# United Medical Education Initiate CPR. Give oxygen. Place monitor/defibrilator. Shockable rhythms: Non-shockable rhythms: · pulseless VT and VF Asystole and PEA Perform CPR (2 minutes). Perform CPR (2 minutes). Secure IV/IO access. Secure IV/IO access. Give epinephrine. Consider an advanced airway (intubation with capnography). Perform CPR (2 minutes). Give epinephrine. Perform CPR (2 minutes). Consider an advanced airway Find and treat cause. (intubation with capnography). Go to "A" or "B" If return of spontaneous circulation Perform CPR (2 minutes). (ROSC) does not occur: Give amiodarone Go to "C" or "D" Find and treat cause. If ROSC does occur: initiate post cardiac arrest care.

# Advanced Cardiovascular Life Support Adult Cardiac Arrest Algorithm

CPR Technique
Depth: Hard & fast, 2in (5cm).
Rate: 100-120 per minute.
Ratio: 30:2 compressions to breaths (If no advanced airway).
Attempt to minimize interruptions.
Rotate compressions provider every 2 minutes or if fatigued.
Avoid excessive ventilation.
Capnography Evaluation:
If PETCO2 is <10mmHg improve the CPR quality.

#### Defibrilation

Monophasic: 360J
Biphasic: follow manufacturer
recommendations
(eg. first shock 120-200J).
If recommended joules is unknown,
use the maximum available.
Following shocks give equal joules
with higher joules considered.

Intra-Arterial Pressure Evaluation: If diastolic pressure is <20mmHg improve the CPR quality.

#### **Medication Therapy**

Epinephrine: 1mg IV/IO every 3-5 minutes. Amiodarone: 1st dose 300mg IV/IO bolus. 2nd dose 150mg IV/IO bolus.

### **Advanced Airway**

Provide ETT or subglotic airway.
Confirm placement and monitor
with capnography or capnometry.
With an advanced airway, provide
1 breath every 6 seconds without
stopping chest compressions.

## Return of Spontaneous Circulation

Palpable pulse and blood pressure.

Sustained improvement in PETCO2
(generally ≥ 40mmHg).

Intra-arterial monitoring showing
spontaeous arterial pressure waves.

Possible Causes
Acidosis
Cardiac tamponade
Coronary thrombosis
Hyperkalemia/Hypokalemia
Hypothermia
Hypovolemia
Hypoxia
Pulmonary thrombosis
Tension pneumothorax
Toxins