

LICENCE CONDITIONS FOR EMERGENCY AMBULANCE SERVICE

IMPOSED UNDER SECTION 13(1) OF THE HEALTHCARE SERVICES ACT 2020

1. Application

1.1 These licence conditions (“**LCs**”) apply to all persons which have been licensed under the Healthcare Services Act 2020 (the “**HCSA**”) to provide Emergency Ambulance Service (“**EAS**”) (“**Licensees**”). For avoidance of doubt, the defined terms as used in these LCs shall have the meanings ascribed to them in the HCSA and any Regulations made thereunder, unless otherwise stated.

1.2 A breach of these LCs may result in regulatory action being taken against Licensees under section 20 of the HCSA, including but not limited to:

- (a) suspension or revocation of the Licensee’s EAS licence;
- (b) shortening the term of the Licensee’s EAS licence;
- (c) directing the Licensee to rectify the contravention, or prevent a recurrence of the contravention; and/or
- (d) directing the Licensee to pay a financial penalty.

2 Responsibilities of the EAS Clinical Governance Officer (“CGO”) appointed under Section 24(2) of the HCSA

2.1 Medical Oversight

2.1.1 The Licensee shall ensure that the CGO develops, establishes, implements, endorses and reviews written care protocols for common and critical situations encountered, operational protocols pertaining to patient care, such as handling and transport of all patients, including critically ill patients or patients undergoing resuscitation, and strategies for mass disaster response and/or special circumstances (e.g. Hazmat, infectious diseases).

2.1.2 The Licensee shall ensure that the CGO develops comprehensive written care protocols for common and critical situations that may arise in connection with the transportation of patients. These written care protocols shall cover, but are not limited to, the following conditions:

- (a) Cardiac arrest;

- (b) Seizures;
- (c) Shortness of breath;
- (d) Loss of consciousness;
- (e) Sudden weakness;
- (f) Stroke;
- (g) Chest pain; and
- (h) Severe abdominal pain.

2.1.3 The Licensee shall ensure that the CGO is sufficiently competent enough to oversee the various clinical situations that are encountered under the Emergency Ambulance Service. In the event where the clinical situation requires specific expertise beyond the competency of the CGO, the licensee shall ensure that the CGO makes arrangement for a suitably qualified person to provide clinical advice to the licensee.

2.1.4 The Licensee shall ensure that the CGO updates the written protocols with the prevailing measures related to provider health and safety, as well as infection control and safety from cross-contamination.

2.1.5 The Licensee shall ensure that the CGO provides (where applicable) appropriate clinical advice to the Emergency Ambulance Service Crew (as defined under Regulation 2 of the Healthcare Services (Emergency Ambulance Service and Medical Transport Service) Regulations 2022) ("**HCS(EAS&MTS)R**") ("**Service Crew**") in the event of a clinical emergency. This includes advising on scene management and control measures in the event of field responses.

2.1.6 The Licensee shall ensure that, in addition to the written care protocols, the CGO establishes and maintains modes of communication with the Service Crew in order to render further assistance or support in the event that the Service Crew requires it.

2.1.7 The Licensee shall ensure that, in the event the CGO is not available, the CGO has put in place alternative arrangements (either by having another suitably qualified person or by having written care protocols) to guide the Service Crew in the event of a clinical emergency.

2.2 Quality Assurance and Audit

2.2.1 The Licensee shall ensure that the CGO provides appropriate input to all audits and patient care-related matters of the Licensee and assists the Licensee in ensuring that any necessary and appropriate corrective actions are taken and adhered to.

2.2.2 The Licensee shall ensure that the CGO endorses all audit documents and reports.

2.3 Training of Service Crew

2.3.1 The Licensee shall ensure that the CGO recommends Service Crew to attend relevant and recognised training courses (e.g. National Pre-hospital Emergency Care Workshop) at least once every six months, which may be in the form of lectures, simulations, practical sessions or clinical discussions (e.g. journal review).

2.3.2 The Licensee shall ensure that the CGO periodically reviews the performance of the Service Crew in terms of delivery of patient care, patient transfers, infection control, documentation of patient records and overall competency level.

3 Service Crew

3.1 Crew Leader

3.1.1 The Licensee shall document the Crew Leader (as described under Regulation 9(2)(b) of the HCS(EAS&MTS)R) for the transport of each patient that is conveyed in an Emergency Ambulance.

3.2 Emergency Medical Technician (EMT)

3.2.1 The Licensee shall ensure that each EMT possess the qualifications recognised by the Director as set out in **Annex A**.

3.2.2 The Licensee shall ensure that each EMT undergoes the recertification programme listed in **Annex A** at least once every two years.

3.2.3 The Licensee shall ensure that the EMT is able to perform the tasks stipulated below:

- (a) Be familiar with and be able to properly handle and operate all equipment on board the Emergency Ambulance and be familiar with the CGO's written care protocols (set out at Paragraphs 2.1.1 and 2.1.2 above);
- (b) Use various types of stretchers and body immobilisation devices;
- (c) Perform basic life support on infants, children and adults and be proficient in the use of bag valve mask;
- (d) Independently initiate the use of an Automated External Defibrillator ("AED");
- (e) Perform standard first aid and give oxygen supplement;

- (f) Measure and monitor the patient's vital signs (i.e. pulse rate, blood pressure, temperature, respiratory rate and oxygen saturation);
- (g) Monitor intravenous peripheral lines and flow of drip of stable patients;
- (h) Transfer and maintain patients with nasogastric tubes, tracheostomy tubes, and/or urinary catheters;
- (i) Perform basic emergency procedures such as control of external bleeding and application of dressings, bandages, slings and splints;
- (j) Establish contact with the receiving hospital if the need arises;
- (k) Appropriately use Personal Protective Equipment ("**PPE**") and apply standard precautions to prevent the transmission of infectious agents during patient care; and
- (l) Assist the Crew Leader in the conduct of the various procedures for the care of the patient who is being managed.

3.3 Paramedic, Ambulance Nurse and Ambulance Doctor

3.3.1 The Licensee shall ensure that the Paramedic possesses the qualifications recognised by the Director as set out in **Annex A**.

3.3.2 The Licensee shall ensure that the Paramedic undergoes the recertification programme listed in **Annex A** at least once every two years.

3.3.3 The Licensee shall ensure that the Paramedic, Ambulance Nurse and Ambulance Doctor are able to perform the tasks as stipulated below:

- (a) Assess and independently manage trauma and non-trauma emergencies in patients of all age groups in accordance with the written care protocols endorsed by the CGO;
- (b) Organise and prioritise treatment and evacuation in multiple casualty incidents;
- (c) Use various types of stretchers and body immobilisation devices provided by the EAS;
- (d) Carry out emergency and life-saving procedures to control external haemorrhage, apply dressings, bandages, slings and splints;
- (e) Provide immediate care to casualties during the process of extrication and disentanglement from entrapments;
- (f) Assess and maintain the patient's airway, including the use of adjuncts such as the oropharyngeal airway or Laryngeal Mask Airway ("**LMA**");

- (g) Perform basic life support on infants, children and adults;
- (h) Perform a 12-lead electrocardiogram (“**ECG**”), monitor the patient’s electrical rhythm and transmit the 12-lead ECG to the receiving hospital, if appropriate and required;
- (i) Independently initiate the use of an AED;
- (j) Obtain intravenous access, administer designated intravenous medications and perform intravenous infusions as per the written care protocols endorsed by the CGO;
- (k) Obtain capillary blood glucose sample and institute treatment for hypoglycaemia;
- (l) Assess and manage an emergency childbirth;
- (m) Administer basic emergency medications include nebulisation;
- (n) Identify abnormal chest sounds through auscultation;
- (o) Appropriately use PPE and apply standard precautions to prevent the transmission of infectious agents during patient care; and
- (p) Manage patients with nasogastric tubes, intravenous plugs or urinary catheters or other tubes and cannula.

3.4 Driver

3.4.1 The Licensees shall ensure that the Driver is able to perform the tasks stipulated below:

- (a) Be familiar with the written care protocols endorsed by the CGO on clinically common and critical situations that may be encountered in the provision of EAS;
- (b) Assist in patient care / monitoring in accordance with the Driver’s scope of practice and competencies;
- (c) Appropriately use the PPE and apply standard precautions to prevent the transmission of infectious agents during patient care; and
- (d) Use of stretchers and be able to assist in the care and evacuation of a patient or casualty.

4 Emergency Ambulance Medical Equipment

4.1 The Licensee shall ensure that each Emergency Ambulance is fitted and equipped with the following equipment:

- (a) The medical equipment and medications specified in **Annex B**, which shall be regularly checked and re-stocked and be in good working condition when the Emergency Ambulance is despatched; and
- (b) Any other equipment that is specified by MOH or any other authority.

4.2 The Licensee shall ensure that the equipment set out at Paragraph 4.1 is properly maintained and in good working condition.

4.3 The Licensee shall ensure that the requirements in Paragraphs 4.1 and 4.2 are complied with when the Emergency Ambulance is used to convey any patient, regardless of whether they are an emergency patient.

4.4 The Licensee shall obtain and maintain all licences, permits, certifications and regulatory authorisations pertaining to the above equipment (including medical equipment) without any restriction or qualification whatsoever so as to enable them to meet the requirements stipulated in these LCs.

4.5. The licensee shall ensure that the Service Crew should not use any medical equipment and medication beyond those stipulated in **Annex B** for the conveyance of a patient unless the Service Crew is appropriately trained and assessed to be competent in managing patients who require the additional medical equipment and medication.

5 Other Vehicle Requirements

5.1 The Licensee shall ensure that the Emergency Ambulance is in a good state of repair and complies with all laws and regulations under the purview of the Land Transport Authority ("LTA").

5.2 The Licensee shall ensure that the Emergency Ambulance is in a clean and sanitary condition at all times.

5.3 The Licensee shall ensure that the Emergency Ambulance has sufficient space to accommodate the conveyance of patients who are lying down and/or patients who are seated.

5.4 The Licensee shall ensure that the Emergency Ambulance has sufficient space for the Service Crew to administer life-saving measures on patients.

5.5 The Licensee shall ensure that the safety of any patients or Service Crew conveyed in the Emergency Ambulance is not compromised at any time, including when the Service Crew is required to administer life-saving measures on any patients.

5.6 The Licensee shall ensure that any equipment and items in the Emergency Ambulance are securely fastened or stored in such a manner so as not to compromise the health and safety of any patients or the Service Crew.

6 *Written Care Protocols*

6.1 *Handover of Patient Care*

6.1.1 The Licensee shall ensure timely and adequate transfer of clinical information to facilitate proper handover during patient transfer. A copy of the documented handover checklist shall be provided to the receiving party. The information to be documented and maintained in the handover checklist shall include, but is not limited to, the following:

- (a) Indication(s) for transfer;
- (b) Patient's clinical information (e.g. past medical history, clinical diagnosis / impression, other clinical issues obtained from the transferring institution, patient, or the next-of-kin or carer of a patient);
- (c) Assessment of patient's vital signs and clinical parameters;
- (d) Clinical interventions and equipment used by the patient; and
- (e) Acknowledgement from the receiving party following patient handover.

LIST OF RECOGNISED EMT AND PARAMEDIC COURSES

EMT

- Workforce Skills Qualifications (“WSQ”) Higher Certificate in Healthcare Support (Pre-Hospital Emergency Medical Services);
- Certificate of Completion of EMT Course [incorporating WSQ Higher Certificate in Healthcare (Nursing) and/or relevant Technical Skills and Competencies as approved by SkillsFuture Singapore] issued by the following training institutions:
 - SingHealth Alice Lee Institute of Advanced Nursing (“IAN”);
 - Singapore Armed Forces (“SAF”) Medical Training Institute;
 - Civil Defence Academy (“CDA”);
 - Health Management International (“HMI”) Institute of Health Sciences;
 - Co-operative of Singapore Civil Defence Force Employees Ltd (“COSEM”);
 - Lenton Training Centre;
- EMT Recertification Programme conducted by Institute of Advanced Nursing-Singapore Workforce Skills Qualifications (“IAN-WSQ”); or
- Any other EMT (Basic) qualification recognised by the Director from time to time.

Paramedic

- Emergency Medical Services (“EMS”) Specialist Certification from the SAF Medical Training Institute or Civil Defence Academy;
- Higher National Institute of Technical Education Certificate (“NITEC”) in Paramedic and Emergency Care;
- Justice Institute of British Columbia (“JIBC”) Paramedic Academy’s ‘Primary Care Paramedic’;
- Diploma or Advanced Diploma in Paramedicine issued by a local institution recognised by the Director;
- Paramedic Transitional Scheme Certificate issued by Unit for Pre-hospital Emergency Care and the Ministry of Health, Singapore (“UPEC-MOH”);

- Paramedic Recertification Programme: Joint ITE-UPEC Certificate in Pre-hospital Emergency Care course by the Institute of Technical Education (“ITE”);
or
- Any other Paramedic qualification recognised by the Director from time to time.

MEDICAL EQUIPMENT AND MEDICATION FOR EMERGENCY AMBULANCES

A. Airway and Ventilation Equipment

1. Portable or fixed suction apparatus with a regulator
 - Wide-bore tubing, rigid pharyngeal curved suction tip; tonsillar and flexible suction catheters (suction catheter size 10 F and 16 F, min 1 each)
2. Portable oxygen apparatus capable of metered flow with adequate tubing
3. Portable and fixed oxygen-supply equipment
 - Variable flow regulator
4. Oxygen-administration equipment (min 1 each)
 - Oxygen face mask (adult and child sizes), non-rebreathing mask (adult and child sizes), nebuliser mask (adult and child sizes), nasal cannulas. An alternative to nebuliser mask (adult and child sizes) is a face mask (adult and child sizes) fitted with a chamber to be compatible with a metered dose inhaler.
5. Big-valve mask (manual resuscitator)
 - Hand-operated, self-re-expanding bag; adult (>1000 mL) and child (450-750 mL) sizes, with oxygen reservoir/accumulator; valve (clear disposable); and mask (adult, child, infant and neonate sizes)
6. Airways
 - Oropharyngeal (sizes 40 mm, 50 mm, 60 mm, 70 mm, 80 mm, 90 mm, 100 mm; adult, child, infant and neonate sizes, min 1 each)
7. 10-mL non-Luer lock (Luer slip) syringe; for LMA use (min 2)
8. Advanced airway devices (e.g. a rescue airway device such as the oesophageal-tracheal double-lumen airway [OTDLA], laryngeal tube, or laryngeal masks airway [LMA Sizes 2, 3, 4 and 5, min 1 each], for adult and children)
9. Lubricating jelly for LMA (water soluble)

B. Intravenous Equipment

1. Crystalloid solutions, such as Ringer's lactate or normal saline solution (min 4)
2. Alcohol swabs (min 6 pieces)
3. Intravenous-fluid pole or roof hook
4. Intravenous catheters (18G, 20G and 22G, min 2 each)
5. Venous tourniquet (min 1)
6. Syringes (3 ml, 5 ml and 10 ml, min 2 each)
7. Needles (1 at least 1½ inch for intramuscular injections, 21G and 23G, min 2 each)
8. Intravenous administration sets (min 2)
9. Transparent I.V. dressing (min 4)
10. Plasters (min 5)
11. Latex Glove, Non Sterile M (min 2 pairs)
12. Standard sharps containers, portable

C. Cardiac

1. Portable, battery-operated defibrillator, which should have paediatric capabilities, including child-sized pads and cables
2. Portable, battery-operated monitoring system capable of continuous cardiac rhythm, blood pressure and oxygen saturation monitoring
 - With printer/recorder, quick-look paddles or electrode, or hands-free pads, ECG 3 leads, adult and paediatric chest attachment electrodes

D. Immobilisation Devices

1. Cervical collars
 - Adult sizes (small, medium, large, and other available sizes or adjustable collar, min 1 each)
2. Head immobilisation device (not sandbags)
 - Firm padding or commercial device (adult size)
3. Upper and lower extremity immobilisation devices (at least 4)

- Joint-above and joint-below fracture (sizes appropriate for adults), rigid support constructed with appropriate material (cardboard, metal, pneumatic, vacuum, wood, or plastic)
4. Pelvic immobiliser (adult size)
 5. Impervious backboards (long, radiolucent preferred) and extrication device
 - Extrication device (head-to-pelvis length) and long (transport, head-to-feet length) with at least 3 appropriate restraint straps (adult size)
 - Scoop backboard with 3 appropriate restraints straps

E. Trauma Supplies/Equipment

1. Burn gels or equivalent (min 1)
2. Triangular bandages (min 5)
3. Elastic or crepe or gauze roll bandages (size 2.5 cm, 5 cm, 7.5 cm, 10 cm, 15 cm or nearest equivalent, min 2 each)
4. Sterile gauze pads (size 7.5 × 7.5 cm, 9 × 20 cm, 10 × 10 cm, 20 × 20 cm or nearest equivalent, min 2 each)
5. Adhesive tape, hypoallergenic (1/2" and 1", min 2 each)
6. Arterial tourniquet (windlass)
7. Plasters (min 10)
8. Pen torch/pen light

F. Miscellaneous

1. Manual sphygmomanometer
2. Adult stethoscope
3. Length/weight-based tape or appropriate reference material for paediatric equipment sizing and drug dosing based on estimated or known weight (Broselow Tape)
4. Ear thermometer or digital thermometer (ear probe covers, min 5 or thermometer probe covers, min 5)
5. Trauma scissors for cutting clothing, belts, boots

6. Cold packs (min 1)
7. Sterile saline solution for irrigation (500 ml, min 1)
8. Flashlights (min 2)
9. Blankets, trolley sheets or linens and pillows (min 2 each)
10. Incontinence sheets (min 2)
11. Triage tags (min 20)
12. Disposable emesis bags or basins (min 5)
13. Wheeled cot
14. Folding stretcher with restrainers
15. Patient care charts/forms (min 5)
16. Glucometer or blood glucose measuring device (with reagent strips)
17. Canvas litter (min 2)

G. Infection Control Equipment

1. Eye protection (e.g. full peripheral glasses or goggles, face shield, min 4/number of crew)
2. Face protection (e.g. surgical masks, min 4/number of crew)
3. Gloves, non-sterile, variable sizes (min 4 pairs/number of crew)
4. Coveralls or gowns (min 4/number of crew)
5. Hair covers (min 4/number of crew)
6. Shoe covers (min 4 pairs/number of crew)
7. Hand sanitiser (min 1)
8. Disinfectant solution for cleaning equipment (min 1)
9. Disposable trash bags for disposing of biohazardous waste (min 4)
10. Respiratory protection (e.g. N95, or N100 respirator, min 4/number of crew)

H. Injury-Prevention Equipment

1. Traffic-signalling devices (reflective material triangles or other reflective, non-igniting devices)
2. Reflective safety wear for each crew member

I. Medications (Pre-loaded Syringes When Available)

Medications should minimally include two doses of the following, and should be properly stored and not expired:

1. Nitroglycerin
2. Aspirin (300 mg/dose)
3. Salbutamol
4. Dextrose 10 % solution
5. Adrenaline
6. Non-opioid Analgesics (e.g. Entonox or Pentrox)
7. Anti-seizure medication (e.g. Rectal diazepam)