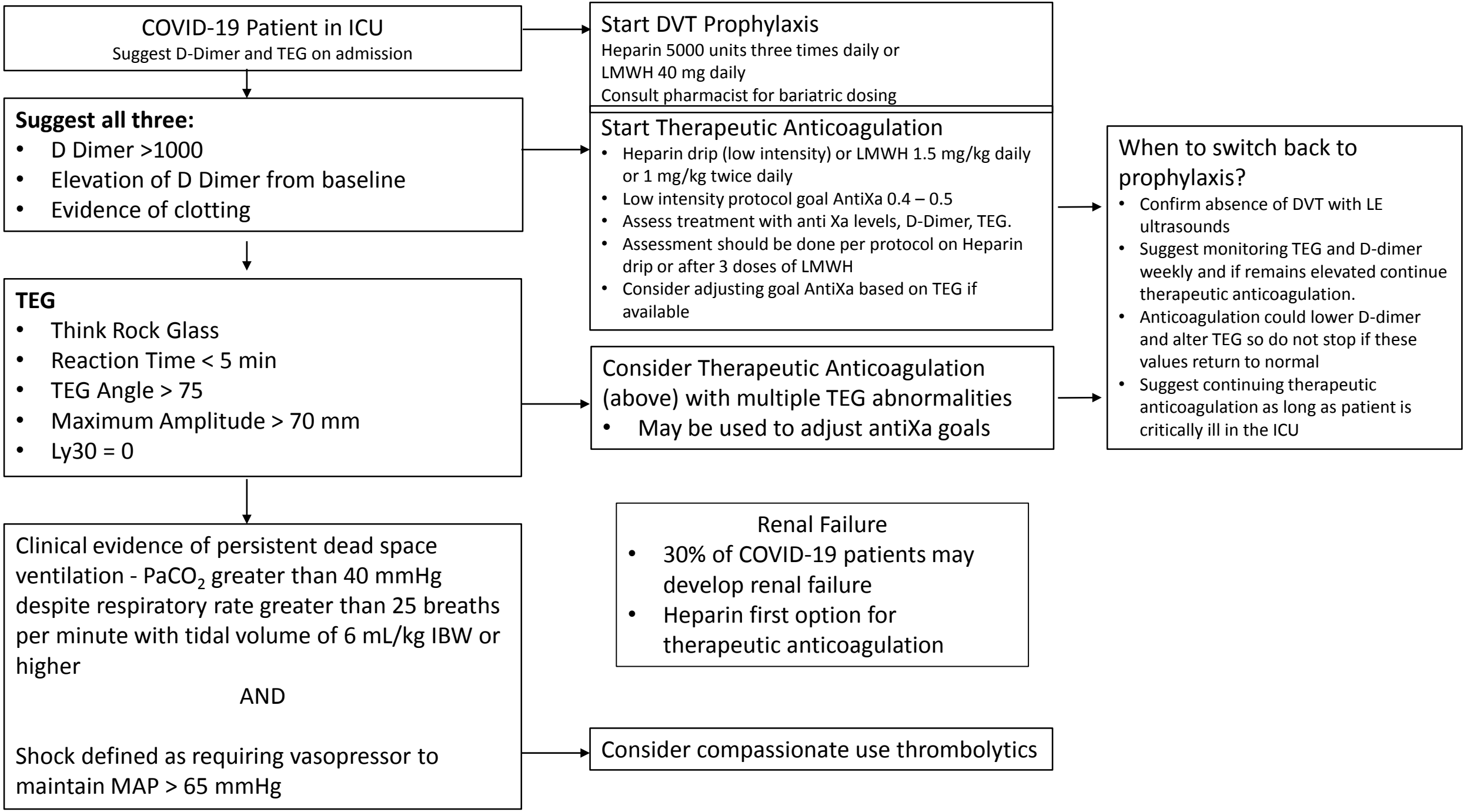
COVID-19 Patient in ICU
Suggest D-Dimer and TEG on admission
Suggest all three:
• D Dimer >1000
• Elevation of D Dimer from baseline
• Evidence of clotting
TEG
• Think Rock Glass
• Reaction Time < 5 min
• TEG Angle > 75
• Maximum Amplitude > 70 mm
• Ly30 = 0
Clinical evidence of persistent dead space ventilation - PaCO2 greater than 40 mmHg despite respiratory rate greater than 25 breaths per minute with tidal volume of 6 mL/kg IBW or higher
AND
Shock defined as requiring vasopressor to maintain MAP > 65 mmHg
Start DVT Prophylaxis
Heparin 5000 units three times daily or
LMWH 40 mg daily
Consult pharmacist for bariatric dosing
Start Therapeutic Anticoagulation
• Heparin drip (low intensity) or LMWH 1.5 mg/kg daily or 1 mg/kg twice daily
• Low intensity protocol goal AntiXa 0.4 – 0.5
• Assess treatment with anti Xa levels, D-Dimer, TEG.
• Assessment should be done per protocol on Heparin drip or after 3 doses of LMWH
• Consider adjusting goal AntiXa based on TEG if available
Consider Therapeutic Anticoagulation (above) with multiple TEG abnormalities
• May be used to adjust antiXa goals
Consider compassionate use thrombolytics
Renal Failure
• 30% of COVID-19 patients may develop renal failure
• Heparin first option for therapeutic anticoagulation
When to switch back to prophylaxis?
• Confirm absence of DVT with LE ultrasounds
• Suggest monitoring TEG and D-dimer weekly and if remains elevated continue therapeutic anticoagulation.
• Anticoagulation could lower D-dimer and alter TEG so do not stop if these values return to normal
• Suggest continuing therapeutic anticoagulation as long as patient is critically ill in the ICU