**Perioperative Management Plan For Patients Who are Not Known COVID-19+ or PUI**

**(last updated 4-1-20)**

The Problem:

* An increasing body of literature reveals that patients who are infected with coronavirus are asymptomatic or pre-symptomatic but still able to transmit the virus to others, including Health Care Personnel (HCP).
* HCP are our most valuable resource. It is imperative that we take every reasonable precaution to keep ourselves and our colleagues safe.
* Enhanced precautions should be taken with ALL patients, since at this time it is impossible to predict who may be infectious.
* The perioperative period is unique in that aerosol generating procedures (AGP) are common. AGPs are procedures where there is a high risk of aerosolizing the virus, thus requiring airborne precautions. AGPs include intubation, extubation and CPR, as well as some types of surgery.

The Plan:

At this time, a rapid test for coronavirus is not available at AAMC. If/when this becomes available, all patients undergoing urgent/emergent surgery should be tested prior to presenting to the OR. Appropriate risk stratification and precautions can then be undertaken.

Short of testing every patient, we propose several measures to reduce the risk that asymptomatic but potentially infected patients may pose to HCP.

* The following **anesthetic** considerations are relevant:
  + The anesthesiologist and circulating nurse should wear an N95 mask (or CAPR) for intubation/extubation (and for the whole case if they choose). All other staff members should stand as far away from the airway as possible. If feasible, they may choose to enter the room after intubation and exit prior to extubation.
  + Prior to induction, a clear plastic drape will be placed over the patient’s head and neck. (The plastic drape attached to the upper body warmer may be used for this purpose.)
  + Induction/intubation practices should be consistent with guidelines for intubation of COVID+/PUI patients (RSI unless contraindicated, Glidescope, etc).
  + Consider threading circuit face mask over ETT prior to connecting circuit for ease/speed of placement after extubation.
  + All circuits will include a HEPA filter, to be placed between the ETT and Y-piece.
  + If circuit disconnect is required for any reason, a clamp should be placed on the ETT during the period of disconnect.
  + If suctioning of the ETT is required, in-line suctioning should be utilized.
  + At the end of the case all staff should help move the patient to the bed/stretcher prior to extubation. Staff other than the anesthesiologist may then move back or exit the room.
  + The clear plastic drape should be placed back over the patient’s head and neck prior to extubation. The facemask should be placed over the patient’s nose and mouth (under the drape) as soon as the ETT is removed. After the patient is no longer coughing, a facemask should be placed on the patient. Nasal cannula may be applied underneath (2-6 lpm) prn.
  + Note: These are guidelines. The clinical scenario (ex: difficult airway) may require deviation from these guidelines at the discretion of the anesthesiologist.
* The following **intra-operative** considerations are relevant:
  + The team should discuss the plan at the start of the day, to make sure all questions are answered.
  + There will be no changes in the handling of equipment for asymptomatic patients. Good hand hygiene remains critical, especially before/after accessing equipment or supplies.
  + After the patient moves to the OR table the OR nurse will strip linens from the bed/stretcher and wipe it down with Oxivir before moving it to hallway.
  + TBD: Consideration should be given to altering the OR schedule so that staff members are not relieved for lunch, but instead the whole room breaks between cases. This will conserve PPE and limit the number of staff members interacting with each potentially infectious patient.
  + The smoke evacuator connected to the Neptune suction (with filter) will be used for ALL laparoscopic cases. Suction should be set to “continuous – high.”
  + Surgeries will be grouped into high risk or low risk categories, based on the potential for the surgery itself to provoke aerosolization of the virus.
    - High risk surgeries include the following: airway surgeries or procedures (ENT, OMFS, bronchoscopy), upper endoscopy, thoracic surgery, laparoscopic surgery and eye surgery.
    - For patients presenting for high risk surgery, every HCP will wear an N95 mask (or CAPR) for the entire case. This mask should be saved/reused according to AAMC policy.
  + TBD: No additional staff members (turnover team) should enter the room at the end of the case until turnover has been called by the circulating nurse.
    - ORAs should wait 23min from the time of extubation prior to entering the room for cleaning.
    - Consider flipping rooms between cases.
* The following **pre-operative** considerations are relevant:
  + Asymptomatic patients with a negative screen do not require a mask in the pre-operative area.
  + Pre-op nurses may choose to wear a mask (used through the whole day) in addition to universal precautions. Hand hygiene is still the most important element of PPE.
* The following **PACU** considerations are relevant:
  + All patients will be transported to PACU with a facemask on.
  + PACU nurses are encouraged to wear a facemask and eye protection (used through the whole day) in addition to normal universal precautions. Hand hygiene is still the most important element of PPE.
  + Patients should be spread out to every other bay, space permitting. Curtains may also be drawn around patient care areas.
  + Upon arrival to PACU, only one PACU nurse, OR nurse and anesthesiologist should interact with the patient (applying monitors, etc), unless the patient is unstable.
* With regards to **PPE**:
  + The supply chain is tenuous, and every effort must be made to conserve PPE where appropriate.
  + Surgical masks are recommended to be reused throughout the day unless soiled.
  + N95 masks are recommended to be reused for up to a week unless they become soiled or hard to breathe through.