TITLE: Coronavirus (2019-nCoV) Radiology Screening and workflow

PURPOSE: The purpose of the Coronavirus (2019-nCoV) workflow is to minimize risk of transfer to other patients and staff. Given the cleaning and disinfection requirements for limited imaging equipment and suites, prioritization of advanced imaging is necessary. Room closure post Covid-19 exposure requires 1 hour of downtime in some instances. The organization is actively reviewing guidelines of care and recommendations in this document will be updated as the organization deems appropriate.

PROCEDURE:

Patient Screening:

1. Initial screening will occur for all patients who are called prior to their imaging appointment (reminder calls).

2. If patient is not screened via phone, screening to be completed by staff registering the patient (this will vary from site to site). Screening will be completed prior to arrival in radiology.

3. Screening will include:
   - Fever
   - Cough
   - Shortness of breath
   - Loss of taste or smell
   - Sore throat
   - Chills
   - Muscle pain

4. Positive screen
   a. Patients who arrive on site and screen positive will be given a notification sheet to take with them to their appointments.
   b. Upon arrival to radiology and receiving the notification sheet, reception staff will immediately put on a faceshield, ask the patient to remain at the desk and immediately call the technologist from appropriate area. Patients will be asked to wait in designated space away from other patients.
   c. Clinical staff will use appropriate PPE. For PUI: Special Droplet Precautions (Procedure mask or universal N95, gown, gloves and faceshield). For Covid positive patients: Airborne and contact precautions (N95, gown, gloves, and faceshield).

5. Negative screen
   a. Perform imaging examination as ordered, if patient is symptomatic provide surgical mask and hand sanitizer.
   b. If patient declines surgical mask, imaging will be canceled. If patient is unable to wear surgical mask, ensure staff is wearing faceshield.
**Employee Responsibilities:**

1. Any member of the Radiology Department who has symptoms should not report to work and discuss with their direct supervisor a plan for time away and alternative work arrangements.

2. Please follow institutional guidelines if you are a member of the Department with known primary or secondary exposure.

**All Imaging:**

1. Patients with a suspicion of Covid-19 will not be imaged at Tilley Drive and ACC outpatient Radiology.

2. Radiology must be informed of patients under isolation precautions for Coronavirus (2019-nCoV) by ED, IP, and OP staff. Covid status is displayed in the patient banner. PUI are noted in the order as such, if results are not yet final.

3. When possible, radiographs for Covid positive patients will be performed portably in the patient room to minimize transport of the patients. If patients must go into xray room for imaging, see cleaning/disinfecting information below.

4. All radiology staff will wear appropriate PPE during the exam or procedure.

5. **The workflow for radiology tests ordered on PUI or Covid-19 positive patients** is as listed below for each modality:

   1. **All CT and MRI for Covid-19 Positive patients:**
      1. Technologist will call the radiology attending or radiology resident (whoever is covering) to determine the utility/appropriateness of the requested study
      2. If approved, the technologist will coordinate timing and next steps with unit (see protocol for transportation of PUI and Covid positive patients) [Intra-Hospital Transport](#)
      3. For CT patients in the ED, Security escort is not needed
      4. If denied, the technologist will inform the ordering provider of the denial including alternative options. (ie. delay the test, offer alternative tests, etc). If there is any disagreement, the technologist will instruct the ordering provider to contact the radiology resident (or radiology attending, depending on who denied the test)

   2. **All CT and MRI for PUI**
      1. The attending radiologist or radiology resident/fellow protocolling the study will be mindful of PUI status and contact the ordering provider if these studies can be safely delayed

   3. **All Ultrasound for PUI and Covid-19 positive patients**
      1. Sonographer will call the attending radiologist to determine the utility/appropriateness of the requested study for any PUI or Covid-19 positive patient
      2. If approved, the Sonographer will discuss possible tailoring of the US exam with the attending radiologist. The Sonographer will discuss the logistics of performing the requested study with the ordering provider. If there is any disagreement the Sonographer will instruct the ordering provider to have the ordering attending physician contact the attending radiologist.
      3. If denied, the technologist will inform the ordering provider. If there is any disagreement the technologist will instruct the ordering provider to have the ordering attending physician contact the attending radiologist.

4. **All x-ray studies for PUI and Covid-19 positive patients**
1. All inpatient x-ray studies should be performed portably. If not possible, the attending radiologist should be contacted to discuss alternatives.

2. All outpatient x-ray studies should be performed at Fanny Allen or at the main campus. If not possible, the attending radiologist should be contacted to discuss alternatives.

5. On-call IR staff will be notified of isolation precaution patients by the on-call resident, fellow, or attending radiologist prior to arriving to medical center.

**Transport, Room Utilization, PPE**

1. Patients are to be transported with surgical/isolation mask, if they can tolerate it, staff PPE should align with current organizational policies. Current policy is available on the Coronavirus internet site. If the patient requires transport to another department, the patient’s nurse is responsible for transport and notifying receiving department. When a patient is required to travel, the patient must wear a surgical or procedure mask at all times. If the patient cannot tolerate wearing a surgical or procedure mask, they should be instructed to cover their nose and mouth with a tissue when coughing and to perform hand hygiene after disposing of the tissue. The patient should not go to or be held in waiting areas.

2. The imaging suite can be used without room closure when performing exams consecutively on patients with Coronavirus (2019-nCoV).

3. For Patients Under Investigation (PUI) who are awaiting Covid-19 testing results, PPE is to be worn as described above. The mask to be used can be universal N95 (white) or surgical mask as long as there are no aerosol generating procedures taking place within the room and faceshield must be worn. When patient exits room, the equipment is wiped down by the technologist and can be put back into use.

4. For Covid positive patients, or PUI with aerosol generating procedure, rooms must sit empty for one hour with standard cleaning precautions to follow. *Rooms that have been tested for air exchange may have shorter downtime (CT has 30 minute downtime).*

Effective March 20, 2020, there will be a “Radiology Administrator on Call” who will be available to answer questions that arise and to assist in escalating issues that need resolution. Schedules will be posted in each modality.

**Cleaning / Disinfection**

1. Full PPE must be utilized for cleaning and disinfection, including after the patient is discharged from the room.

2. Portable equipment can be returned to use after disinfection is complete. There is no waiting period. After imaging the patient technologist to remove gown and gloves in the room. Perform hand hygiene and don new gown and gloves. After wiping down the portable machine in the room, gown, gloves and face shield to be doffed in the room while mask still in place. Mask to be disposed of outside of room.

3. Please see instructions for PPE recommendations for Covid-19 positive patients and for Persons under Investigation (PUI) on intranet site. PUI is a patient who has a Covid-19 test pending, but has not been ruled out.
4. For timing requirements for closing room after positive Covid-19 patient exposure, please refer to each imaging suite, as HVAC requirements are different. All CT scanners have a 30 minute requirement, while MRI imaging suites have a 1 hour requirement.

5. Each modality has identified one (or more) imaging suite for Covid-19 imaging and will limit exposed patients to those rooms whenever possible.

- CT: Room 2, Room 1
- MRI: Room 1
- NM: Discovery unit
- IR: Room 26 and CT-25
- US: Portable exams will be performed