This document was also approved by the CCOC.

General Code Blue and Rapid Response Procedure Guidelines

1) No responding team member, emergency department or critical care caregiver, should enter the room without supervised fit checked or fit tested N95, Eye Protection, Isolation gown, gloves (regardless of COVID status).
2) Any bedside nurse or primary caregiver who initiates a rapid response or code but has not been fit tested or had supervised fit checking should stay with the patient to initiate care but exits upon the arrival of the first team member.
3) Keep door closed as much as possible, especially negative pressure rooms without ante-rooms.
4) Cardiac Arrest Resuscitation: Four to seven people maximum are involved unless others are specifically asked to enter the room to assist with a specific procedure/task
5) Rapid Response: Four to five people maximum are involved in entering the room (Team lead, RN (1-2), RT, phlebotomy) unless others are specifically asked to enter the room to assist with a specific procedure/task
6) Each operator should maintain maximum possible distance from the patient when not performing a critical function

All Code or Rapid Response team (RRT) members must be in appropriate level A mask or PAPR and PPE prior to entering room, regardless of COVID status.

Evaluate for breathing and circulation. Check pulse/perfusion.

If patient has an LVAD (EMR Code status will read “Code: VAD-Full Code”) then use AHA VAD ACLS ALGORITHM in Appendix A.

For all other patients start CPR if indicated.

Place patient on defibrillator paddles and move monitor as far away from patient as possible.

Code cart location during an event should be placed where the team is most comfortable operating from the cart depending on the needs of the situation and the space available.

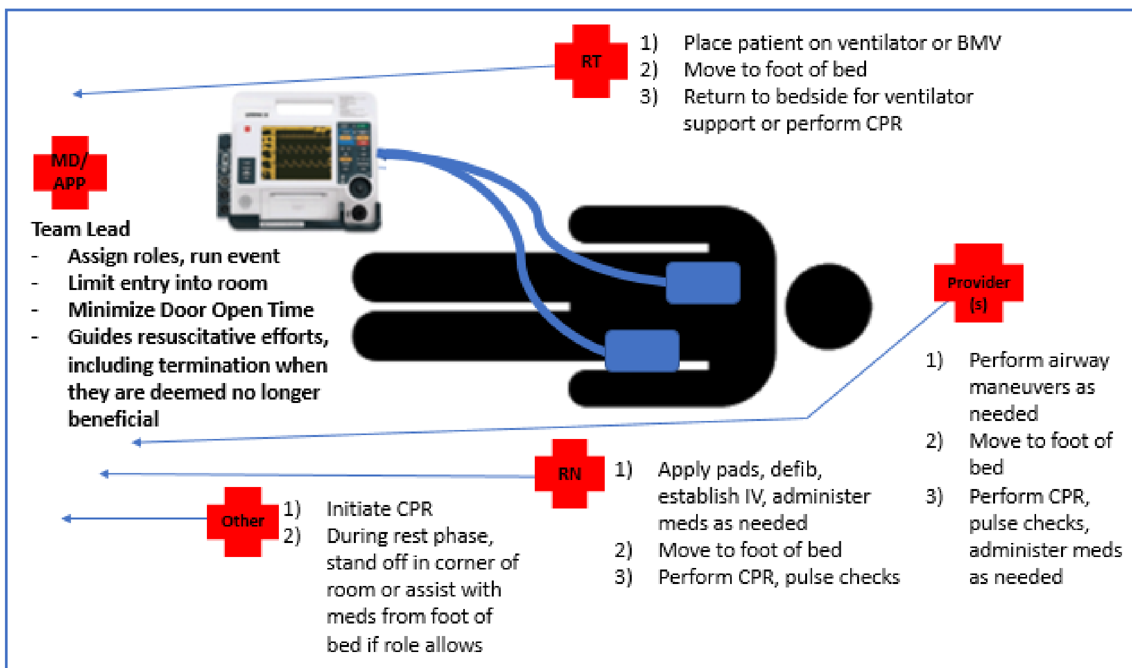
A high-efficiency particulate air (HEPA) filter, or an equivalent, should be incorporated on the end of the ET tube for any manual or mechanical ventilation (regardless of COVID status). See Appendix B

- A two filter BMV device setup fulfills the satisfaction of HEPA filtration.
- A third filter is not advised as it would pose too much resistance in the airway.

Bag assisted ventilation and oxygenation is a high risk for aerosolization of virus and should be avoided if possible however patient care needs should take priority and if used, should be used with a HEPA filter. See Appendix B

Code Team Roles

Operator	Step 1	Step 2	Step 3
Intubating Provider(s) (1-2 individuals)	Performs airway maneuvers as needed	Move toward foot of bed to assist with meds, operating Lucas when applicable, pulse checks	Return to patient as needed for other critical interventions
Team Lead (MD or APP)	Assign roles, run event, **LIMIT ENTRY into the room,** Minimize door open time	If not the intubating provider, team lead should stand back from bed	Return to patient as needed for other critical interventions, terminate resuscitative efforts when they are deemed no longer beneficial after collaboration w team
RN (supervised fit checked or fit tested only)	Establish IV if necessary, apply pads and defibrillation	Push meds using long IV tubing and flush through line	Move toward foot of bed to assist with meds, operating Lucas when applicable, pulse checks, rotate CPR
RT	Place patient on ventilator/BiPAP, BVM, give respiratory treatment	Move toward foot of bed when possible	Return to bedside only if needed for ventilatory/BiPAP, treatment support or CPR
Other Lucas or 2 staff members (RN/PCA/Provider)	Initiate CPR	During rest phase, stand off in corner of room, assist with meds from foot of bed if role allows	Return to bedside for CPR



NOTES:
-If available (mainly ED), place Lucas base under patient as soon as possible and attach Lucas device. Continue CPR with minimal interruption until Lucas device is available upon operation.

-If available (mainly ED), use "code med kit" from pyxis (epi x 3 and lido) and bring into room in lieu of code cart.

Communication Recommendations:

- Ideally, Comfort Measures Only/DNR discussions with patients and families will be proactively discussed at admission and with any significant clinical change. During the code, a team member outside the room should call the health care proxy to advise them of current events and discuss goals of care.
- The duration of the resuscitation efforts should be determined based on the clinical condition of the patient and the potential for benefit to the patient.
- RN operates Code Narrator from just outside room, using intercom, telephone, eICU cart or any other reasonable means for audio communication

Recommendations for PPE:

- Responding team members to carry own supervised fit checked or fit tested N95 or PAPR, including eye protection, gown and gloves.
- Units should have gowns and gloves readily available for rapid response and code events.
- N95 masks should not be stored with code carts – recommend backup supply stored on unit.
- Disposable laryngoscopes to be preferentially used where available.
- All intubations should incorporate HEPA filtration.
- Only those with appropriate PPE should enter the room after initiation of rapid response or code. The bedside RN and primary provider should stay with patient until the first responding team member arrives, then exits the room if they have not had fit testing or supervised fit checking.
- Once leaving the room, the bedside RN and/or primary provider should remain nearby to communicate pertinent patient information to the code team and should only reenter the room if they are acting as one of the code operators and have had a fit test or supervised fit checking of their N95mask.
- Someone outside the room should act as a spotter for all people donning/doffing PPE including supervised fit checks

Resuscitation medications limited in Amiodarone availability:

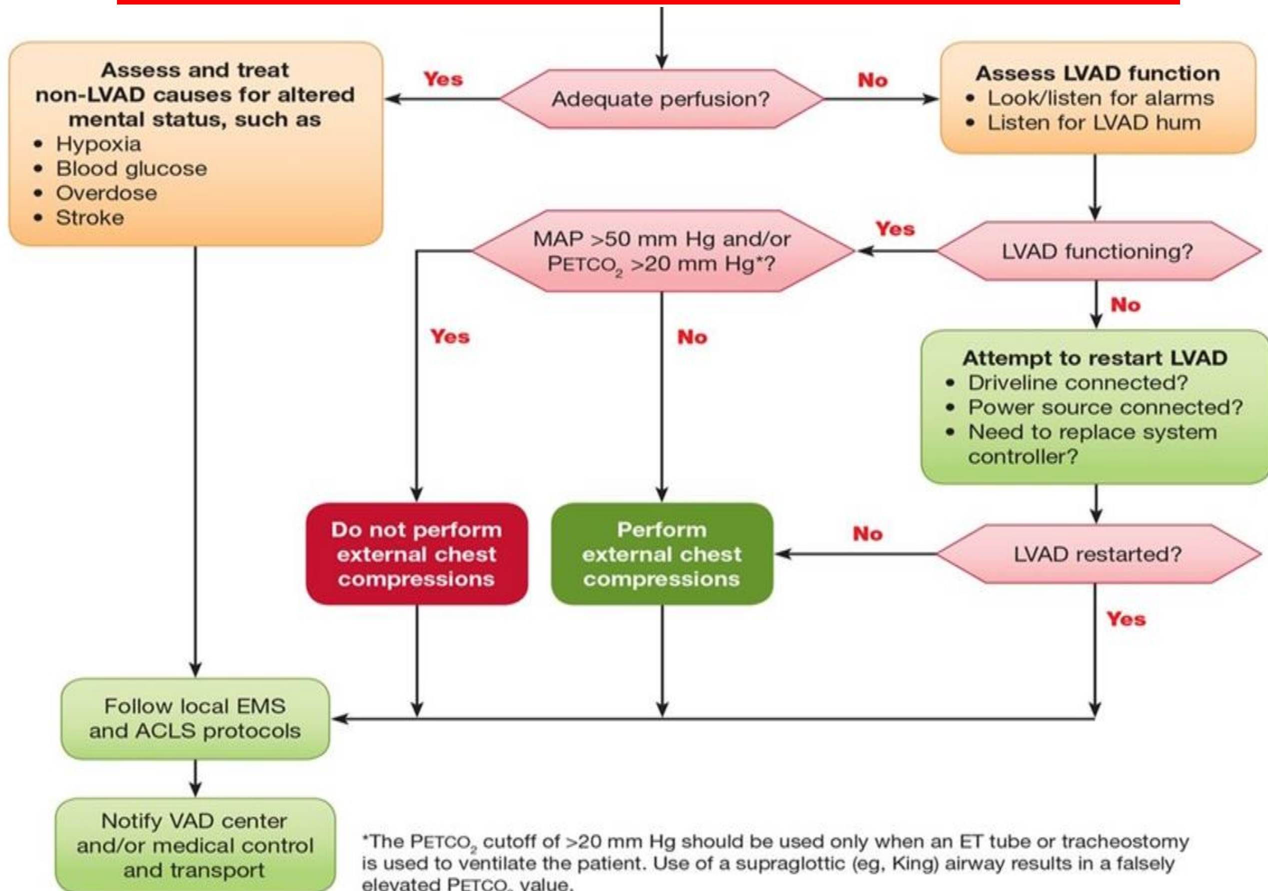
- Will need to limit IV amiodarone to those patients with unstable VT/VF
- Stable patient with VT, use IV procainamide
- Patients with unstable AFIB and RVR, consider cardioversion and IV metoprolol

Considerations for code cart placement during a rapid response or code event:

- MINIMIZE door open time to decrease contamination and ensure negative pressure seal
- If cart is outside room
  - DURING event
    - Bring defibrillator into room and place on table as far away from patient as possible.
    - Batch medications handed into the team to decrease door open time.
    - Controlled substances should be wasted after use as per usual procedure.
    - Vials from used medications should be discarded as per usual procedure.
    - DO NOT DISCARD Amiodarone or any other medication pulled but not used in a code or rapid response. Placed unused meds in a clear plastic bag and put on top of code cart before transporting for restock.
  - After event
    - Any medication pulled but not used in a code or rapid response should be placed in a clear plastic bag and put on top of code cart before transporting for restock.
    - Wipe down the defibrillator using Grey top Sani-Cloths or equivalent. Do not use bleach
- If cart is inside room
  - DURING event
    - Keep cart as far away from patient as possible.
    - Keep cart drawers closed whenever possible.
    - Do not put anything back into the drawers if taken out.
    - Set medications taken out of drawers aside to either be used during event or placed in plastic bag post event.
    - Controlled substances should be wasted after use as per usual procedure.
    - Vials from used medications should be discarded as per usual procedure.
    - DO NOT DISCARD Amiodarone or any other medication pulled but not used in a code or rapid response. Placed unused meds in a clear plastic bag and put on top of code cart before transporting for restock.
  - AFTER Code/Rapid Response event:
    - Fill out card/piece of paper with the following information before transporting for restock:
      - **Placement of Cart: Inside room or Outside room**
      - **COVID Status: Confirmed COVID positive, COVID PUI, person not under investigation**
    - Wipe down the outside of the code cart.
    - Wipe down the defibrillator - Grey top Sani-Cloths or equivalent. Do not use bleach
    - Any medication pulled but not used in a code or rapid response should be placed in a clear plastic bag and put on top of code cart before transporting for restock.
    - Place a clear plastic "shower cap" bag over the entire code cart before transporting for restock.
    - Handling of code cart can be done in clean gown, gloves and surgical mask and does not require level A mask.

APPENDIX A

AHA VAD ACLS ALGORITHM



UMass Memorial Medical Center

American Heart Association. (2017). Cardiopulmonary resuscitation in adults and children with mechanical circulatory support. *Circulation, 135*, e1115-e1134. doi:10.1161/CIR.0000000000000504

APPENDIX B

Example of Bag Valve Mask Setup with HEPA filtration