4. Post-Cardiac Arrest Care Algorithm

This clinical pathway is intended to supplement, rather than substitute for, professional judgment and may be changed depending upon a patient's individual needs. Failure to comply with this pathway does not represent a breach of the standard of care.

Return of Spontaneous Circulation (ROSC)

- **Activate Resuscitation Team** (if not already present)
- Monitor, support ABCs. Be prepared to provide CPR and defibrillation
- Check vital signs (BP, PR, RR, SPO_2, T°C, **RBS**)

Optimize Ventilation and Oxygenation

- Avoid excessive ventilation.
  - Start at 10 – 12 breaths/min (**1 breath every 6 seconds**)
  - Titrate FiO_2 to minimum necessary to **maintain $SPO_2 \geq 94\%$**. **DO NOT** aim for 100%
  - Titrate to target $PETCO_2$ of 35 – 45 mmHg
- Consider an advanced airway and waveform capnography

Treat Hypotension (SBP < 90mmHg)

- **IV/IO Bolus** (if not contraindicated e.g. pulmonary oedema, renal failure)**:** 1-2 L Ringer's Lactate/Hartmann's Solution
- **Vasopressor infusion if NO response to fluid bolus or fluid bolus contraindicated:**
  - Adrenaline IV Infusion: 0.1 – 0.5µg/kg/min (7-35µg/min in 70-kg adult)
  - Norepinephrine IV Infusion: 0.1 – 0.5µg/kg/min (7-35µg/min in 70-kg adult)
- **Identify and Treat reversible causes**
  - **H**ypoglycaemia
  - **H**ypovolemia
  - **H**ypoxia
  - **H**ydrogen ion (acidosis)
  - **H**ypo-/hyperkalaemia
  - **H**ypothermia
  - **T**ension Pneumothorax
  - **T**amponade, cardiac
  - **T**oxins
  - **T**hrombosis, pulmonary
  - **T**hrombosis, coronary

- Get a 12-lead ECG **immediately**. If **STEMI** or **Suspected Cardiac Cause** of cardiac arrest **– Consult an Interventional Cardiologist**
- **If patient is stable, transfer to Critical Care Unit (ICU/CCU) attached to a defibrillator**
- For patients who are comatose after cardiac arrest (i.e., lacking meaningful response to verbal commands), temperature should be monitored continuously and fever should be treated aggressively with a target temperature between **32°C and 36°C maintained constantly for at least 24 hours.**