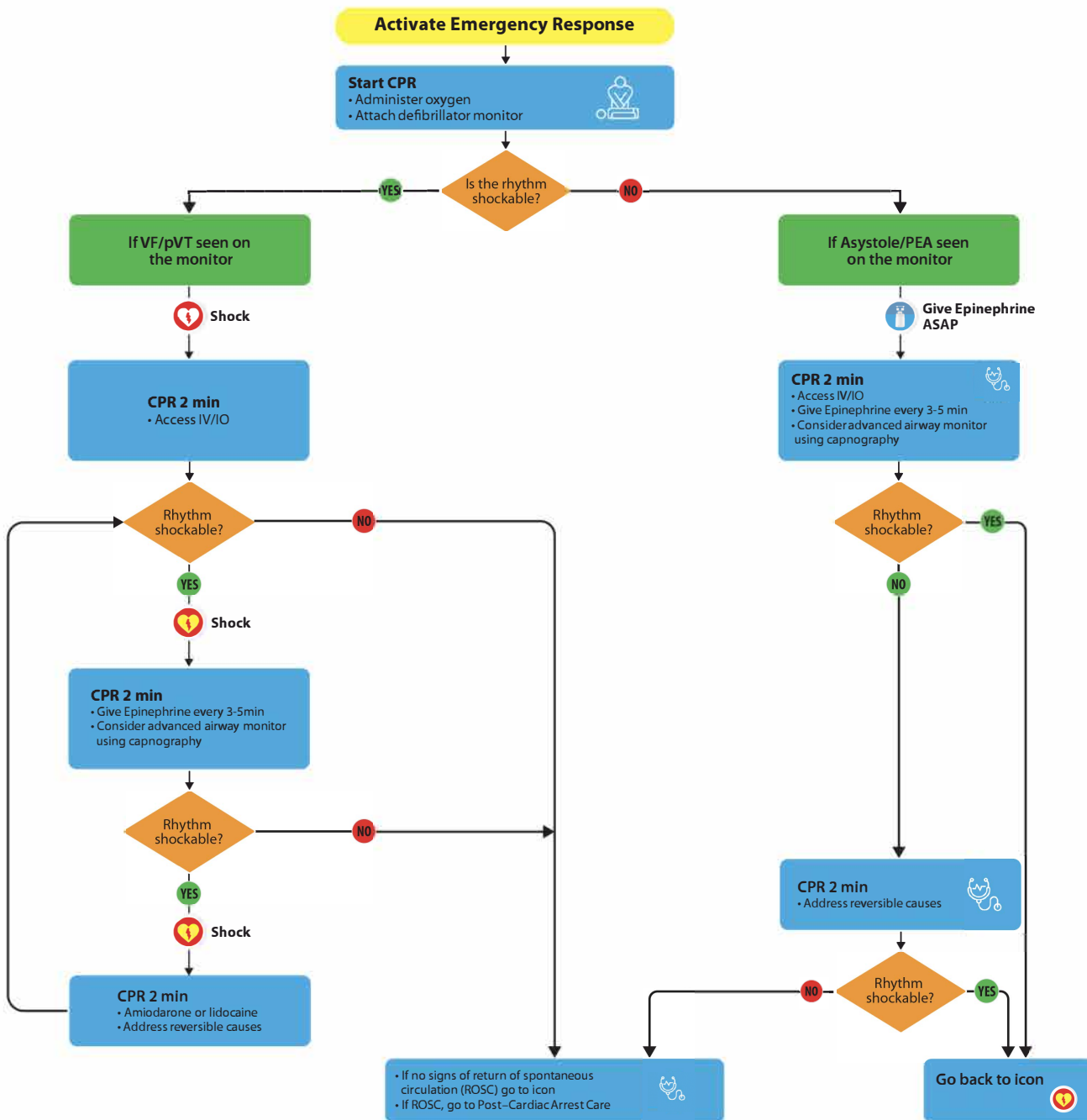


ADULT CARDIAC ARREST ALGORITHM



CPR Quality

- Push hard (at least 2 inches [5 cm]) and fast (100-120/min) and allow complete chest recoil.
- Minimize interruptions in compressions
- Avoid excessive ventilation
- Change compressor every 2 minutes, or sooner if fatigued
- If no advanced airway, 30:2 compression-ventilation ratio, or 1 breath every 6 seconds.
- Quantitative waveform capnography – If PETCO2 is low or decreasing, reassess CPR quality

Shock Energy for Defibrillation

- **Biphasic:** Follow manufacturer guidelines (e.g., initial dose ranging from 120-200 J); if specifics are unknown, administer the maximum available dose. Subsequent doses should match the initial dose, and higher doses may be warranted
- **Monophasic:** Administer 360 J

Drug Therapy

- **Epinephrine IV/IO dose:** 1 mg every 3-5 minutes
- **Amiodarone IV/IO dose:** 1st dose: 300 mg bolus. 2nd dose: 150 mg or
- **Lidocaine IV/IO dose:** 1st dose: 1-1.5 mg/kg. 2nd dose: 0.5-0.75 mg/kg

Advanced Airway

- Placement of an advanced airway device
- Waveform capnography or capnometry to confirm and monitor ET tube placement
- Once advanced airway in place, give 1 breath every 6 seconds (10 breaths/min) with continuous chest compressions

Return of Spontaneous Circulation (ROSC)

- Pulse and blood pressure
- Abrupt sustained increase in PETCO2 (typically ≥ 40 mm Hg)
- Spontaneous arterial pressure waves with intra-arterial monitoring

Reversible Causes

- Hypovolemia
- Hypoxia
- Hydrogen ion (acidosis)
- Hypokalemia
- Hyperkalemia
- Hypothermia
- Tension pneumothorax
- Tamponade, cardiac
- Toxins
- Thrombosis, pulmonary
- Thrombosis, coronary