Guidance and Recommendations for Management of Patients in CED Resus Room

General Principles and Objectives

1. Always protect yourself from potential COVID exposure
2. Limit staff exposure to potential COVID
3. Decanting staff from resus room when able
4. Reducing contamination of equipment, devices, and blood tubes from COVID
5. Maintain global assessment and close loop communication of team members
6. There is no “one size fits all” approach. Be flexible.

Pre-arrival

If there is an R40:

1. Event manager and Nurse leader to pre-brief and prepare team as comprehensively as possible.
2. Anticipate, order, and prepare drugs that may be required.

Clerical

1. To avoid exposure of COVID on clerical staff, clerical staff should not enter the resuscitation room.
2. Clerical staff should liaise with the nurse outside the curtain or the nurse leader (also outside the curtain) about the patient before registering patient.
3. Clerical staff should print at least 15 patient stickers and hand to nurse leader.

Donning

1. Leave your pagers and cellphones with the Nurse leader or the CNM. They will answer any calls or emergency codes while you are in the resus room.
2. Don PPE in designed area(s).
3. Wear **both** goggles and visor, wear N95 mask, and wear a disposable yellow gown. Delta is AIRBORNE.
4. Each clinician should have a PPE partner while donning.
5. Clinicians to don PPE in 2 different donning stations in resus hallway to minimise time donning PPE.
6. Safe and appropriate PPE is vital. Make sure PPE is donned properly before going into the room, even in situations of extremis, e.g., patient in cardiac arrest, patient in respiratory failure, etc.

Inside and Outside Teams

1. Labels with resus roles are available for team members. All team members (inside and outside) should write your names on this label and put this label on your visor but do not occlude your vision.
2. Start with 3 clinicians as a "basic team" to manage a patient in the resus room. These are:
    - CED clinician: CED registrar or SMO (inside)
    - CED nurse (inside)
    - CED nurse (outside)
3. More clinicians may be required depending on the clinical scenario and patient's condition. This should be at the discretion of the CED SMO or CED senior nurse/CCN/CNM and is fluid. The extra bodies may be:
    - Event manager: CED SMO or most senior CED clinician
    - Nurse leader: CED senior nurse or CED CCN or CNM: Event manager outside resus room and conduit for communication between inside and outside teams
    - More CED clinician(s)
    - More CED nurses both inside (donned, to help perform nursing procedures) and outside (doffed, to help prepare drugs/fluids, or as a runner to retrieve equipment/handle delivery of blood samples)
    - PICU clinician
    - Airway nurse: PICU nurse or PAR nurse or CED nurse
    - Specialty team clinicians
4. Event manager should always consider decanting team members who are not directly involved in patient care out of the room. Aim for as little team members as possible without compromising the status of the patient.
5. Consider having clinician(s) donned and stood outside the room in case they are needed to urgently go into the resus room to help.

Communication Between Team Members Inside and Outside of Resus Room

1. The team inside can communicate with the team outside (and vice versa) by:
    - Communication via event manager (inside team) and nurse leader (outside team).
    - Communication via intercom.
2. The team inside can communicate with other specialty teams by:
    - Using the "speaker" function of the phone inside the resus room. Do not pick up the phone to talk.
    - Asking the nurse leader (outside) to call the specialty teams.

Assessment and Management of Patient in Resus Room

1. Two resuscitation drug sheets should be printed (for inside and outside). If patient's weight is subsequently changed, 2 new resuscitation sheets must be printed to replace the 2 previous sheets (one for inside the curtain, one for medication nurse outside the curtain).
2. For sicker patients, print out 3 copies of resuscitation drug sheets (one for inside the curtain, and one each for nurse leader and medication nurse outside the curtain).
3. Patient's clinical notes should remain outside the resus room.
4. Consider COVID swabbing patient early.
5. Do not re-use stethoscope. Either clean or ask for clean stethoscope from outside.
6. Limit invasive examination if able (e.g., throat, ear, etc).

Transfer of Equipment, Drugs, Fluids, and Blood Samples in and out of Resus Room

1. Important equipment located outside the resus room:
    - Video laryngoscope
    - Hotline/fluid warmer
    - Defibrillator
    - ECG machine
2. Important equipment located inside the resus room:
    - Airway trolley. Limit opening of drawers to only the drawer appropriate for the patient's age if able.
    - IV trolley, which contains:
        - Pre-prepared IV lines trays x2 (on top of IV trolley)
        - Sharps bin
        - "Dirty equipment" tray (underneath the IV trolley)
3. Equipment within the drawers of the airway trolley and IV trolley that have been open should be "stood down" from use until patient's COVID status is known. If patient is COVID+, these equipment need to be either discarded or appropriately clean/sterilised.
4. **Transferring equipment into resus room:** Outside team to place equipment on the border of the inside/outside spaces, then walk away, and the inside team can then retrieve the equipment.
5. **Transferring drugs/fluids into resus room:** Outside team to draw up, check, and sign off drugs/fluids before putting them in the blue tray on the trolley located on the border of the inside/outside spaces.
6. **Transferring blood samples taken from patient out of resus room:** blood samples to be placed on the blue tray on the trolley located on the border of the inside/outside spaces.
    a. Blood gas passed out dirty and not labelled. Will be wiped clean and passed on to runner to go to PICU with a separate label
    b. Blood tubes will be labelled and bagged inside then placed in tray. Assistance will be double gloved, then will place bloods into clean bag with one hand, put bag down, remove gloves, then seal bag, write form, and send. If not double gloved will need to change gloves BEFORE sealing bag, write form, and send.

General Concept of Airway and Breathing Management in Resus Room

1. Every clinician in the resus room should wear both goggles and visor and a N95 mask. Delta is AIRBORNE.
2. Anticipate need for airway management early and call PICU.
3. When doing bag mask ventilation or when ventilating an intubated patient, a white HME filter must be in place. Bag valve mask can be done via:
    - Self-inflating bag with PEEP valve **OR**
    - Green anaesthetic bag and T piece
4. If bag mask ventilation is required, use a "two-person" technique to maximise seal and minimise aerosolization.

Rapid Sequence Intubation (RSI) in the Resus Room

1. Always involve the PICU team.
2. Once PICU team arrives, decant clinicians who will not be directly involved in the RSI out of the resus room.
3. Standard list of clinicians inside the room during an RSI:
    - The intubating clinician is the most experienced intubator (usually from the PICU team).
    - The airway assistant is usually the most experienced airway nurse; either a PAR nurse, a PICU nurse or a CED nurse.
    - The event manager is usually the CED SMO. The event manager's role is to event manage the RSI and give the RSI drugs.
    - Have a few clinicians donned and outside the resus room, but ready to come into resus room if more hands are needed in the event of patient deterioration.
4. Occasionally, depending on the clinical scenario and clinical stability of the patient, more clinician(s) may need to be in the resus room when the RSI is being done. This is at the discretion of the event manager.
5. Maximise the chance of first pass success by:
    - Having the most experienced intubator perform the intubation
    - Using video laryngoscope/CMAC
    - Administering appropriately dosed sedative and paralytic drugs
6. The CED RSI/airway checklist (located on top of the airway trolley) must always be used prior to an RSI.

Transfer of Patient out of Resus Room

1. Use the CED post-RSI checklist to prepare for transfer.
2. Discuss with PICU team whether the post intubation CXR are to be done in CED or PICU. In some circumstances this can be done in PICU, but this should be at the discretion of the PICU SMO (e.g., in trauma patient, x-rays will likely be performed in CED).

3. Clinicians transferring patient from CED to PICU should remained donned. A separate clinician, who is fully donned and “clean”, should help clear the hallway traffic and with opening doors.

Khang Hee Gan, last updated 21st of September 2021