Provincial Advanced Life Support Patient Care Standards (ALS PCS) and the ‘six rights’ of patient medication administration: the right patient, the right dose, the right drug, the right route, the right time and the right to know.

3. **EQUIPMENT**
   - Proper medication
   - Syringe with a needle length of 1 - 1½ inch and a gauge size between 21 – 25
   - Alcohol swab
   - Sharps container

4. **PROCEDURE**
   1. Ensure that the patient qualifies for the appropriate medical directive, or contact a Base Hospital Physician (BHP) for further direction.
   2. Communicate the need for the medication, and its effects to the patient and/or family member whenever possible
   3. Wear personal protective equipment as per Service Provider policy.
   4. Check medication for proper labeling and for an expiry date.
   5. Refer to medical directive for correct dosage(s).
   6. For the administration of Glucagon, follow the package instructions for preparation but utilize the most appropriate sized IM syringe for injection.
   7. Select the deltoid muscle and avoid areas with bruising, edema, masses, tenderness or discoloration when possible. Select a site that has not recently been used. Palpate the acromion process and landmark 3-4 finger widths below. Injection volume 0.5 to 3 ml.
   8. For pediatric and/or emaciated patients with under-developed deltoid muscles, inject the medication into the vastus lateralis muscle of the thigh. Landmark by placing one hand below the greater trochanter and one hand above the knee. The space between the two hands and slightly on the lateral side defines the vastus lateralis muscle. For a pediatric patient < 1 year of age, consider using a 1 inch needle.
   9. Injection volume 0.5 to 3 ml. If the patient requires more than 3 ml of medication, prepare another injection site.

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10. Cleanse the area with an alcohol swab, wiping with firm pressure from injection site outward in a circular motion. Allow skin to dry.

11. Hold the syringe between the thumb and forefinger of dominant hand. Pull cover straight off the needle with non-dominant hand.

12. Spread the skin at the site with the thumb and index finger of the non-dominant hand.

13. Insert the needle at a 90-degree angle in one quick motion to ensure insertion in the muscle layer. Avoid inserting the needle all the way to the hub.

14. Pull back slightly on the plunger (aspirate) to ensure needle placement is not in the venous system. If no blood is aspirated, gently inject the medication. If blood is present on aspiration, withdraw the needle, discard the medication and equipment, and restart process from procedure 7.

15. After the injection, withdraw the needle at the same angle it was inserted. Use an alcohol swab to massage the site. This helps distribute the medication and promote absorption by dilating blood vessels in the area and increasing blood flow.

16. Discard the needle in the sharps container without recapping.

17. Assess the patient closely for any change in condition following medication administration and document any adverse effects.

18. Discontinue further medication administration if adverse effects occur and/or as directed by a BHP.

19. Document all medication administration on the patient care record as per the Ministry of Health and Long Term Care Emergency Health Services Branch Ambulance Call Report Documentation Standards and your Service Provider policy which includes:
   - name of the medication
   - dose and concentration of the medication
   - time of administration
   - route/site of administration
   - amount of wastage for any controlled substance accompanied by a co-signature

20. Document patient condition before and after medication administration.

5. POLICY/PROCEDURE UPDATE SCHEDULE
To be reviewed annually.

6. REFERENCES AND RELATED POLICIES
ALS PCS Nov. 2013 Version 3.1
HSN/Policy & Procedures/Clinical Policies and Procedures/Intramuscular Injections

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### 7. CONSULTATION AND APPROVAL

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<tr>
<th>Policy Owner</th>
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<tbody>
<tr>
<td>Paramedic Practice Coordinator</td>
<td>Daniel Langevin</td>
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<tr>
<td>Chair, CPC Program Council</td>
<td>September 17, 2014</td>
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<tr>
<td>Name: Nicole Sykes</td>
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