The processes outlined here are aimed at meeting the following goals while maintaining safe and effective patient care:

1. Protection of staff from exposure and infection
2. Conservation of PPE and resources
3. Mitigation of stress on staff and patients/families

Know that these processes can rapidly change thus always watch for the most updated version. If you notice anything that can be improved, contact any of the hospitalists, Peds ID or nurse managers and we will work on it.

ADMISSION PROCESS AND INPATIENT CARE FOR COVID CONFIRMED AND PUI’s

- All Patients under Investigation (PUI) or confirmed COVID patients, coming from a PCP’s office, HAVE to go through the ED for quick assessment unless other interventions are required. This is mainly so that we can control how they get to the room and whether they need floor or PICU
  - Once the decision to admit has been placed, they will be transported up with appropriate PPE straight to their room
- Direct Admissions from a PCP’s office
  - All PCPs who want to admit patients for suspected COVID need to do their OWN TESTING at their facility, when available, prior to sending the patient to CW
  - These patients will still need to go through the ED, as stated above.
  - All COVID patients, PUI & patients with respiratory symptoms should be wearing a mask
  - Other URI/respiratory patients should be provided a mask by their PCP. They are to stay in their car upon arrival so they can be transported directly up to their room by patient transport.
  - When the admission is accepted the caregiver will be provided with the phone number to 3S (415-1444). Parents are to notify staff of their arrival to the hospital parking lot. The 3S clerk will call transport and instruct the family to stay in their car until someone comes and gets them.
  - Only 1 healthy/asymptomatic guardian/caregiver can join the patient, also while wearing a mask.
    - If no healthy caregiver is available it should be discussed on a case to case basis
  - Admitting paperwork should be done in the room, preferably over the phone
  - All PUIs / COVID patients will be admitted to 3N on the “Green Team”, initially to 1 senior on the team. If the patient volume increases the second senior will also carry these patients
    - 3N will keep the doors to the unit closed

updated 04/03/2020
• Once the test comes back negative the patient will be transferred to another unit & team.
• The Green (COVID) Team is capped at 10.
• Once Green team reaches 10 COVID/PUI admissions the night team or admitting senior(s) will admit these patients to the Blue Team until the Blue Team reaches 10 COVID/PUI admissions.
• Once the Blue Team reaches 8 COVID/PUI admissions the blue senior will notify the Blue Team attending.

• Direct Admissions from an outside hospital or outside Emergency Department
  o All COVID patients, PUI & patients with respiratory symptoms should be wearing a mask
  o EMS/transport team should be appropriately protected and transport the patient directly to their assigned room while not letting the patient touch anything
  o Only 1 healthy/asymptomatic guardian/caregiver can join the patient, also while wearing a mask.
    • If no healthy caregiver is available it should be discussed on a case to case basis
  o Accepting physician / transfer center should notify /emphasize these rules with the transferring facility

• Bundle care
  o Limit procedures performed on the patient, limit personnel going in the room
  o Nurses and staff to bundle care to limit times of going in the room
  o Use phones as much as possible to communicate with patients and parents rather than going in the room
  o Limit blood draws to daily or every other day; should be done by RN’s at a time where she is already in the room (order as nurse collect)
  o Limit imaging to medically urgent or necessary
  o Switch all IV medications to PO if possible
  o Schedule administration of meds at the same time if possible to limit entries into the room; consider having parents administer PO meds when feasible
    • When MD thinks parents will be reliable at administering PO meds they have to put this in a communication order
    • RN will draw up all meds (after checking with pharmacy about storage /stability), label them with times, and make a timesheet with doses which will then be given to the parents during the first RN visit.
    • OR RN will open door slightly and place meds on counter right by door at the time the dose is due (she would be more than 6 ft away from patient)
  o Have parents administer G-tube feeds (after teaching)
COVID-19 Protocols for Pediatric Inpatient Wards

- In order to minimize exposure and cross infection across the hospital the food tray should be delivered to the nurse by nutrition services staff and the nurse delivers the food tray into the patient’s room (bundle delivery with other care)
- Housekeeping should not clean rooms during the “aerosolized procedure” window
- Consider different tactics to limit VS check; when RN is in the room she should bundle care and obtain VS then. If in 4 hours he/she doesn’t have another reason to go into the room he/she can facetime or use zoom to contact the parents
- Limit linen changes to only when soiled; have an extra set in room that parents can change

• Rounding of COVID Team
  - 1 attending, 1 senior, 1 nurse
  - Team members should have minimal accessories (no jewelries, watches, etc) to avoid impeding donning/doffing
  - Any personnel should not have any accessories going in the room (no phones, stethoscope, papers, pens)
  - Do rounds on a blocked time (no respiratory therapy, no administration of meds, no vital signs) that way there’s less interruption of limited time with the guardian and patient, no need to use N95, less traffic in a small room
  - Ideally all patients should be in the same floor (3north) to avoid going from one floor to another

  - Process:
    - Preround on all patients by talking to resident +/-nurse
    - Telephone round on all patients/talk to the mother - discuss assessment/plan
    - Actual patient visits
      - Attending goes in the room, examines the patient, briefly reiterates assessment/plan (or any changes to the plan); if anticipating longer talk, tell mother/father you’ll call again at a certain time
      - Doff off but keep the mask on, don’t touch it. Use hand sanitizer as you go out.
      - Resident is outside the room:
        - Give hand sanitizer to the attending (don’t let attending touch it) in case there’s breach of hand hygiene
        - Residents puts all the orders in the computer. Have a phone ready in case clarification from mother needs to be done right there outside the room.
        - Resident reminds the attending of the things that need to be discussed for the next patient
      - Attending moves to the next room using same mask and put other PPE’s on
    - Mask can be thrown out in the last patient’s room.
    - Call any patients that you said you need to call back
TESTING
• Since we have confirmed COVID cases in the community, every patient with respiratory symptoms including sore throat that requires admission needs to be tested
  o If they are coming through the ED, the ED should perform a test prior to admitting to the floor
  o Again, if it is a direct admit, PCP’s should perform the testing at their facility, when available, prior to admission (in other words they can NOT send their patients here JUST for us to test them)
• Please review the testing criteria and testing process
• For any positive results, please contact Amy Hill at 251-415-1683

TREATMENT
• Avoid nebulized treatments, when possible, since COVID can become aerosolized during these treatments for up to 2 hours. Utilize MDIs if possible
• Avoid the use of ibuprofen and substitute with acetaminophen
• Avoid use of systemic steroids.
• Consult Peds ID in all patients for whom therapy is being considered
  o Very little evidence to support routine therapy, medications may have associated adverse events thus therapy is only on select patients (severe infections in immunocompetent patients, immunocompromised, elderly, those with chronic medical conditions such as diabetes, heart disease, receiving immunosuppressive medications, chronic lung disease, chronic kidney disease)
  o As of now hydroxychloroquine/azithromycin and lopinavir/ritonavir, IVIG & Remdesivir are being considered, however supplies are limited or we don’t have any
  o If specific therapy is to be initiated, verbal consent should be obtained, inform parents that there is limited data for these therapies, and current standard of therapy is supportive care
  o Consider therapy in hospitalized AND COVID-positive AND with at least one of the following (for immunocompetent and high risk patients):¹
    ■ New/increased supplemental oxygen requirement >4 hours; OR
    ■ Increase in baseline non-invasive or invasive ventilatory support requirement (e.g., increased ventilator pressures) with worsening trajectory > 8 hours
• Determine immune status of the patients (Table 1)²
Table 1. Immune status of patients

<table>
<thead>
<tr>
<th>Category</th>
<th>Immunodeficiency/Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severe</td>
<td>• SCID</td>
</tr>
<tr>
<td></td>
<td>• allogeneic HCT (&lt;100 days and ALC&lt;100/mm³, or severe GVHD)</td>
</tr>
<tr>
<td></td>
<td>• acute lymphoblastic leukemia in induction with ALC &lt;100/mm³</td>
</tr>
<tr>
<td></td>
<td>• relapsed/refractory acute lymphoblastic leukemia with ALC &lt;100/mm³</td>
</tr>
<tr>
<td></td>
<td>• recent T-cell specific therapy (e.g. Anti-Thymocyte globulin (ATG) &lt;90 days, alemtuzumab &lt;6 months)</td>
</tr>
<tr>
<td></td>
<td>• HIV infection with CD4 count &lt;100/mm³</td>
</tr>
<tr>
<td>Moderate</td>
<td>• Acute lymphoblastic leukemia in induction, consolidation or reinduction with ALC 100–300/mm³</td>
</tr>
<tr>
<td></td>
<td>• any other malignancy with ALC&lt;100/mm³</td>
</tr>
<tr>
<td></td>
<td>• bone marrow failure with ALC&lt;100/mm³</td>
</tr>
<tr>
<td></td>
<td>• other high-dose immunosuppression (discuss with ID)</td>
</tr>
<tr>
<td></td>
<td>• HIV infection with CD4 count 100–200/mm³</td>
</tr>
<tr>
<td>Mild or none</td>
<td>All other patients</td>
</tr>
</tbody>
</table>

VISITORS

- For COVID confirmed & PUI cases:
  - Only 1 visitor can stay in the room; should opt for the “lowest risk” caregiver
  - This visitor can NOT leave the room for any reason
- Food for caregivers
  - Can be delivered to their room, if needed.
    - They will need to ask the nurse to contact food services at 415-1070
  - There are plenty of cards on the floor that can be provided to caregivers
DISCHARGING PROCESS

- For COVID confirmed cases:
  - Patients diagnosed with COVID who are discharged should remain in quarantine at home until symptom free and 2 weeks after discharge (whichever comes last)
  - Asymptomatic care takers should remain in quarantine with the patient for a minimum of 2 weeks after discharge.
- For PUI cases:
  - Once a patient meets the usual criteria for discharge, they can be discharged home, even if their COVID test is not back yet
  - They need to be quarantined at least until their test comes back negative
    - Provide handout on post-testing instructions, which includes information about quarantine and precautions: Post-Testing Instructions for Patients
    - Follow up with PCP should be set up as a “phone call follow-up” or tele-health visit so that they don’t go to a physician office prior to their test being reported
  - They need to be placed on the White list in Cerner, to help track their test results
    - All information needs to be placed on the excel file in the shared drive (MyFile Share)
    - Residents > Pediatrics > COVID19 Tested folder
    - The swing Sr will check results daily and will notify the attending, parents, ID, PCP & Karen Deakins
  - Once ready to discharge, both the patient and the caregiver need to put on a yellow surgical mask and have to be escorted out by patient transport (as in not to touch anything)

PPE

- For COVID confirmed cases:
  - Assign to a negative pressure room, when available
- For PUI AND COVID Confirmed cases:
  - Disposable stethoscope should be placed & stay in each room
  - Gown, mask, gloves & eye protection for all patients, UNLESS THEY NEED AN AEROSOLIZED PROCEDURE, which requires an N-95 mask/PAPR for 2 hours
  - Examples of why you would need an N-95 mask/PAPR:
    - Nebulized treatments
    - Deep suctioning
    - Trachcollar
    - Intubation
    - Bag-mask-valve care
    - CPR
- Review donning and doffing PPE: Click here!
Reference
1. Adapted from Children's Hospital of Philadelphia
   Updated Version April 2nd, 2020

2. Adapted from St. Jude Children's Research Hospital