Reference: EMS Rules Section 515.550 (April 15, 1997)

I. **POLICY**

A. All patients in the NWC EMSS shall receive the following:

1. A reasonable assessment to the extent allowed if there is a potential for illness or injury based on the circumstances;
2. The appropriate level of care based on their mechanism of injury/past medical history, chief complaint, presenting signs and symptoms, and anticipated complications within the scope of practice granted to the responding personnel; and
3. Appropriate disposition in a manner that complies with system standards of care.

B. If a scene response, a reasonable search must be completed to determine if a patient is present.

C. This policy shall be used as a guideline and should not be considered a replacement for good common sense and/or emergency responder judgment.

II. **DEFINITIONS**

A. **BASIC LIFE SUPPORT (BLS) SERVICES**

A basic level of pre-hospital and inter-hospital emergency care, and non-emergency medical care that includes airway management, cardiopulmonary resuscitation (CPR), control of shock and bleeding and splinting of fractures, as outlined in the BLS National Curriculum of the U.S. DOT and any modifications to that curriculum specified in rules adopted by IDPH pursuant to the EMS Act.

B. **ADVANCED LIFE SUPPORT (ALS) SERVICES**

An advanced level of pre-hospital and inter-hospital emergency care and non-emergency medical care that includes basic life support care, cardiac monitoring, cardiac defibrillation, electrocardiography, intravenous therapy, administration of medications, drugs and solutions, use of adjunctive medical devices, trauma care and other authorized techniques and procedures, as outlined in the ALS National Curriculum of the U.S. DOT and any modifications to that curriculum specified in rules adopted by IDPH pursuant to the EMS Act.

III. **SCOPES OF PRACTICE: Licensed EMTs/PHRNs**

A. Any person licensed as an EMT, Paramedic or PHRN shall perform emergency and non-emergency medical services as defined in the EMS Act, in accordance with his or her level of education, training and licensure, the standards of performance and conduct prescribed by IDPH in rules adopted pursuant to the Act, and the requirements of the EMS System in which he or she practices, as contained in the approved Program Plan for that System. (Section 3.55(b) of the Act)

B. A person currently licensed as an EMT, Paramedic or PHRN may only practice or use his or her EMS license in pre-hospital or inter-hospital emergency care settings or non-emergency medical transport situations, under the written or verbal direction of the EMS MD or his designee. A prehospital emergency care setting may include a location that is not a health care facility, which uses EMS personnel to render pre-hospital emergency care prior to the arrival of a transport vehicle. The location shall include communication equipment and all of the portable equipment and drugs appropriate for the EMS practitioner's level of care, and the protocols of the EMS systems, and shall operate only with the approval and under the direction of the EMS MD (Section 3.55(b) of the Act).

C. This does not prohibit EMS personnel from practicing within an ED or other health care setting for the purpose of receiving con-ed or training approved by the EMS MD.

This also does not prohibit EMS personnel from seeking credentials other than his or her EMT or paramedic license and using such credentials to work in an ED or other health care setting under the jurisdiction of that employer [Section 515.550(c) of the Rules].

D. **EMT-Bs** (EMTs) with System privileges in good standing may perform **BLS Services as defined by IDPH EMS Rules** with the following caveats:

1. They may assist a patient to administer their own nitroglycerin, Epi pen, or Proventil pending an ALS response.
2. They may administer glucagon and naloxone by the intranasal route (MAD).
3. They may administer ondansetron via rapid dissolve tablet.
4. They are considered skilled assistants when an advanced airway is necessary, but are not expected to perform the procedure.
5. They are expected to appropriately use an AED if one is available pending an ALS response. AEDs are required on BLS vehicles or BLS MedEngines included in the EMS System plan.
6. The NWC EMSS does not use activated charcoal or glucose gel. It does not authorize EMT-Bs to start intravenous lines.
7. They may obtain a capillary blood glucose reading if trained in the procedure.

E. **Paramedics (PMs) or Prehospital RNs (PHRNs)** with System privileges in good standing may administer all medications and perform all interventions prescribed in the SOPs or this policy using techniques specified in System standards of practice. If a patient requires any additional drugs, solutions, additives, or appliances a qualified healthcare professional must accompany the patient.

1. **PMs/PHRNs are authorized to perform the following ALS skills/interventions:**

   a. **Airway access**: Intubation: Orotracheal, drug-assisted, nasotracheal, in-line, digital, anterior/inverse; King LTS-D airway; and needle and surgical cricothyrotomy
   b. ETT placement confirmation: EDD, quantitative waveform capnography
   c. **Suction**: Oral and tracheal; use of a meconium aspirator
   d. Pulse oximetry (SpO_2) monitoring
   e. **O_2 delivery**: NC, non-rebreather mask, BVM; C-PAP; automated transport ventilators (Univent/Autovent) or others as approved)
   f. Needle pleural decompression
   g. **Vascular access**: Peripheral veins including external jugular; saline lock if trained in the procedure; AV shunt if that is the only site available and the patient is unstable; intraosseous access of tibia or humeral head using the EZ-IO driver on adults and children
   h. ECG monitoring including 12 lead
   i. Cardioversion, defibrillation, transcutaneous pacing
   j. Therapeutic hypothermia
   k. Obtaining capillary and/or venous blood sample for glucose testing
   l. Capillary glucose testing using a System-approved device
   m. Administration of vaccines as authorized by the EMS MD (Opt. since 1997)
   n. Drugs/solutions as listed below.

Drugs/Solutions	Acceptable routes
Normal saline (0.9% NaCl)	IV, IO
Lactated Ringers solution	IV, IO
D_5W or D10W	IV, IO
D5/.45 NS; D5/.9 NS; D5/LR	IV/IO
Adenocard (adenosine)	IVP, IO
Albuterol	Nebulized, MDI
Amiodarone	IVP
ASA	PO
Atropine	IVP, ET, IO
Benzocaine (Hurricaine)	Spray
Cardizem (diltiazem) (no longer in SOP)	IVP, IO
Dextrose 12.5%, 25%, 50%	IVP, IO
Diphenhydramine	IVP, IM, IO
Dopamine (Intropin)	IVPB
Epinephrine 1:10,000	IVP, IO
Epinephrine 1:1,000	IM, SL, ET, nebulized
Etomidate (Amidate)	IVP
Fentanyl	IVP/IO/IN/IM
Glucagon	IVP/IO/IN/IM
*Heparin on a medication pump	IV pump
Ipratropium (Atrovent)	HHN
Lasix (furosemide) (no longer used)	IVP, IM, IO
Lidocaine	IVP, ET, IO
Magnesium sulfate	IVP, IO
Midazolam	IVP/IO/IN/IM
Morphine sulfate ~~(no longer in SOP)~~	IVP, IM, IO, PCA pump
Naloxone	IV, IN, IM, SL, IO, Sub-q,
Nitroglycerin	SL, spray, transcutaneous, IV on pump
Nitrous oxide	Inhaled
Ondansetron	ODT/IVP
Sodium bicarbonate	IVP, IO
*Steroids (Ex: methylprednisolone)	IVPB, nebulized
Tetracaine ophthalmic solution	topical gtts to eye
Valium (diazepam) ~~(No longer in SOP)~~	IVP, IR, IO
Vasopressin	IVP, IO
Verapamil	IVP
*Vitamin additives to an IV	Added to IV solution

Medications noted with an * are not included in the SOPs and must be administered per transferring physician's written directions.

"Any drug listed in the SOPs and/or above that has a current abbreviation of "IV", "IVP", or "IVPB" may be transported on an IV pump by a system paramedic(s) without the assistance of a RN as long as that paramedic(s) have been trained/competencies on that IV pump"

2. **PMs/PHRNs are authorized to monitor patients with the following:**
   - a. Central lines (may not insert; may access based on medical control order)
   - b. Indwelling urinary catheters (may not insert)
   - c. Gastric tubes (may not insert)
   - d. Tracheotomy tube (may not insert)
   - e. Surgical drains (may not access or manipulate)

3. **PMs are NOT authorized to perform and/or independently monitor/transport patients with the following:**
    a. Chest tubes
    b. Arterial lines;
    ~~c.~~ Intra-aortic balloon pumps;~~ ventricular assist devices;~~
    d. Hemodynamic monitoring catheters (CVP/Swan-Ganz);
    e. Ventilators (other than Univent or Autovent);
    f. Fetal monitoring: internal or external;
    g. Intracranial pressure monitors; or
    h. Cervical traction devices (Garner wells tongs, etc)
4. They may not independently transport critically ill neonates in isolettes.
5. The only exceptions are PMs who have completed a critical care course and have had their scope of practice expanded by the EMS MD.
6. Patients with the above appliances/devices must be accompanied by a qualified nurse, physician, respiratory therapist, and/or perfusionist.
7. **PMs are NOT authorized to perform the following:**
    a. Bimanual vaginal exams
    b. Rectal exams

F. A student, enrolled in an IDPH-approved EMS program, while fulfilling the clinical training and in-field supervised experience requirements mandated for licensure or approval by the System and IDPH, may perform prescribed procedures under the direct supervision of a physician licensed to practice medicine in all of its branches, a qualified registered professional nurse or a qualified PM preceptor, only when authorized by the EMS MD (Section 3.55(d) of the Act).

IV. **INITIATION OF CARE**

A. Upon arrival at the scene, all EMS responders are to follow system SOPs with respect to responder safety, patient access, recognition and abatement of risk, application of personal protective devices/body substance isolation, patient assessment and initial interventions.

B. **The EMS MD has determined that the following minimum equipment should be taken with EMS personnel to the patient for use at point of patient contact:**

1. Assessment tools: Stethoscope, light source, BP cuff, glucose monitor, SpO_2 monitor
2. Airway bag consistent with the responder's scope of practice. Ex. BLS & ALS responders should bring oral and nasal airways and suction. An ALS response should bring full airway/intubation equipment per System drug and supply list including drugs for DAI, EDD and $EtCO_2$ device or capnography.
3. Oxygen delivery devices and one cylinder (D or E) of oxygen
4. BLS response: AED; drugs consistent with BLS scope of practice
5. ALS response: Monitor/defibrillator with monitoring pads and one set of pads to pace/defibrillate
6. ALS response: Vascular access supplies and equipment
7. ALS response: First line resuscitation drugs - same as carried on an alternate response vehicle
8. EMS Providers may expand on this minimum response requirement as they find practical or necessary based on preliminary dispatch information.

C. **INITIATION OF BLS CARE**

BLS care involving airway access/maintenance, ventilatory support, oxygen delivery, cardiopulmonary resuscitation, application and use of an AED, capillary glucose testing, spine motion restriction, hemorrhage control, and splinting of isolated fractures shall be initiated at the point of patient contact per the SOPs for all patients requiring interventions consistent with the definition of BLS service. Patients requiring BLS care may include, but not be limited to, non-life-threatening situations, i.e., stable (normal for size/age/sex of patient) vitals; plus the following:

1. Initial assessment findings within normal limits
2. Patients in cardiac or respiratory arrest pending an ALS response
3. Isolated musculoskeletal trauma with distal SMV status intact
4. Bleeding controllable by direct pressure
5. Acute illness or trauma without systemic implications and presenting in minimal distress
6. Long-term (chronic) diseases without new or acute distress

D. **INITIATION OF ALS CARE**

1. Provided that scene safety is confirmed, any patient with an actual or potential life-threatening condition or one requiring ALS services shall have the following assessments/interventions initiated/attempted, if indicated, at the point of patient contact ***prior to removal*** to the ambulance:

   a. Airway access per System procedure unless further attempts are contraindicated

   b. Ventilatory support, SpO_2 and capnography monitoring, O_2 delivery unless contraindicated, use of C-PAP, pleural decompression, and/or conversion of an open to closed pneumothorax

   c. **ECG monitoring/cardioversion/defibrillation/pacing**. A 12-lead ECG should be acquired as soon as possible (while stationary) if indicated; results should be transmitted or communicated while enroute.

   d. **Vascular access** if an immediate drug administration route is necessary or the systolic BP is 80 or less. Vascular access should generally be performed enroute on patients meeting criteria for transport to a Level I or Level II Trauma Center or experiencing a stroke as specified in the SOPs.

   e. **Significant external bleeding**: Hemorrhage control with direct pressure and hemostatic dressings. If an extremity and bleeding persists: tourniquet.

   f. **First line medications**: adenosine, albuterol, amiodarone, ASA, atropine, benzocaine spray, diphenhydramine, dopamine, etomidate, NTG, epinephrine 1:10,000 & 1:1000, dextrose in age-appropriate concentrations, ipratropium, lidocaine, midazolam, naloxone, ondansetron, vasopressin, verapamil. Pain medication should be administered prior to splinting or removal from point of contact if patient is in severe discomfort.

2. If initial attempts at ALS interventions are unsuccessful, attempt a recommended back-up procedure and contact medical control for further orders. DO NOT prolong scene time with persistent unsuccessful efforts at airway or venous access.

3. **Patients requiring ALS services include, but may not be limited to, conditions covered by the System SOP's; PLUS the following:**

   a. Any deviation from normal in the initial assessment or breath sounds

   b. Patients with abnormal VS supported by signs of hypoxia, hypercarbia, and/or hypoperfusion

Guidelines for abnormal vital signs: ADULTS

Pulse:	< 60 or > 100 or irregular rhythm; poor quality
Respiration:	< 10 or > 20 or abnormal pattern/effort/expansion
Systolic BP:	< 90 or > 150 mmHg

c. **PEDIATRICS** - See SOPs for normal and abnormal values

d. Chest/abdominal pain with positive assessment findings or GI bleeding

e. S/S of hypoperfusion: altered mental status; pale, cool, moist skin

4. **ALS care should never be discontinued** once initiated unless a decisional patient refuses further intervention, the patient is given full disclosure of risk, has a Refusal of Service form appropriately executed, the patient's wishes are shared with on-line medical control while on the scene, and a physician or his/her designee grants permission to discontinue care.

5. If a patient has required any continuous monitoring during transport (ECG, SpO_2, $EtCO_2$ or capnography), or any other continuous interventions while under EMS care (CPR, oxygen, assisted ventilations, etc.), those assessments and/or interventions shall continue until responsibility for the patient is transferred to ED personnel unless specially authorized to stop by medical control. They shall not be discontinued in the ambulance for transfer into the hospital.

6. If scene, patient and/or rescuer safety is questionable or if EMS personnel are confronted with an uncooperative patient, the requirements to initiate ALS care at point of patient contact or during transport may be waived in favor of assuring that safety is protected and the patient is transported to an appropriate facility. Contact medical control to discuss the situation prior to leaving the scene. Clearly document the circumstances leading to an abbreviation of customary practice.

E. **In-field service level upgrades**

1. All transfer of care decisions shall be made under the immediate direction of the nearest system hospital base station who shall determine the risk/benefit and appropriateness of a service level upgrade.

2. BLS ambulance personnel at the scene of an emergency shall allow any ILS or ALS ambulance personnel at the scene access to the patient, for the purpose of assessing whether ILS or ALS care is warranted. If the ILS or ALS personnel determine that the patient requires ILS or ALS care, the BLS personnel shall transfer care of that patient to the ILS or ALS personnel.

3. If a patient is being initially treated in the field by BLS personnel and they identify that ALS monitoring or interventions are necessary, the BLS crew shall request an ALS response from the local municipal EMS agency, unless the initial responders are employees of a private provider and the private provider can provide an ALS response within six minutes.

4. Transfer of care shall not be initiated in either of the above scenarios if it would appear to jeopardize the patient's condition. If the BLS crew can transport to the nearest hospital faster than the local municipal ALS team can arrive, the BLS team may transport the patient immediately, providing BLS care enroute.

5. **When care is transferred from one EMS crew to another, the first responding personnel shall**
    a. remain with the patient and continue to provide appropriate care within their scope of practice according to System standards of care until patient responsibility is transferred to the transporting team;
    b. provide a verbal report to the transporting personnel that includes assessment and treatment data current to the point of transfer;
    c. complete a patient care report which notes patient assessment and treatment data current to the point of transfer; and
    d. provide a copy of their written report to the receiving hospital as soon as possible. See Refusal of Care policy & CARS procedures.

V. CHRONICALLY DISABLED/IMPAIRED PATIENTS

If EMS is dispatched to a patient who has a chronic, debilitating condition, but who appears stable with no new or acute findings, and the total scene and transport time is less than five minutes, they shall advise the receiving hospital of the situation and may request permission to abort ALS care in favor of immediate transport. At all times, the patient's needs, based on the present medical condition, must dictate the level of care delivered.

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