**Assess clinical state:**

Administer high flow O2 via NRBM

**Thrombolysis**

Alteplase 50mg vial to be reconstituted with 25mls water for injection to make final concentration 2mg/ml

**NB**: the reconstituted solution should not be diluted further, or mixed with other drugs, or given via the same cannula as other drugs (including heparin)

Alteplase is located in the A&E cupboard/ CCU Cupboard

Alteplase should only be given with CCOT present **OR** on CCU

**Consider diagnosis of PE based on history and clinical signs:**

* Collapse with cardiovascular compromise
* Shock, pale, cold and clammy
* Hypotension, tachycardia, delayed capillary refill
* Central chest pain
* Elevated JVP and gallop rhythm
* Unexplained hypoxia
* ECG changes suggestive of right ventricular strain

Imminent Cardiac Arrest

Condition Stable

Deteriorating

Systolic BP <90mmHg, Severe hypoxaemia, Right ventricular dysfunction, Mycardial injury, Syncope

Immediate thrombolysis where appropriate

Give LMWH according to patient weight

CTPA to confirm diagnosis

Reassess

CTPA or ECHO to confirm diagnosis

Informed consent for thrombolysis if possible. Consider urgency of thrombolysis, contraindications and risk/benefit

For the deteriorating patient give:

* Alteplase 10mg IV bolus (5mls) over 1-2 minutes

Followed by

* Alteplase 90mg (45mls) as an intravenous infusion over 2 hours using a syringe driver

NB: the total dose should not exceed 1.5mg/kg in patients with a body weight below 65kg

Check the patients APTT on completion of the Alteplase infusion, and then again at 4 hours.

Start heparin infusion at 1000 units/hour when APTT <2.0

For massive PE with imminent cardiac arrest give:

* Alteplase 50mg IV bolus

If still critical, either repeat 50mg bolus at 30 minutes

**OR**

Change to 50mg infusion over 60 minutes (depending on clinical urgency)

If deteriorating