# APPENDIX 1 MEDICATION FORMULARY

CLINICAL LEVEL: CFR EFR EMT P AP

Medication	Aspirin
Class	Platelet aggregation inhibitor.
Descriptions	Anti-inflammatory agent and an inhibitor of platelet function. Useful agent in the treatment of various thromboembolic diseases such as acute myocardial infarction.
Presentation	300 mg dispersible tablet.
Administration	Orally (PO) – dispersed in water, or to be chewed – if not dispersible form. (CPG: 5/6.4.10, 4.4.10, 1/2/3.4.10).
Indications	Cardiac chest pain or suspected Myocardial Infarction.
Contraindications	Active symptomatic gastrointestinal (GI) ulcer. Bleeding disorder (e.g. haemophilia). Known severe adverse reaction. Patients < 16 years old.
Usual Dosages	Adult:300 mg tablet.Paediatric:Contraindicated.
Pharmacology/Action	Antithrombotic Inhibits the formation of thromboxane A2, which stimulates platelet aggregation and artery constriction. This reduces clot/thrombus formation in an MI.
Side effects	Epigastric pain and discomfort. Bronchospasm. Gastrointestinal haemorrhage.
Long-term effects	Generally mild and infrequent but incidence of gastro-intestinal irritation with slight asymptomatic blood loss, increased bleeding time, bronchospasm and skin reaction in hypersensitive patients.
Additional information	Aspirin 300 mg is indicated for cardiac chest pain regardless if patient is on anticoagulants or is already on aspirin. If the patient has swallowed an aspirin (enteric coated) preparation without chewing it, the patient should be regarded as not having taken any aspirin; administer 300 mg PO.

# APPENDIX 1 MEDICATION FORMULARY

CLINICAL LEVEL: EFR EMT P AP

Medication	Epinephrine (1:1,000)
Class	Sympathetic agonist
Description	Naturally occurring catecholamine. It is a potent alpha and beta adrenergic stimulant; however, its effect on beta receptors is more profound.
Presentation	Pre-filled syringe, ampoule or Auto injector (for EMT use) 1 mg/1 mL (1:1,000)
Administration	Intramuscular (IM) (CPG: 5/6.4.15, 4.4.15, 2/3.4.16, 5/6.7.31, 4.7.31, 2/3.7.31)
Indications	Severe anaphylaxis
Contraindications	None known
Usual Dosages	Adult: $0.5 \text{ mg} (500 \text{ mcg}) \text{ IM} (0.5 \text{ mL of } 1: 1,000)$ EMT & (EFR assist patient) $0.3 \text{ mg}$ (Auto injector) Repeat every 5 minutes proPaediatric: $< 6 \text{ months:}$ $0.05 \text{ mg} (50 \text{ mcg}) \text{ IM} (0.05 \text{ mL of } 1:1 000)$ $6 \text{ months to 5 years:}$ $0.125 \text{ mg} (125 \text{ mcg}) \text{ IM} (0.13 \text{ mL of } 1:1 000)$ $6 \text{ to 8 years:}$ $0.25 \text{ mg} (250 \text{ mcg}) \text{ IM} (0.25 \text{ mL of } 1:1 000)$ $> 8 years:$ $0.5 \text{ mg} (500 \text{ mcg}) \text{ IM} (0.5 \text{ mL of } 1:1 000)$ $> 8 years:0.5 \text{ mg} (500 \text{ mcg}) \text{ IM} (0.5 \text{ mL of } 1:1 000)= 10 \text{ years:}0.15 \text{ mg} (Auto injector)\ge 10 \text{ years:}0.15 \text{ mg} (Auto injector)Repeat every 5 \text{ minutes prn}$
Pharmacology/Action	Alpha and beta adrenergic stimulant Reversal of laryngeal oedema & bronchospasm in anaphylaxis Antagonises the effects of histamine
Side effects	Palpitations Tachyarrhythmias Hypertension Angina-like symptoms
Additional information	N.B. Double check the concentration on pack before use

# APPENDIX 1 MEDICATION FORMULARY

CLINICAL LEVEL: EFR EMT P AP

Medication	Glucose gel
Class	Antihypoglycaemic.
Description	Synthetic glucose paste.
Presentation	Glucose gel in a tube or sachet.
Administration	Buccal administration: Administer gel to the inside of the patient's cheek and gently massage the outside of the cheek. (CPG: 5/6.4.19, 4.4.19, 2/3.4.19, 5/6.7.32, 4.7.32)
Indications	Hypoglycaemia. Blood glucose < 4 mmol/L. EFR – Known diabetic with confusion or altered levels of consciousness.
Contraindications	Known severe adverse reaction.
Usual Dosages	Adult:10 – 20 g buccal. Repeat prn.Paediatric:≤ 8 years; 5 – 10 g buccal. > 8 years: 10 – 20 g buccal. Repeat prn.
Pharmacology/Action	Increases blood glucose levels.
Side effects	May cause vomiting in patients under the age of five if administered too quickly.
Additional information	Glucose gel will maintain glucose levels once raised but should be used secondary to Dextrose to reverse hypoglycaemia. <b>Proceed with caution:</b> Patients with airway compromise. Altered level of consciousness.

# **APPENDIX 1 MEDICATION FORMULARY**

CLINICAL LEVEL: EFR EMT P AP

Medication	Glyceryl Trinitrate (GTN)
Class	Nitrate.
Description	Special preparation of Glyceryl trinitrate in an aerosol form that delivers precisely 0.4 mg of Glyceryl trinitrate per spray.
Presentation	Aerosol spray: metered dose 0.4 mg (400 mcg).
Administration	Sublingual (SL): Hold the pump spray vertically with the valve head uppermost. Place as close to the mouth as possible and spray under the tongue. The mouth should be closed after each dose. (CPG: 5/6.3.5, 4.4.10, 5/6.4.10).
Indications	Angina. Suspected Myocardial Infarction (MI). EFRs may assist with administration. Advanced Paramedic and Paramedic - Pulmonary oedema.
Contraindications	SBP < 90 mmHg. Viagra or other phosphodiesterase type 5 inhibitors (Sildenafil, Tadalafil and Vardenafil) used within previous 24 hours. Known severe adverse reaction.
Usual Dosages	Adult:Angina or MI: 0.4 mg (400 mcg) Sublingual. Repeat at 3-5 min intervals, Max: 1.2 mg. EFRs 0.4 mg sublingual max. Pulmonary oedema; 0.8 mg (800 mcg) sublingual. Repeat x 1.Paediatric:Not indicated.
Pharmacology/Action	Vasodilator Releases nitric oxide which acts as a vasodilator. Dilates coronary arteries particularly if in spasm increasing blood flow to myocardium. Dilates systemic veins reducing venous return to the heart (pre load) and thus reduces the heart's workload. Reduces BP.
Side effects	Headache. Transient Hypotension. Flushing. Dizziness.
Additional information	If the pump is new or has not been used for a week or more, the first spray should be released into the air.

# **APPENDIX 1 MEDICATION FORMULARY**



Medication	Oxygen
Class	Gas.
Description	Odourless, tasteless, colourless gas necessary for life.
Presentation	D, E or F cylinders, coloured black with white shoulders. CD cylinder; white cylinder. Medical gas.
Administration	Inhalation via: High concentration reservoir (non-rebreather) mask. Simple face mask. Venturi mask. Tracheostomy mask. Nasal cannulae. Bag Valve Mask. (CPG: Oxygen is used extensively throughout the CPGs)
Indications	Absent/inadequate ventilation following an acute medical or traumatic event. SpO <sub>2</sub> < 94% adults and < 96% paediatrics. SpO <sub>2</sub> < 92% for patients with acute exacerbation of COPD.
Contraindications	Bleomycin lung injury.
Usual Dosages	Adult:Cardiac and respiratory arrest and Sickle Cell Crisis; 100%. Life threats identified during primary survey; 100% until a reliable SpO2 measurement obtained then titrate O2 to achieve SpO2 of 94% - 98%. For patients with acute exacerbation of COPD, administer O2 titrate to achieve SpO2 92% or as specified on COPD Oxygen Alert Card. All other acute medical and trauma titrate O2 to achieve SpO2 94% -98%.Paediatric:Cardiac and respiratory arrest; 100%.
	Life threats identified during primary survey; 100% until a reliable SpO <sub>2</sub> measurement obtained then titrate O <sub>2</sub> to achieve SpO <sub>2</sub> of 96% – 98%. All other acute medical and trauma titrate O <sub>2</sub> to achieve SpO <sub>2</sub> of 96% – 98%.
Pharmacology/Action	Oxygenation of tissue/organs.
Side effects	Prolonged use of $O_2$ with chronic COPD patients may lead to reduction in ventilation stimulus.
Additional information	A written record must be made of what oxygen therapy is given to every patient. Documentation recording oximetry measurements should state whether the patient is breathing air or a specified dose of supplemental oxygen. Consider humidifier if oxygen therapy for paediatric patients is > 30 minute duration. Caution with paraquat poisoning, administer oxygen if $SpO_2 < 92\%$ Avoid naked flames, powerful oxidising agent.

# APPENDIX 1 MEDICATION FORMULARY

CLINICAL LEVEL: EFR EMT P AP

Medication	Salbutamol
Class	Sympathetic agonist.
Description	Sympathomimetic that is selective for beta-2 adrenergic receptors.
Presentation	Nebule 2.5 mg in 2.5 mL. Nebule 5 mg in 2.5 mL. Aerosol inhaler: metered dose 0.1 mg (100 mcg).
Administration	Nebuliser (NEB). Inhalation via aerosol inhaler. (CPG: 4/5/6.3.3, 4/5/6.3.4, 3.3.4, 5/6.4.15, 4.4.15, 2/3.4.16, 4/5/6.6.10, 4/5/6.7.12, 3.7.12, 5/6.7.31, 4.7.31, 2/3.7.31).
Indications	Bronchospasm. Exacerbation of COPD. Respiratory distress following submersion incident.
Contraindications	Known severe adverse reaction.
Usual Dosages	Adult:5 mg NEB (or 0.1 mg metered aerosol spray x 5) Repeat at 5 min prn. (EFRs: 0.1 mg metered aerosol spray x 2).Paediatric:< 5 yrs - 2.5 mg NEB (or 0.1 mg metered aerosol spray x 3). $\geq$ 5 yrs - 5 mg NEB (or 0.1 mg metered aerosol spray x 5). Repeat at 5 min prn. (EFRs: 0.1 mg metered aerosol spray x 2).
Pharmacology/Action	Beta-2 agonist. Bronchodilation. Relaxation of smooth muscle.
Side effects	Tachycardia. Tremors. Tachyarrhythmias. High doses may cause hypokalaemia.
Additional information	It is more efficient to use a volumizer in conjunction with an aerosol inhaler when administering Salbutamol. If an oxygen driven nebuliser is used to administer Salbutamol for a patient with acute exacerbation of COPD it should be limited to 6 minutes maximum.