



MINISTRY OF HEALTH
SINGAPORE

Stakeholder Consultation for Amendments to Emergency Ambulance Service and Medical Transport Service Regulations under the Healthcare Services Act (HCSA)

Health Regulation Group (HRG)

Ministry of Health

Updated 29 Dec 2023

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**1. Overview of HCSA and Existing Emergency Ambulance Service and Medical Transport Service Regulations
[For Information]**

Overview of HCSA and Existing Emergency Ambulance Service and Medical Transport Service Regulations

- Private ambulance services are regulated as either Emergency Ambulance Service (EAS) or Medical Transport Service (MTS) and licensed under the Healthcare Services Act (HCSA) since 3 January 2022.
- Licensed EAS and MTS providers must ensure that all conveyance services are provided in accordance with the requirements for EAS and MTS and general obligations under the HCSA. This includes:
 - **General Regulations, Fees Regulations, Advertisement Regulations:** General requirements, usually applicable to all licensees.
 - **Service-specific Regulations:** Unique requirements to each service i.e., Healthcare Services (Emergency Ambulance Service and Medical Transport Service) Regulations
 - **Licence Conditions (LCs):** To complement service-specific Regulations and to set out specific technical requirements to be met. Non-compliances could result in regulatory sanctions.
- These service regulations and licence conditions have been published in Jan 2022, and subsequently updated on 26 Jun 2023 as part of Phase 2 HCSA implementation. The documents are available at: www.moh.gov.sg/hcsa/resources.
- The first section of the presentation provides a recap of the service requirements for EAS and MTS.

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Duties of a Clinical Governance Officer

- A Clinical Governance Officer (CGO) has to be appointed by each EAS and MTS licensee.
- Responsibilities of a CGO include the following:
 - a) Ensure that clinical protocols relating to the assessment and management of patients are developed, implemented and maintained;
 - b) Conduct reviews of clinical protocols and give final endorsement;
 - c) Ensure the training and education of all of the licensee's personnel;
 - d) Provide 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; and
 - e) Provide appropriate clinical consultation and medical advice to the licensee and service crew where necessary. Should a clinical situation requires specific expertise beyond the competency of the CGO, the CGO makes arrangement for a suitably qualified person to provide clinical advice to the licensee.

Qualifications of a CGO

EAS CGO	MTS CGO
<p>An EAS CGO must fulfil the following:</p> <ul style="list-style-type: none"> a) A fully registered medical practitioner; b) Either of the following: <ul style="list-style-type: none"> i. is accredited by the SMC Specialist Accreditation Board for Anaesthesiology, Emergency Medicine, General Surgery, or Intensive Care Medicine ; or ii. has at least 10 years of relevant experience in Anaesthesiology, Emergency Medicine, General Surgery, or Intensive Care Medicine; c) Holds valid certifications for the following courses recognised by MOH: (i) Emergency Medical Services Medical Directors Workshop; and (ii) Advanced Cardiac Life Support; and d) Must not have been subject to any disciplinary order by the SMC for the preceding three years before appointment as a CGO. 	<p>A MTS CGO must fulfil the following:</p> <ul style="list-style-type: none"> a) Either of the following: <ul style="list-style-type: none"> i. A fully registered medical practitioner with at least 5 years' experience, including at least 1 year experience in either Anaesthesiology, Emergency Medicine, General Surgery, or Intensive Care Medicine; or ii. A Registered Nurse with at least 5 years of nursing experience in either Emergency Medicine, Intensive Care, General Surgery, Anaesthesiology or any other branch of medicine involving the management of acute and critical patients as approved by the Director; b) Hold valid certifications for the following courses recognised by MOH: (i) Emergency Medical Services Medical Directors Workshop; and (ii) Basic Cardiac Life Support and Automated External Defibrillation; and c) Must not have been subject to any disciplinary order by the SMC or SNB for the preceding three years before appointment as a CGO.

Framework for Quality Assurance and Audit

- The Licensee shall:
 - a) Maintain both a medical record system and an ambulance or medical transport log system;
 - b) Ensure performance monitoring, reporting and evaluation of the service provided;
 - c) Ensure all adverse events are recorded and reviewed; and
 - d) Develop and implement road and vehicular safety standards to uphold patient safety.



Appointment of a Service Crew

- A licensee must appoint a service crew comprising the following personnel for each vehicle:
 - a) At least one crew leader who is an appropriately qualified Ambulance Paramedic, Relevant Ambulance Nurse or Ambulance Doctor. MTS licensees may also appoint an Emergency Medicine Technician (EMT) or Ambulance Nurse as a crew leader; and
 - b) At least one qualified driver.
- Staffing numbers must commensurate with the number of vehicles.
- If the Service Crew comprises 3 or more staff, the additional crew member(s) should be a qualified EMT, Ambulance Nurse, Relevant Ambulance Nurse, Paramedic or Ambulance Doctor.
- Service Crew must hold valid certifications. Trainees are not counted towards the staffing requirements of the Service Crew.

Qualifications of a Service Crew

Crew Member	Qualifications
Ambulance Doctor	A fully registered medical practitioner who holds one or more valid certifications certifying competency — (a) in the provision of Advanced Cardiac Life Support; and (b) in the use of Automated External Defibrillation;
Ambulance Nurse	An individual who – (a) is a registered nurse or an enrolled nurse; and (b) holds one or more valid certifications certifying competency — (i) in the provision of Basic Cardiac Life Support; and (ii) in the use of Automated External Defibrillation
Ambulance Paramedic	An individual who holds one or more valid certifications certifying competency — (a) for appointment as a paramedic, following the individual's successful completion of a course recognised by the Director*; (b) in the provision of Basic Cardiac Life Support; and (c) in the use of Automated External Defibrillation
Emergency Medical Technician	An individual who holds one or more valid certifications certifying competency — (a) for appointment as an emergency medical technician, following the individual's successful completion of a course recognised by the Director*; (b) in the provision of Basic Cardiac Life Support; and (c) in the use of Automated External Defibrillation
Relevant Ambulance Nurse	An ambulance nurse who — (a) is a registered nurse; and (b) holds a valid certification certifying —(i) the individual's competency in the provision of Advanced Cardiac Life Support; or (ii) the individual's successful completion of a Life Support Course for Nurses.
Driver	An individual who – (a) holds a valid driving licence under the Road Traffic Act 1961 to drive an emergency ambulance or a medical transport; and (b) has a valid defensive driving course certificate recognised by the Land Transport Authority of Singapore; and (c) holds a valid certification certifying competency in CPR + AED (d) possesses appropriate competencies in the care and evacuation of patients.

*Details on the approved courses are stipulated in the Licence Conditions for EAS and MTS

Licensed Conveyance

- Before a vehicle is used as an emergency ambulance (EA) or medical transport (MT) vehicle, the licensee must allow MOH to inspect the vehicle to ensure that it meets the requirements. If the vehicle meets the requirements, the vehicle details can be listed in the licence.
- Vehicle requirements include the following:

Emergency Ambulance	Medical Transport
<ul style="list-style-type: none"> • Have a system compatible for communication with the Singapore Civil Defence Force or other designated medical dispatch system for ambulances • Fitted with an adequate number of passenger seats and attendant seats which are equipped with safety belts • Equipped with appropriate navigational tools • Installed with frosted or tinted windows in the patient compartment to ensure patient privacy • Equipped with a fire extinguisher • Meets LTA vehicle specifications 	
<ul style="list-style-type: none"> • A siren and wail sound horn or two-tone horn, and red beacon lights • Siren and beacon lights are only used when travelling to and transporting an emergency patient* • Shall bear the letterings “EMERGENCY AMBULANCE” on the front, both sides and rear of the vehicle 	<ul style="list-style-type: none"> • Shall bear the letterings “MEDICAL TRANSPORT” on the front, both sides and rear of the vehicle • Shall not bear or identify itself as “EMERGENCY AMBULANCE” or similar, nor be fitted with sirens and beacon lights • Not used to convey patients who are assessed before or at the point of pick-up to be an emergency patient*

*Emergency patient means an individual who is suffering or believed to be suffering from an injury, or a condition of acute or sudden onset, that poses an immediate threat to the individual's life or jeopardises the long-term health of the individual.

Licensed Conveyance

- **[Implemented on 26 Jun 2023]** In addition to the [existing vehicular requirements](#) for EAS and MTS, the licensee shall ensure that an appropriate vehicle model with sufficient space for patient care and monitoring and resuscitation is used to operate as an EA or MT (such as having a stretcher in place within the vehicle and for the service crew to position behind the head of the patient, who is lying on the stretcher, to administer resuscitative measures).
- The **minimum dimension of the patient compartment area*** in an EA or MT shall be as follows (see **Annex A** for details):
 - Length: 2.9m
 - Width: 1.5m
 - Height: 1.3m

*The minimum dimension of the patient compartment area is measured from existing vehicle models used e.g., Toyota Hiace, Nissan Urvan 3.0M, Mercedes-Benz Sprinter 316CDI, Renault Master 2.3, and Fiat Ducato 250.

Licensed Conveyance

The Licensee shall ensure that:

- a) The EA/MT is in a clean and sanitary condition at all times;
- b) The EA/MT has sufficient space to accommodate the conveyance of patients who are lying down and/or patients who are seated;
- c) The EA/MT has sufficient space for the Service Crew to administer life-saving measures on patients; and
- d) Any equipment and items in the EA/MT 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.

Equipment

- Facilities and equipment in licensed conveyance are regularly checked, properly maintained and replenished or replaced as necessary.
- Each vehicle shall be equipped with the appropriate facilities and equipment for the safe operation of the EA or MT (as the case may be) and the safe and effective conveyance of and delivery of care to patients. Equipment include*:
 - a) Appropriate airway, ventilation and intravenous equipment;
 - b) Appropriate cardiac and immobilisation devices;
 - c) Trauma supplies, equipment and medication;
 - d) Infection control and injury prevention equipment; and
 - e) Basic first aid kit equipment,

which are to be functional and effective at all times when the vehicle is in operation.

*Detailed equipment requirements for EAS and MTS are stipulated in Annex B of the Licence Conditions for EAS and MTS respectively.

Requirements for Medical Management of Patients

- A licensee must put in place measures, including the establishment of written care protocols where appropriate, to:
 - a) Determine whether the patient is an Emergency or non Emergency Patient when the patient/next-of-kin (NOK) calls (at the initial conveyance request) and again upon arrival at the patient's location and clinical assessment of the patient;
 - b) Where it is assessed that the patient cannot be safely conveyed – make appropriate alternative arrangements for the safe and timely conveyance of the patient; and
 - c) Ensure appropriate management and care of patients, including the appropriate use of medical supplies and equipment.
- The written care protocols include:
 - a) The appropriate manpower, equipment and vehicular requirements necessary for the transportation of patients;
 - b) Appropriate management of patients, including the care and escalation of patients whose medical condition deteriorates while being conveyed; and
 - c) In cases where the EAS licensee owns a mixed fleet of EAS/MTS vehicles and service crew, there should be conditions for use of each vehicle, including but not limited to when emergency ambulances should be used, how it may be used to transport non-emergency patients and when the EAS service crew should be deployed. For example, beacons and sirens should only be used in emergency cases.

Requirements for Medical Management of Patients

- EAS licensees must transport emergency patients to the nearest public hospital with an A&E department that possesses the appropriate on site specialties in either of the 2 scenarios:
 - a) Patients already in a state of cardiovascular collapse, or in imminent danger of collapse; or
 - b) All other emergency patients (other than those in sub-paragraph (a)) who have not given an indication (whether by express or implied instructions) to be ferried to a hospital of choice.
- Where the patient has indicated (whether by express or implied instructions) to be ferried to a hospital of choice (except for patients who are already in a state of cardiovascular collapse, or in imminent danger of collapse), the licensee must not directly or indirectly influence the decision of the patient to be sent to a different hospital.

Handling of Medical Supplies and Equipment

Requirement	Summary
Usage of medical supplies and equipment	<ul style="list-style-type: none"> • Purchase from authorised sources licensed by the Health Sciences Authority. • Each EA or MT must have an appropriate and adequate supply of medicines, medical supplies and equipment. • All usage or administration of medicines, medical supplies and equipment should be in accordance to the medical advice of the CGO, any written protocols and applicable requirements and restrictions under any written law.
Maintenance of medical supplies and equipment	<ul style="list-style-type: none"> • Medical supplies and equipment are regularly checked, replenished, and maintained and in good working condition when the EA or MT is dispatched. • An updated inventory of medical supplies and equipment* that are presently available for use is kept.

*Specific requirements for medical supplies and equipment required EAS and MTS are stipulated in Annex B of the Licence Conditions for EAS and MTS respectively.

Infection Control

- The licensee shall develop and implement protocols on:
 - a) The handling of patients with infectious diseases, including instructions on appropriate action to take in the event of exposure to blood or other body fluids/substances including needle-stick injuries and other incidents; and
 - b) The decontamination of vehicles after transport of patients with infectious diseases, or in the event of contamination by body fluids, in accordance with the protocols or any written law or such standards/guidelines issued by MOH for the transportation and disposal of waste.

- The licensee shall also ensure that the Service Crew:
 - a) Is provided with adequate and appropriate personal protective equipment, and is trained in the proper use of the PPE such as N95 mask, gloves, gown/apron, face shield/ goggles; and
 - b) Undergo the necessary vaccinations, and maintaining records of their immunisations, in accordance with the prevailing vaccination requirements for healthcare workers under the Workplace Safety and Health Act and any other prevailing requirements issued by MOH.

Requirements for Price Transparency and Bill Itemisation

- A licensee shall ensure that the charges payable for the service are displayed or made available in the EA/MT operated by the licensee and on the website (if the licensee has an online presence).
- These charges must also be conveyed to the patient and the patient's NOK upfront based on the preliminary assessment of the patient over the phone and before the EAS or MTS accepts the patient.
- In the event of higher or additional charges arising from changes in patient's treatment care plan immediately before a patient is or while a patient is being conveyed, the licensee must, as far as reasonably practicable, communicate the higher or additional charges to the patient or patient's NOK without (directly or indirectly) attempting to influence, persuade or coerce the patient/NOK to agree to the higher or additional charges.
- Should the patient/NOK not agree to the higher or additional charges, the licensee must not refuse to convey or continue conveying the patient without first making appropriate alternative arrangements for the safe and timely conveyance of the patient.
- Patients shall be informed of the cost of each item or service charged for the conveyance through itemised billing. The itemised bill must include each of the following components:
 - a) Base fees
 - b) Medication
 - c) The use of any equipment, such as equipment for continuous monitoring of the patient's condition while being conveyed;
 - d) Consumables
 - e) Additional charges, if any
 - f) The total amount of the fees payable by the patient

2. Amendments to the EAS/MTS Service Requirements [For Consult]

Amendments to the EAS/MTS Service Requirements

- From 9 Dec to 27 Jan 2023, MOH sought feedback on the proposed amendments to the EAS and MTS requirements via an online public consultation. Following which, MOH received feedback on the proposed amendments.
- Taking the stakeholders' feedback into consideration, this section of the presentation will **focus on the following amendments which are relevant to EAS/MTS providers:**
 1. Amendment to the definition of ambulance doctor
 2. Introduction of new Specified Services (SSes) for EAS

UPDATED

Amendment 1: Amendment to the Definition of Ambulance Doctor

- Currently, an ambulance doctor means a fully registered medical practitioner who: (a) holds a valid practising certificate under the Medical Registration Act 1997; and (b) has a valid Advanced Cardiac Life Support certification.
 - The crew leader for an EAS can be an ambulance doctor, registered nurse or paramedic.
- **[NEW]** MOH will be removing the term “fully” from the published definition of ambulance doctor and will be allowing conditionally-registered doctors (C-reg doctors) to be a crew leader for EAS, subject to the following requirements i.e., where the EAS licensee employs/engages a C-reg doctor as an EAS crew leader, the licensee shall ensure that:
 - The C-reg doctor is properly supervised by an fully registered doctor employed/engaged by the licensee;
 - The Singapore Medical Council (SMC)’s approval is sought prior to the C-reg doctor acting as a crew leader for the EAS licensee (see **Annex B** for SMC’s training and supervisory requirements); and
 - The C-reg doctor functioning as a crew leader for an EAS licensee cannot take on the role of a crew leader with another EAS licensee unless approval from SMC is sought.

NEW SLIDE

Amendment 1: Amendment to the Definition of Ambulance Doctor

- For acute hospitals with their own EAS or standalone private EAS providers deploying C-reg doctors as crew leaders on their own EA: the acute hospital or EAS provider must ensure that its employed/engaged C-reg doctors meet the training requirements and that it institutes the supervisory requirements stipulated by SMC.
- For acute hospitals contracting private EAS providers and deploying their C-reg doctors as crew leaders on the private EAS provider's EA: As part of the contractual agreement between the private EAS provider and the acute hospital, the private EAS provider must ensure that the C-reg doctor fulfils the training and supervisory requirements in the acute hospital.

NEW SLIDE

Amendment 2: Introduction of new Specified Services (SSes) for EAS

- **[NEW]** MOH will be introducing the following new SSes for EAS:

	EAS	MTS
Applicable SSes	<ol style="list-style-type: none">1. Adult Cardiac Critical Care Service2. Adult General Critical Care Service3. Paediatric Critical Care Service4. Isolation Service	Nil SS

- EAS licensees **must seek MOH's approval to provide any of the above SSes. It is an offence under HCSA for EAS licensees to provide any of the SSes without prior approval.**
- The definitions, scope and detailed requirements for the SSes for EAS will be presented in the next few slides.

Definitions and Scope of SSeS for EAS

NEW SLIDE

S/N	Name of SS	Equipment/ Medications Required to be used by Patients on Board the EA*	Patient Profile
1	Adult Cardiac Critical Care Service	Extracorporeal Membrane Oxygenation (ECMO) or intra-aortic balloon pumps (iABP)^	18 years of age and above
2	Adult General Critical Care Service	Mechanical ventilator, chest tube^, or continuous intravenous infusion of inotropes, sedatives and/or paralytics	18 years of age and above
3	Paediatric# Critical Care Service	All of the above	Less than 18 years of age
4	Isolation Service	Portable medical isolation unit (PMIU)^	Any age

* Other equipment or medication (as the case may be) may be added to the above SSeS if similar enhanced regulatory requirements are required.

^As specified under the current Regulations, the licensee must ensure that all equipment used for provision of any licensable healthcare service (including the SS) are registered as a medical device under the Health Products Act where registration is required.

#A paediatric patient is defined as a person less than 18 years old (to align with the age limit of a "young person" under the Child and Young Persons Act).

Definitions and Scope of SSES for EAS

NEW SLIDE

- **Adult Cardiac Critical Care Service, Adult General Critical Care Service and Paediatric Critical Care Service** are intended to **apply only to emergency patients on critical care equipment/ medications and require conveyance to an acute hospital for medical attention** e.g., inter-acute hospital/intensive care unit (ICU) transfers, conveyance from home to acute hospitals i.e., the Acute Hospital Service (AHS) and not the Outpatient Medical Service (OMS) of Acute Hospitals
 - The above SSES requirements **will not be applied to EAS/MTS licensees conveying non-emergency patients on critical care equipment/ medications*** in scenarios such as (1) from an acute hospital to patient's home (e.g., mechanically ventilated patient for terminal discharge) or (2) from patient's home to an outpatient medical appointment (e.g., patients on home ventilation and respiratory support requiring conveyance for follow-up visits to SOCs.
- **Isolation Service** is intended to apply to any patient who is clinically assessed[^] to require an equipment for isolation during the conveyance in an emergency ambulance.
- **Only EAS licensees who apply for the four (4) SSES and are approved to do so are allowed to provide these SSES. The SSES will not be applicable to MTS licensees** as the provision of these SSES require the use of an Emergency Ambulance vehicle and the oversight and governance of an EAS licensee.

* While the SS requirements will not be applied to EAS/MTS licensees conveying non-emergency patients on critical care equipment/ medications, EAS/MTS licensees are still required to ensure that the service crew possess the necessary capabilities to manage non-emergency patients on critical care equipment/ medications on board the EA/MT requiring conveyance to destinations other than an acute hospital.

[^] The assessment as to whether the patient requires to use the PMIU should be based on the established clinical protocols endorsed by the Clinical Governance Officer appointed by the EAS licensee, or the clinical advice from the CGO, or both.

Adult Cardiac Critical Care Service – Service Crew Requirements

- **[NEW]** The requirements for the service crew involved in the conveyance of an emergency patient requiring **Adult Cardiac Critical Care Service** shall **minimally be a 3-man crew comprising the following members:**
 1. A registered medical practitioner with valid Advanced Cardiac Life Support (ACLS) certification and with either of the following competencies/ qualifications:
 - a) (i) In the case of a patient on ECMO: is registered under section 22 of the Medical Registration Act 1997 as a specialist in the branch of cardiothoracic surgery; (ii) in the case of a patient on iABP: is registered under section 22 of the Medical Registration Act 1997 as a specialist in the branch of cardiology or cardiothoracic surgery; or
 - b) is privileged by a medical board or clinical board of a HCSA-licensed Acute Hospital to manage patients on ECMO or iABP conveyed from or to the Acute Hospital (as the case may be)*;
 2. An ambulance doctor, ambulance nurse, relevant ambulance nurse, ambulance paramedic or emergency medical technician; and
 3. A driver (see [slide 9](#) for the existing qualifications for each service crew).

NEW SLIDE

*For acute hospitals with organic fleet of EAs and are also EAS licensees: The acute hospitals have to ensure that the doctor acting as a crew leader is privileged by the Clinical/Medical Board of the acute hospital to manage any patient on ECMO or iABP (as the case may be).

For acute hospitals contracting private EAS providers and deploying their privileged doctors as crew leaders on the private EAS provider's EA to convey acute hospital patients: As part of the contractual agreement between the private EAS provider and the acute hospital, the private EAS provider ensures that the doctor is privileged accordingly by the Clinical/Medical Board of the acute hospital.

For standalone private EAS providers deploying doctors privileged by the Clinical/Medical Board of an acute hospital to convey the private EAS providers' own patients: **Not allowed** since conveyance is beyond the oversight of the acute hospital service licensee's Medical/Clinical Board.

Adult Cardiac Critical Care Service - Written Care Protocols and Conveyance Requirements

- **[NEW]** The EAS licensee providing Adult Cardiac Critical Care Service shall ensure that there are **written care protocols relating to:**
 - a) the **safe and proper provision** of the SS; and
 - b) the **safe and proper handling and operation of ECMO/ iABP used** in the provision of the SS.
- **[NEW]** The EAS licensee providing Adult Cardiac Critical Care Service shall ensure that the **crew leader and one additional service crew are positioned next to the patient at all times while the patient is being conveyed**, so that these persons can readily monitor the condition of the patient.
- **[NEW]** Where an EAS licensee conveys a patient requiring Adult Cardiac Critical Care Service from one HCSA-licensed acute hospital (i.e., transferring hospital) to another HCSA-licensed acute hospital (i.e., receiving hospital), the **EAS licensee shall ensure that the receiving hospital agrees to the transfer before the EAS licensee conveys the patient to the receiving hospital***.

NEW SLIDE

*The EAS licensee should sight documentary evidence on the agreement between the transferring and receiving acute hospitals and keep a record that such evidence had been sighted. If the EAS licensee knows that the patient has voluntarily discharged himself/herself from the HCSA-licensed acute hospital, the EAS licensee, must, before conveying the patient to another HCSA-licensed acute hospital, inform that HCSA-licensed acute hospital of the patient's arrival.

Adult General Critical Care Service - Service Crew Requirements

- **[NEW]** The requirements for the service crew involved in the conveyance of an emergency patient requiring **Adult General Critical Care Service** shall **minimally be a 3-man crew comprising the following members:**
 1. A registered medical practitioner with valid Advanced Cardiac Life Support (ACLS) certification and with any of the following competencies/ qualifications:
 - a) is registered under section 22 of the Medical Registration Act 1997 as a specialist in the branch of anaesthesiology, emergency medicine, or intensive care medicine; or
 - b) holds one of more valid certifications in the provision of Fundamental Critical Care Support or an equivalent (e.g., Basic Assessment and Support in Intensive Care (BASIC) certification[^]); or
 - c) has been trained by a medical practitioner registered under section 22 of the Medical Registration Act 1997 as a specialist in any branch of medicine specified in (a)*; or
 - d) is privileged by a medical board or clinical board of a HCSA-licensed Acute Hospital to manage patients on mechanical ventilator, chest tube, or intravenous infusion of inotropes, sedatives and/or paralytics conveyed from or to the Acute Hospital.
 2. An ambulance doctor, ambulance nurse, relevant ambulance nurse, ambulance paramedic or emergency medical technician; and
 3. A driver (see [slide 9](#) for the existing qualifications for each service crew).
- **[NEW]** For emergency ambulance conveyances **providing both (1) Adult Cardiac Critical Care Service and (2) Adult General Critical Care Service, the service crew requirements for both SSeS apply.**

* The frequency of training and competency assessment will be left to the professional judgement of the CGO.

[^] BASIC certification is considered valid if the certification is obtained within 4 years from the course completion date.

Adult General Critical Care Service - Written Care Protocols and Conveyance Requirements

- **[NEW]** The EAS licensee providing Adult General Critical Care Service shall ensure that there are **written care protocols relating to:**
 - a) the **safe and proper provision** of the SS; and
 - b) the **safe and proper handling and operation of mechanical ventilator, chest tube, or continuous intravenous infusion of inotropes, sedatives and/or paralytics** in the provision of the SS.
- **[NEW]** The EAS licensee providing Adult General Critical Care Service shall ensure that the **crew leader and one additional service crew are positioned next to the patient at all times while the patient is being conveyed**, so that these persons can readily monitor the condition of the patient.
- **[NEW]** Where an EAS licensee conveys a patient requiring Adult General Critical Care Service from one HCSA-licensed acute hospital (i.e., transferring hospital) to another HCSA-licensed acute hospital (i.e., receiving hospital), the **EAS licensee shall ensure that the receiving hospital agrees to the transfer before the EAS licensee conveys the patient to the receiving hospital***.

NEW SLIDE

*The EAS licensee should sight documentary evidence on the agreement between the transferring and receiving acute hospitals and keep a record that such evidence had been sighted. If the EAS licensee knows that the patient has voluntarily discharged himself/herself from the HCSA-licensed acute hospital, the EAS licensee, must, before conveying the patient to another HCSA-licensed acute hospital, inform that HCSA-licensed acute hospital of the patient's arrival.

Paediatric Critical Care Service - Service Crew Requirements

- **[NEW]** The requirements for the service crew involved in the conveyance of an emergency patient requiring **Paediatric Critical Care Service** shall **minimally be a 3-man crew comprising the following members:**
 1. A registered medical practitioner with valid Advanced Paediatric Life Support (APLS) certification or an equivalent and with any of the following competencies/ qualifications:
 - a) is registered under section 22 of the Medical Registration Act 1997 as a specialist in the branch of anaesthesiology, emergency medicine, neonatology or paediatric intensive care; or
 - b) holds one of more valid certifications in the provision of Paediatric Fundamental Critical Care Support (PFCCS) or an equivalent; or
 - c) has been trained by a medical practitioner registered under section 22 of the Medical Registration Act 1997 as a specialist in any branch of medicine specified in (a)*; or
 - d) is privileged by a medical board or clinical board of a HCSA-licensed Acute Hospital to manage patients on mechanical ventilator, chest tube, intravenous infusion of inotropes, sedatives and/or paralytics, ECMO or iABP conveyed from or to the Acute Hospital.
 2. An ambulance doctor, ambulance nurse, relevant ambulance nurse, ambulance paramedic or emergency medical technician; and
 3. A driver (see [slide 9](#) for the existing qualifications for each service crew).

* The frequency of training and competency assessment will be left to the professional judgement of the CGO.

Paediatric Critical Care Service - Written Care Protocols and Conveyance Requirements

- **[NEW]** The EAS licensee providing Paediatric Critical Care Service shall ensure that there are **written care protocols relating to:**
 - a) the **safe and proper provision** of the SS; and
 - b) the **safe and proper handling and operation of ECMO, iABP, mechanical ventilator, chest tube, or continuous intravenous infusion of inotropes, sedatives and/or paralytics** in the provision of the SS.
- **[NEW]** The EAS licensee providing Paediatric Critical Care Service shall ensure that the **crew leader and one additional service crew are positioned next to the patient at all times while the patient is being conveyed**, so that these persons can readily monitor the condition of the patient.
- **[NEW]** Where an EAS licensee conveys a patient requiring Paediatric Critical Care Service from one HCSA-licensed acute hospital (i.e., transferring hospital) to another HCSA-licensed acute hospital (i.e., receiving hospital), the **EAS licensee shall ensure that the receiving hospital agrees to the transfer before the EAS licensee conveys the patient to the receiving hospital***.

NEW SLIDE

*The EAS licensee should sight documentary evidence on the agreement between the transferring and receiving acute hospitals and keep a record that such evidence had been sighted. If the EAS licensee knows that the patient has voluntarily discharged himself/herself from the HCSA-licensed acute hospital, the EAS licensee, must, before conveying the patient to another HCSA-licensed acute hospital, inform that HCSA-licensed acute hospital of the patient's arrival.

Isolation Service - Service Crew Requirements

- **[NEW]** The service crew involved in the conveyance of a patient requiring isolation service shall **minimally be a 3-man crew comprising the following members:**
 1. A crew leader who is an ambulance doctor, a relevant ambulance nurse or an ambulance paramedic;
 2. A service crew who is an ambulance doctor, ambulance nurse, ambulance paramedic, emergency medical technician or any other individual with knowledge or expertise relating to the provision of the applicable service as approved by MOH; and
 3. A driver.
- **[NEW]** Given that equipment such as PMIU used for isolation service is likely to be infrequently used during conveyances, the EAS licensee shall ensure that **service crew providing isolation service undergo training* on the use of PMIU at least once a year.**
- **[New]** For emergency ambulance conveyances providing isolation service and any of the critical care service, the **service crew requirements for critical care service applies** (given that the service crew requirements for critical care service is more stringent than those for isolation service).

*Training can either be: (a) conducted by the manufacturer/ vendor; or (b) in-house training by a service crew who had undergone vendor training previously (i.e., train-the-trainer). Training records should be documented.

Isolation Service - Written Care Protocols and Conveyance Requirements

- **[NEW]** The EAS licensee providing Isolation Service shall ensure that there are **written care protocols relating** to:
 - a) the **safe and proper provision** of the SS; and
 - b) the **safe and proper handling and operation of PMIU** in the provision of the SS.
- **[NEW]** The EAS licensee providing Isolation Service shall ensure that the **crew leader and one additional service crew are positioned next to the patient at all times while the patient is being conveyed**, so that these persons can readily monitor the condition of the patient.
- **[NEW]** Where an EAS licensee conveys a patient requiring Isolation Service from one HCSA-licensed acute hospital (i.e., transferring hospital) to another HCSA-licensed acute hospital (i.e., receiving hospital), the **EAS licensee shall ensure that the receiving hospital agrees to the transfer before the EAS licensee conveys the patient to the receiving hospital***.

NEW SLIDE

*The EAS licensee should sight documentary evidence on the agreement between the transferring and receiving acute hospitals and keep a record that such evidence had been sighted. If the EAS licensee knows that the patient has voluntarily discharged himself/herself from the HCSA-licensed acute hospital, the EAS licensee, must, before conveying the patient to another HCSA-licensed acute hospital, inform that HCSA-licensed acute hospital of the patient's arrival.

Application and Licensing Matters for the Provision of SSES by EAS Providers

- The **SSES for EAS will be implemented in Apr 2024***. EAS licensees providing or intending to provide any of the SSES will need to take note of the following timelines:
 - **From 1 Feb 2024**: EAS licensees will need to apply to provide the SSES in the electronic licensing system i.e., Healthcare Applications and Licensing Portal (HALP). Licensees are strongly encouraged to apply for the SSES by end Feb 2024 so that the Apr 2024 implementation timeline can be met.
 - **Between 1 Feb 2024 to end-Mar 2024**: Once the application is made, MOH will contact EAS licensees for further documents and conduct a review of the EAS SS requirements. EAS licensees who have applied for the SSES and have met the requirements will be approved to provide the SSES from Apr 2024.
 - **From Apr 2024**: The SSES applicable to EAS licensees will be implemented. EAS licensees who do not meet the requirements and are not approved to provide the specified services will not be able to provide the specified services until approval from MOH is sought.

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* MOH will announce the exact date of EAS SS implementation at a later date.

Application and Licensing Matters for the Provision of SSES by EAS Providers

- **The following fees will apply** for the provision of EAS Sses:

EAS SSES	Fee*
Provision of any one of the four EAS SSES	\$900
Provision of any two of the four EAS SSES	\$1,700
Provision of three or more of the EAS SSES	\$2,500

- To mitigate the impact of fee increase on affected licensees, MOH will gradually increase the new SS fees over three renewal cycles[^].

* For charitable service providers, the fee applicable is \$12 for each application for request for change or licence renewal.

[^] Gradual Fee Increase will only apply to non-hospital-based EAS providers.

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MOH will provide more information along the way



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HCSA_Enquiries@moh.gov.sg

The End

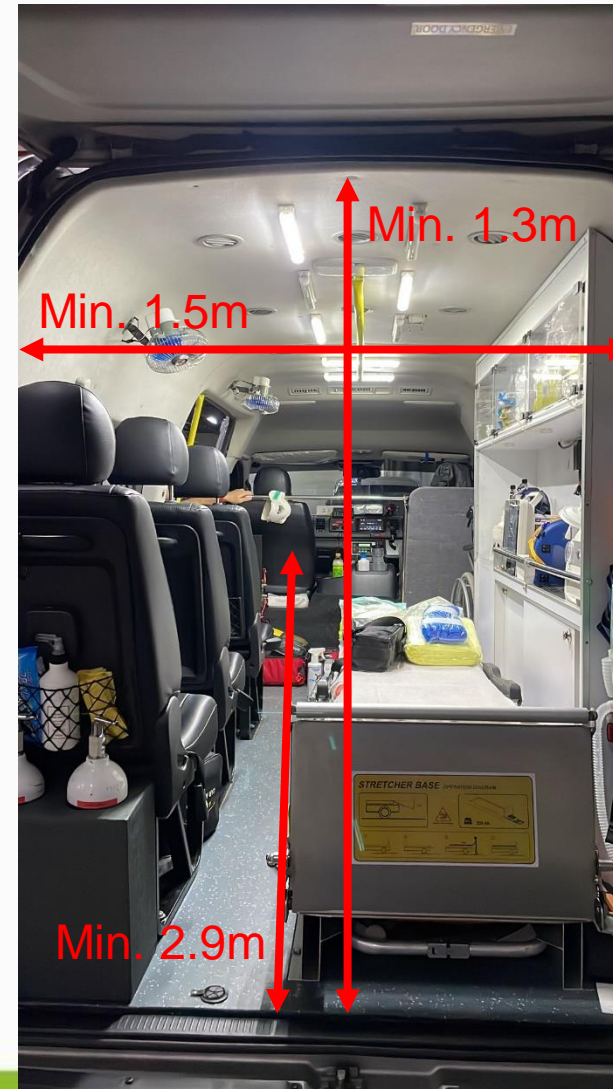
Thank you



MINISTRY OF HEALTH
SINGAPORE

Annex A: Visual Guidance of the Patient Compartment Area

- The patient compartment of the EA or MT means the space in the vehicle bound by:
 - a) any fixed partition installed behind the driver's seat and any forward-facing front seat alongside the driver's seat and separating those seats from the rest of the vehicle;
 - b) the permanent roof and floor of the vehicle; and
 - c) the tailgate or doors opening at the rear of the vehicle



Annex B: SMC's Training and Supervisory Requirements for C-reg Doctors as EAS Crew Leader (1/2)

- The Singapore Medical Council (SMC) allows conditionally registered (C-reg) doctors to be a Crew Leader for an EAS. The institution **must submit an application to seek SMC's approval for the C-reg doctor to be a Crew Leader** for the EAS. SMC retains the final discretion whether to approve the application.
- The **EAS provider/licensee shall ensure that the following conditions are met:**
 - a) C-reg doctors on Level 2 (L2) supervision should have practised for at least 6 months (full-time) in Anaesthesiology, Emergency Medicine, General Surgery, Intensive Care Medicine or General Medicine as medical officers and their performance must be considered satisfactory by SMC in these postings.
 - b) For hospitals with their own EAS/MTS, the institution must submit an application to seek SMC's approval to add "additional practice place" for the C-reg doctors who are on L2 supervision to be a Crew Leader with supervision from their fully registered (F-reg) supervisors*. The SMC retains the final discretion whether to approve the application.
 - An "additional practice place" refers to the provision of EAS for an EAS provider/licensee by a C-reg doctor in addition to the C-reg doctor's existing practice setting.
 - An acute hospital intending to deploy C-reg doctors working in the emergency department setting as EAS crew leader would need to apply to add "additional practice place" for these C-reg doctors before such doctors are allowed to function as an EAS crew leader for the acute hospital's EAS. If the C-reg doctors were to be deployed as EAS crew leaders for (1) other acute hospitals with an organic fleet of EAs; or (2) other private EAS providers/licensees, an additional application has to be made to the SMC.
- The remote supervision for L2 C-reg doctors to be a Crew Leader for EAS is allowed.

* To add an additional practice place for the C-reg doctor, the institution HR can submit an online application in SMC's website. If there are any queries on how to submit application for additional practice place for C-reg doctors, please contact SMC at SMC@spb.gov.sg.

Annex B: SMC's Training and Supervisory Requirements for C-reg Doctors as EAS Crew Leader (2/2)

- **The EAS provider/licensee shall ensure that the following additional requirements are met:**
 - a) The F-reg supervisor should take the responsibility to ensure that the C-reg doctor is properly supervised.
 - b) The C-reg doctor would also bear responsibility for failure of care should an adverse event occur.
 - c) All case notes by the C-reg doctor must be checked and countersigned by the next working day by the F-reg supervisor.
 - d) The licensee must ensure that the primary or secondary F-reg supervisor(s) are contactable at all times by the C-reg doctor.
 - e) The Head of Department (or an equivalent e.g., the CGO in the case of a private EAS provider) must maintain oversight of the supervisor and supervisees.
 - f) Other SMC eligibility criteria for a supervisor under SMC's Supervisory Framework would apply.