SBAR for Performing Pulmonary Function Test in PFT lab

Situation: Due to COVID-19 pandemic response, PFT lab has postponed all non-urgent pulmonary function tests. However, the test cannot be delayed for long in certain patient groups (such as lung transplant patients). Therefore, a plan is needed to safely perform pulmonary function testing in highly selected group of patients.

Background: PFT lab does not have any negative pressure rooms. Due to community spread of COVID-19 in Nebraska and the reports that asymptomatic patients may transmit COVID-19, PFT lab has postponed all non-urgent pulmonary function tests. Since, pulmonary function test is an aerosol generating procedure, a plan is required to safely perform pulmonary function tests in a highly selected group of patients (whose tests cannot be delayed).

Analysis: As the pulmonary function tests will be performed only in asymptomatic patients who have not had known exposure to COVID 19, the overall risk of COVID-19 infection will be low. With the addition of proper infection control measures, pulmonary function tests can be safely performed in highly selected group of patients (See Appendix 1 for patients meeting the criteria). The main reason to perform the test only in highly selected group is to conserve PPE due to current shortage.

Recommendations:

1. Patients will be screened for any exposure to COVID-19 and symptoms of a respiratory illness (fever, cough, and shortness of breath) 48 to 72 hours before their tests. If the screen is positive, they will be asked to contact their PCP over the phone and the PFT lab appointment will be rescheduled for a later date (more than 14 days out). Furthermore, they will be advised to call back if they develop these symptoms before their appointment for further guidance.

2. If over the phone screening is negative for risk of COVID-19 infection then consider testing to rule out COVID-19 infection. If a patient has a negative COVID-19 test within 48 to 72 hours of the procedure then standard PFT lab procedures will be followed. PFT will not be performed if test results are positive for COVID-19 infection. (Note: COVID-19 test should be performed 48 to 72 hours prior to scheduled PFT in order to make sure the results are back before the procedure).

3. If COVID-19 testing not available then follow the following procedures:
   a. Patient will be provided a surgical mask at the entrance (if not already wearing a mask on arrival).
   b. They will be screened again for presence of respiratory illness on arrival. If respiratory illness is present then the procedure will be rescheduled for a later date. If no respiratory illness, then they will undergo pulmonary function test, as planned.
   c. Before the procedure starts, all healthcare workers who will be in the room for procedure should don PPE which will include N-95 mask, eye protection (Face shield or goggles, Gowns and gloves. (See Appendix 2 for appropriate donning steps).
   d. After the procedure ends, the patient will don a mask, be dismissed from the PFT Lab and be asked to promptly leave campus. Healthcare workers will doff their PPE and exit the room immediately after that. (See Appendix 2 for appropriate doffing steps).
   e. The procedure room will remain closed for an hour after the procedure.

g. The respective Pulmonary Lab room is then going to be ready for testing of the next patient.
Appendices

**SBAR for Performing Pulmonary Function Test in PFT lab**

Appendix 1: List of Selected Indications Approved for PFT

1. Lung Transplantation
2. Required Pre-operative Assessment
3. PFTs that will impact treatment of CF patients
4. PFTs for monitoring immunosuppressive therapies for non-lung transplant patients
SBAR for Performing Pulmonary Function Test in PFT lab

Appendix 2: Appropriate PPE use when COVID 19 has not been ruled out

N95 PPE Donning Checklist (If Using Face Shield)

1. Hand Hygiene
2. Isolation Gown (tie both ties into bows)
3. N95 mask, seal check
4. Face Shield
5. Hand Hygiene
6. Gloves (completely cover white cuff)
7. Safety Check

N95 PPE Donning Checklist (If Using Goggles)

1. Hand Hygiene
2. Isolation Gown (tie both ties into bows)
3. N95 mask, seal check
4. Goggles
5. Yellow Procedure Mask over N95
6. Hand Hygiene
7. Gloves (completely cover white cuff)
8. Safety Check

N95 PPE Doffing Checklist (If Using Face Shield)

1. Clean Door Handle and gloves with Disinfectant wipe
2. Doff Gown
3. Doff gloves
4. Exit Patient Room
5. Hand hygiene
6. Don clean gloves
7. Use disinfectant wipe to clean surface for face shield
8. Remove face shield
9. Disinfect Face shield
10. Doff Gloves
11. Perform Hand Hygiene
12. Remove N95
13. Place cleaned face shield in designated area
N95 PPE Doffing Checklist (If Using Goggles and procedure mask over N95)

1. Clean door handle and gloves with disinfectant wipe
2. Doff Gown
3. Doff gloves
4. Exit patient room
5. Hand hygiene
6. Don clean gloves
7. Remove Yellow Procedure mask and store in pre-labelled bag (name, front, back)
8. Hand Hygiene
9. Use disinfectant wipe to clean surface for goggles
10. Remove goggles
11. Disinfect goggles
12. Doff Gloves
13. Perform Hand Hygiene
14. Remove N95
15. Hand Hygiene
16. Place cleaned goggles in designed area

N-95 respirator decontamination and reuse guidance documents are available at following links:
