Cardiac Scenario 1 – PACIFIC

History {initial candidate briefing prior to arrival of child}

You are called to the paediatric ward where a 12 year old girl is an inpatient. She has known rheumatic heart disease and has acute carditis and prolonged PR interval on ECG.
Her monitor has been going off due to tachycardia

Estimated Weight 30kg.

Initial impression {provide information as candidate assesses child and applies monitoring}

She is agitated and looks pale. HR 190 and irregular, BP 79/51, RR 40, SpO2 89% room air. Airway is patent, Chest is clear, Systolic murmur, CRT 2 sec

Clinical Course {to be given to candidate as they progress}

As she is being reassessed, she starts turning blue and becomes unresponsive, apnoeic and pulseless. The monitor shows VF
She remains in VF until after the 2nd shock.

INSTRUCTORS INFORMATION

Key Treatment Points

Airway & breathing	Establish airway patency
	BVM ventilation with 100% O_2
	Consider LMA/intubation
Circulation	VF protocol
	IV/IO access
General Therapy	Uninterrupted BLS

Diagnosis Rheumatic Heart Disease (RHD), Arrhythmia, Cardiopulmonary arrest, Ventricular fibrillation

Learning objectives

At the end of this session participants should be able to:

- Apply the structured approach to management and diagnosis during cardiac arrest
- Perform BLS/ALS effectively and safely
- Recall and apply the ALS VF/VT algorithm in their own practice
- Recall and apply the 4 Hs/Ts in their own practice

APLS: Cardiac Scenario 2

History {initial candidate briefing prior to arrival of child}

A 5 year old boy is brought to the Emergency department in the arms of his distressed parents. They say he was found unconscious in bed this morning having gone to sleep late the previous night with tummy ache.
Estimated weight 20 kg

Initial impression {provide information as candidate assesses child and applies monitoring}

No response, apnoeic, pulseless.

Clinical Course {to be given to candidate as they progress}

Initially in asystole: after ventilation with oxygen, chest compressions and one dose of adrenaline, the rhythm on the monitor remains asystole. After the 2nd cycle the rhythm is noted to be organised but there is still no pulse nor signs of life. Ventilation with oxygen and chest compressions continue and with a fluid bolus and a further dose of adrenaline the heart rate increases and a pulse can be felt.

Additional History and Observations

Bruising of different colours on abdomen. Distension of abdomen.

INSTRUCTORS INFORMATION

Key Treatment Points ☑

Airway & Breathing	Establish airway patency	
	BVM ventilation with 100% O_2	
	Consider LMA/intubation or arrange for intubation	
Circulation	Asystole then PEA protocol	
	Fluid bolus	
	IV/IO access	
General Therapy	Uninterrupted BLS	

Diagnosis: Asystole/PEA, non-accidental injury, bowel perforation and sepsis

Learning objectives

At the end of this session participants should be able to:

- Apply the structured approach to management and diagnosis during cardiac arrest
- Perform BLS/ALS effectively and safely
- Recall and apply the ALS PEA and asystole algorithm in their own practice
- Recall and apply the 4 Hs/Ts in their own practice