Proposed CPR protocol:

Purpose: to develop a protocol to perform team-based CPR that improves compression quality/continuity and increases the chance of a successful outcome

Personnel:

ED resident lead

ED attending lead

ED resident 2 (if present)

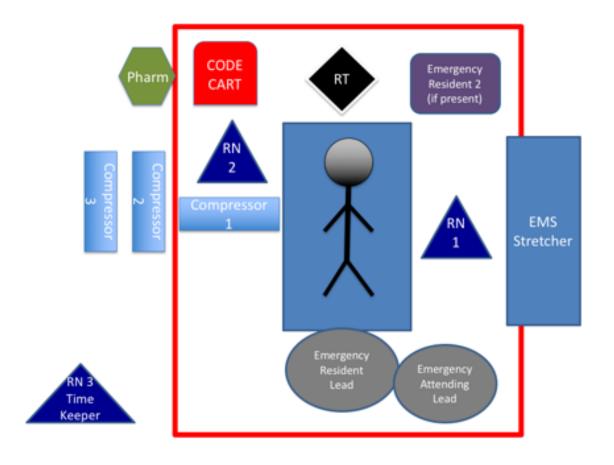
ED nurses

ED Techs (Compressors)

Respiratory therapy

Pharmacy

Roles will be assigned before the patient arrives. Any individual not assigned a role will stand behind the red line. RT will immediately check carotid pulse on arrival to determine need for compressions. Compressions will be done in cycles of 200 with ventilated breaths delivered at every 20^{th} compression. The defibrillator will be charged during the last 20 compressions (180-200) of the cycle. Pulse checks will be done once the defibrillator is charged and the team will analyze the rhythm and deliver shock if indicated. Compressions will then resume immediately. If an unshockable rhythm is present and no pulse palpated, compressions will resume immediately. All compression pauses will ideally be less than 10 seconds. Epinephrine will be given upon IV access and can be repeated every 2 compression cycles. All patients will be placed on end tidal CO2 on arrival by respiratory, who will ventilate via BVM. If RT feels that ventilation is difficult with BVM will have MD place supraglottic airway device (i.e. LMA).



Roles:

ED resident lead

- Direct/oversee all resuscitation efforts
- State what/when meds should be given
- Analyze cardiac rhythm during pulse check

ED attending lead

- Oversee resuscitation efforts
- Ensure high quality compressions (End Tidal CO2/Femoral Pulse)
- Assist ED resident with any needed procedures (A-line, CVL, etc.)
- Lead debriefing following the code

ED resident 2 (if present)

- Assist with necessary procedures, such as obtaining access, placing supraglottic airway/intubation, and using the ultrasound to assess cardiac activity
- Assist ED resident lead

RN 1

- Obtain IV access
- Alert MD if unable to obtain IV access after 1 attempt for IO placement
- Deliver Medications including immediate
 Epi after IV placement
- Support the team

<u>RN 2</u>

- Attach defibrillator pads
- Charge defibrillator at compression 180
- Assess rhythm, clear the bed, and deliver shock when indicated

RN 3 (Time Keeper)

- Document time of all interventions/meds on code sheet
- Help prompt the team when it is time to deliver meds, perform pulse checks, etc.
- Help RN 2 assess rhythm and instruct shock delivery if needed.

Compressors 1,2, and 3

- Perform appropriate/effective chest compressions
- Count out loud for every 20th compression until 200
- Switch after a cycle of 200
- Compressor 2 will start the timer when compressions are intiated
- PCT will draw labs when access obtained and also obtain D-stick on arrival.

RT

- Immediate pulse check when patient moved from stretcher
- Ventilate via bag-valve-mask
- Place on ETCO2 monitor
- Give a breath for every 20th compression
- If unable/inadequate ventilations, alert MD for supraglottic airway placement/intubation

Pharmacy

- Draw up meds from the code chart to give to nursing to administer
- Draw up Epinephrine on compression initiation to deliver when IV is placed
- Assist with defibrillator