UVMMC Periop and Procedural Area COVID-19 Response Plan

Procedural Areas

Bronchoscopy

Specifics related to our practice at UVM:

1. In general, we will not perform bronchoscopy for suspected COVID cases;
2. We are canceling any elective case for a patient that has a fever and lower respiratory tract symptoms;
3. Given rising prevalence of COVID-19 in community, negative pressure and use of N95 respirator, gown, faceshield, and gloves will be mandated for all bronchoscopies during the procedure;
4. Recovery under negative pressure will only be mandated in patients suspected of TB;
5. If we need to perform a bronchoscopy emergently for a suspected COVID case, we will not include the fellows, trainees, or students, and minimize the number of individuals in the room. However, bronchoscopy is STRONGLY discouraged for any patient suspected of having COVID-19.

Patients may go through pre-op without specific precautions

Patients should be wearing a surgical mask/faceshield in recovery as they’ll be coughing.

Patients having a bronchoscopy have already been evaluated prior to the procedure and are not covid19 suspicious. We will use N95 PPE in the OR due to the aerosol generating nature of the procedure. We DO NOT need N95 PPE precautions in pacu. The patient should wear a facemask and the PACU RN *can* wear a surgery mask (not an N95).

Confirmed Covid positive patients and those who are PUI’s will not be having bronchoscopies, or the circumstances for these patients will likely not involve the PACU.

As a layer of caution, the pulmonary and anesthesia attending will have a conversation at the end of the procedure to confirm this and will communicate any deviations from this protocol to the PACU prior to transfer. Deviations are not likely as the screening process happens prior to the bronchoscopy procedure.

Pediatric bronchoscopies will need to be discussed on a case by case basis prior to initiating the procedure given the higher likelihood of non-symptomatic spread. A plan will need to be in place for disposition prior to initiating the procedure.
CATH LAB

In light of current risks and concerns related to COVID exposure for patients and providers, we will make immediate changes to our operations. These changes are based on the official statement of the Society of Cardiac Angiography and Interventions issued today as well as the Incident Command at UVMHN:

1. **STEMI**: We will continue to offer Primary PCI to STEMI patients at UVMHN. But this will be done with appropriate respiratory precautions for patients that are either confirmed COVID 19 or Possible COVID 19. The staff and physicians will be fitted for appropriate masks ASAP. For patients who are post lytic and stable, we will offer early cath (Rescue or Pharmacoinvasive) after confirming COVID status and making appropriate arrangements for respiratory safety among the providers.

2. **NSTEMI**: we will await COVID 19 definite status on all possible COVID patients before proceeding with angiography. All patients with suspected NSTEMI will require documentation in the chart prior to arrival in the cath lab any COVID related concerns (ie, fever, cough, travel) before they are called to the cath lab. If a patient is confirmed COVID 19 and has an elevated Tnl, they will go to the cath lab only if there is clear concern for a Type I MI (plaque rupture) with ongoing symptoms/instability separate from viral symptoms. If a patient has a low level troponin rise and no ongoing symptoms, do not send to cath lab for semi-elective cath at this time unless there are clear signs of high risk for ongoing large territory ischemia.

3. **Elective coronary angiography and peripheral vascular angiography**: patients who are truly stable will not be offered elective procedures in the next two weeks. But in our field, being an outpatient does not necessarily mean a patient is stable. For example, a patient with accelerating outpatient angina and a stress test consistent with global ischemia should not be told to wait 4 weeks for a diagnostic angiogram. If the patient is clinically stable and truly elective, then reschedule for mid April. If patient is a clinically unstable outpatient, screen for any COVID warning symptoms (cough, fever) and if yes, test prior to cath so that all staff have appropriate precautions. If patient has no COVID warning symptoms, then urgent cath for outpatients may still be warranted but should be supported by clinical indications suggesting instability.

4. **For Peripheral Vascular Surgery** patients we will only do Critical limb ischemia when it cannot be delayed and assess cases with imminent thrombosis. All other cases will be cancelled and rescheduled.

5. **Aortic, mitral and structural heart procedures**: No patient who is COVID 19 positive will be offered TAVR or mitraclip. All patients who are possible COVID infected will wait testing confirmation prior to TAVR/Mitraclip and proceed only if negative. COVID 19 negative patients awaiting truly elective TAVR or mitraclip will be asked to wait until mid-April for potential scheduling to avoid any increased risk of infection in this elderly population. But similar to CAD outpatients, not all outpatients with critical AS/severe MR are actually stable enough to wait 4 weeks. If a patient is seen in consult/clinic who does not have COVID symptoms/signs, but has Class IV CHF with elevated BNP or pulmonary edema on CXR/CT in setting of severe AS/MR, we will consider urgent TAVR/mitraclip.

March 20, 2020 at 0745
In order to prioritize screening of patients referred for cath lab procedures from Miller 4, other institutions and Tilley for signs/symptoms of COVID prior to arrival to the cath lab, I anticipate that we will decrease cath lab room availability in the next two weeks. We will focus only on urgent, high risk patients and allow extra time for staff/fellows/attendings to ensure COVID 19 status prior to arrival in the holding area. We will also stop enrollment in clinical trials and halt new initiatives and product launches until we hear from the Incident Command that the risk of staff/fellow/attending/patient infection has been reduced.

**EP Lab**

**Elective requires inpt bed** – Could wait weeks to months - **Will be canceled**

- Complex ablation w/o tachycardia induced cardiomyopathy – can be rx medically
- Pacemaker or ICD upgrades **will check with MD on case by case but likely to be canceled.**
- LAAO (watchman) implants

**Elective/Elective not admitted** – Could wait weeks to months **Will be canceled**

- Elective medication admissions
- Cardioversion w/ minimal sx
- Loop recorder explant
- Implantable loop recorders (could be treated with event monitors short term)
- SVT ablations w/o tachycardia induced cardiomyopathy – can be rx medically
- Primary prevention ICD (could with life vest if needed) - **will check with MD on case by case**

**Elective yet medically necessary** –

- Ablation for patients with tachycardia induced cardiomyopathy – (any rhythm)
- Ablation for medication refractory ventricular tachycardia - **will check with MD on case by case**
- New pacemakers in patient w/ brady arrest, syncope or other sx (AVB or SSS)
- Secondary prevention ICD – most are inpatient
- Cardioversion for symptomatic patients
- Repair- replacement of malfunctioning CRM device (pacemaker or ICD) **will check with MD on case by case**
- CRM device (pacemaker or ICD) generator change that is towards the end of elective replacement period- or for patients that are symptomatic due to mode change. **will check with MD on case by case.**
Endoscopy

1. Starting Monday March 23rd we will be offering telehealth visits to high risk patients in the GI clinic.

2. We are sending out a letter Monday to patients with IBD receiving infusion or injectable immunosuppressive therapies with the recommendation of the CDC and international organization for IBD regarding therapy for IBD.

3. We are planning to stop doing elective and non-urgent endoscopic cases starting Thursday March 19th.

4. Per guidelines of the Division of Gastroenterology at Mount Sinai we will stop the following the following procedures for at least the next 14 days:
   1-screening and surveillance colonoscopy for asymptomatic patients;
   2- screening and surveillance of upper GI disease in asymptomatic patients;
   3- Evaluation of non-urgent symptoms or disease states where procedure results will not imminently (within 4-6 weeks) change clinical management (e.g. ECD for non-alarm symptoms, EUS for intermediate risk pancreatic cysts);
   4-Motility procedures-esophageal and anorectal manometry.

5. Per the Division of Gastroenterology at Mount Sinai we will continue the following procedures for the evaluation and treatment of:
   1-Upper and lower GI bleeding;
   2- Suspected GI bleeding;
   3- Dysphagia significantly impacting oral intake;
   4- Cholangitis or impending cholangitis;
   5-Symptomatic pancreaticobiliary disease;
   6-Palliation of GI obstruction (UGI, LGI, and pancreaticobiliary);
   7- Patients with time sensitive diagnosis (evaluation/surveillance/treatment of premalignant or malignant conditions, staging malignancy prior to chemotherapy or surgery) or cases where endoscopic procedure will urgently change management.

Additional cases will require evaluation and approval by division leadership on a case by case basis.
Interventional Radiology

IR will follow the Policy: Coronavirus (2019 nCoV) Radiology Screening and Workflow when caring for patients. This policy is found and updated on the UVMMC Coronavirus intranet site.

Only urgent/emergent radiology procedures and examinations will be performed in the Network Radiology Department beginning 3/17.

Non-urgent, elective, and screening examinations will be postponed until 4/10/20 with a weekly reassessment (Friday for the following week).

Radiologists will screen the status board in Radiant for each modality and identify exams for approval or delay depending on the following factors:

1. Age (CDC guidelines);
2. Comorbidities (especially high risk and cancer patients, considering safety in the hospital, waiting room, and department);
3. Urgency of exam.

Radiologists will choose the Radiant status board that applies to their service. Pediatric Radiology will cross many modalities.

Radiologists working off of their appropriate status board will review scheduled patients:

If approved (A)

- Type under “notes” the letter “A” with radiologist initials to follow.

If delayed (D)

- Type “D” followed by either number 1 or number 2 and then radiologist initials.
  - Number 1: For patient’s safety related to age, comorbidity, or at risk.
  - Number 2: Lower priority exam, can be delayed

If delayed, and patient agrees and has no questions, cancel the APPOINTMENT (not the order) with the reason code of P (pandemic). This will allow reports on all patients that need to be rescheduled.

If the patient or patient provider has questions and requests that patient remain scheduled, escalate to Division Chief via email and copy modality manager. The patient, or provider, or both will be called by Division Chief or delegate within 2 hrs. to discuss. Will reschedule patient into the same slot. The Division Chief will reply to all (scheduler and manager) to give status.

Neuro: Dr. Bruno Soares
Chest: Dr. George Gentchos
Body: Dr. David Keating
MSK: Dr. Diego Lemos
Pediatric: Dr. Timothy Higgins
Ultrasound: Dr. Naiim Ali
Fluoro GI/GU: Dr. Rob D’Agostino
IR: Dr. Anant Bhave
Neuro IR: Dr. David Johnson
Breast: Drs. Sally Herschorn and Hanna Perry
Nuclear Radiology: Dr. Jay Kikut

Dr. DeStigter and Paula Gonyea will work with Community Radiologists/Directors on a similar process (not based in Epic) to optimize local services.

CVMC: Dr. Charlie Pappas
Porter: Dr. Wade Cobb
CVPH/AHMC/ECH: Dr. Tony Conti

**PeriOp Areas**

**Comfort Zone**

**Elective needing in-patient bed - cancelled**
- Infant who need apnea monitoring after anesthesia

**Elective/Elective not admitted – cancelled**
- Endoscopy/colonoscopy
- IR
- Botox
- Bronchs
- Radiology Imaging
- Circumcisions
- Video urodynamics
- Oral anxiolysis for lab draws, IV starts, VCUG
Semi-Elective yet medically necessary

- LP’s with chemo who are going home
- LP’s with chemo being admitted to Baird 5 after for IV chemotherapy
- IR cases
- Endoscopy PEG tube change, foreign body removal
- MRI to rule out tumor
- PEG tube placement

OR Schedule

All surgeries will be reviewed by the Health Care Service leaders or their designees. They will be reviewing the next 6 weeks of surgical scheduling. We have established a process for adjudicating what is essential surgery should there be a need. Don, Mitch and Tara will serve in that role.

Contact/Coordination Points:

Ortho – Nichols or designee
Women’s – Bernstein or designee
Surgery – Norotsky or designee
Private surgeons – D’Amico

Cardiac Surgical Procedures

1. **All elective cardiac procedures through the end of May have been postponed.** We are in the process of making a spreadsheet with the patient specific information including diagnosis, planned procedure and previously scheduled OR date. If they are urgent cases that cannot wait until the end of May, we will do our best to operate on these semi-urgent patients in a timely manner.

2. **We will only have one room per day.** This room is for in house urgent patients and possibly patients from home that medically cannot wait until the end of May.

3. By 12 noon the day before, Dr. Hirashima or myself will email Andy Stanley and Mitch Norotsky our proposal for the next day’s CT surgery. It is my understanding there is a daily 2 pm meeting to finalize the next day’s schedule.

4. **There are a limited number of rehabilitation facilities who will take patients currently.** A significant number of our postop cardiac patients need further care after surgery. This must be taken into account when evaluating a patient that will be operated on during this current phase of care. Our medical center would not be best served with a debilitated post-operative heart surgery patient spending a week or two longer on Miller 3 to rehabilitate.

5. In the future we will look to our spreadsheet to see if patients with CAD or heart failure needing valve surgery can be scheduled for their surgery balancing the inpatient volume that we see.