

**General Infectious Disease How To's**  
**COVID-19 Provider Training Materials**  
**Updated 4/3/2020**

**How to place a NEW ID Consult:**

1. Determine the appropriate ID consult team:
  - All COVID-19 related consults should go to the general ID consult pager, even if the patient had a transplant or hematologic malignancy
  - Transplant ID team covers solid organ transplant patients, including those undergoing expedited workup or listed for transplant, without COVID-19
  - Oncology ID team covers all hematologic malignancy patients (leukemia, lymphoma, myeloma) and bone marrow transplant patients, without COVID-19
  - General ID team covers the rest, including solid oncology patients
2. Place the appropriate ID consult order in Epic (separate orders exist for these three services)
3. Page the appropriate service number via rolodoc (can use app or the following website: <https://rolodoc.pennmedicine.org/>). This is ideal to text page questions and phone numbers. If you are unable to access rolodoc, here are the numbers (but this is less ideal option):
  - General ID consult pager: Available 24/7 - 215-265-1634
  - Transplant ID consult pager: Available 24/7 - 215-314-0513
  - Oncology ID consult number directly goes to attending during the day, so must check rolodoc. On nights and weekends, use the general ID consult pager above

**If you have questions regarding a patient who is already being followed by ID:**

- FIRST you should check who wrote the last infectious diseases note and call that individual provider
- If you do not get a response, then page the appropriate consult pager/number

**If you have clarifications regarding discharge planning (home antibiotics, etc) for a patient previously seen by ID:**

- FIRST, you should check the last note left by ID. This often contains all the necessary information
- If not, you can check the outpatient chart for a 'care management' note left by ID, which often contains this information
- If neither of these work, then page the appropriate consult pager (general, ID or onc)

**Antibiotic Approval**

All antibiotic approval requests are processed through the Ilúm app (download by searching "ilum" on iTunes or GooglePlay) or through the Ilúm online request form (you can access by clicking on the "Approval Request" link in PennChart in orders for antibiotics that require approval). See the Antibiotic Approval Reference Guide below for detailed instructions on how to download the app and submit an antibiotic request.

Antibiotic approval is operational during the following times:

- Weekdays: 8a–9p
- Saturdays: 9a–1p and 5p–9p
- Holidays: 9a–1p and 5p–9p

During times antibiotic approval is **NOT** available, restricted antimicrobial agents may be entered without approval by entering "ID approval not available" in the Electronic Health Record. Approvals can be entered on the **Ilúm app** or the **Ilúm website**. at any time, and your request will be processed the next time antibiotic approval is available.

If there is a problem obtaining antibiotic approval in a timely fashion, utilize the following protocol:

- **8am-5pm:** Contact the floor-based pharmacist > contact central pharmacy (215-662-2907) and ask them to contact a stewardship pharmacist > contact ID consult pager (215-265-1634)

### **Antibiotic Approval Step by Step Guide:**

#### **Downloading the App**

1. Download the app by searching the App Store or Google Play for *ilum*.
2. You can log on to the app **only** when connected to the Penn Medicine secure Wi-Fi.
3. Log on to the app using your UPHS username and password.
4. Select Penn as your location.
5. **Enable push alerts** for the app in your phone settings as well as in the app itself (if you need to turn on and off push alerts in the app you can do so from the home screen by tapping the gear/setting icon in the bottom left corner) and toggling push alerts on or off. When push alerts are enabled, it allows you to get push alerts when you get responses to your requests

#### **Request ID approval through Ilúm app**

1. On the home screen of the app, select "Request ID approval" to request restricted antibiotic(s)
2. Search for your patient using name, MRN, or location.
3. Select your treatment indication(s) and answer relevant questions on the form.
4. Enter requested antibiotic(s) as well as entering any comments you may have.
5. Tap "Send."
6. You will receive a notification with the approval status of the request or an answer to your question. You can also tap "Notifications" on the home screen to see if your request was approved.

#### **Asking Question through the Ilúm App**

1. On the home screen of the app, select "Contact Team" to ask a question of the antibiotic stewardship/approval team.
2. Search for your patient using name, MRN, or location.
3. Enter your call back number in the appropriate section.
4. Enter your question in the "Additional Information" section.
5. Tap "Send."
6. You will receive a notification or a call to answer your question.

#### **Making requests and asking questions through the Ilúm Web Software**

1. You can also use the Ilúm web software to request ID approval or to ask a question of the team.

To access the web version, go to the antibiotic stewardship website:

[www.uphs.upenn.edu/antibiotics](http://www.uphs.upenn.edu/antibiotics).

2. In the top left corner of the website, click on the llúm link, and log in with your UPHS username and password.
3. Search for your patient and then under "Treatment Actions" you can either "Contact Team" to ask a question or "Request ID Approval" to request approval for restricted antibiotic(s). You can view the status of your request in "Notifications" and you will get push alerts to your phone when the team responds.
4. You can also access the web software when you are placing an order for a restricted antibiotic in PennChart by clicking on the "Request Approval" link below the yellow box at the top of the antibiotic order.

### **Antibiotic Dosing**

- Antibiotic Guidelines site provides dosing recommendations for antimicrobials (accessible from the intranet, the second tab on the right column), also accessible here:  
[www.uphs.upenn.edu/antibiotics](http://www.uphs.upenn.edu/antibiotics).
- As always, if you are still unsure of dosing, and especially if your patient has acute renal injury, you should call the assigned floor pharmacist to discuss dosing further

### **HUP Antibiotic Treatment Guidelines**

- EXCELLENT reference for which antimicrobial agents are recommended for a broad range of infections commonly encountered in hospitalized patients, as well as duration of treatment
- Accessible via [www.uphs.upenn.edu/antibiotics](http://www.uphs.upenn.edu/antibiotics)

### **Basics of going home with parenteral antibiotics**

- All patients being discharged from HUP on IV antibiotics require ID consult for enrollment in Infectious Diseases Transitions Service (IDTS) monitoring. (Exception: Some ALD or oncology patients discharged on IV antibiotics are managed by their own providers, and do not require ID consult and are not managed by IDTS)
- Please consult ID prior to day of discharge to ensure adequate time for consultation
- If the patient does not already have an appropriate line in place for home antibiotics (midline, PICC or port), when close to discharge, would order midline or PICC in Epic for PICC team.
- The nurse discharge planner or social worker, depending on where the patient is being discharged to, will ask for a prescription for the IV antibiotic. Please specify the appropriate end date on the prescription. They will also likely ask for a script for PICC line care and supplies or midline care and supplies.
- Please provide script for lab monitoring (usually weekly CBC, CMP at minimum, with additional labs added such as weekly CK for patients on Daptomycin, or Vanc trough for patients on Vancomycin- the desired labs are indicated in the ID sign off note), to be faxed to HUP ID transition service at 215-662-7899

### **ID Specimen Collection Basics - Who and What**

- Urine specimens:
  - Order a urinalysis with micro and reflex to urine culture for FOLEY patients

- All other patients must order urinalysis with micro and urine culture separately. PRO TIP: Order a urinalysis, ask the RN to collect both urinalysis and urine culture, and if UA is positive THEN order urine culture and RN will send it
- Blood cultures:
  - One order for blood culture will provide ONE set consisting of two vials (one aerobic, one anaerobic)
  - We often desire TWO sets (place two separate orders - 4 vials total drawn) - rare exceptions to this
  - You can select peripheral collect if it will be a fresh stick, or line collect if to be off a central line. Ideally the two sets would be peripheral, though this is not always possible.
  - On the floor: Phlebotomists will collect blood cultures
  - In the ICU: RNs will attempt blood cultures, may ask provider if unable to obtain
- Respiratory viral swabs/ COVID testing:
  - ED: RNs are collecting specimens
  - On the general ward/floor patients: providers such as MDs, NPs, PAs must collect the specimens themselves (Exception: liquid oncology RNs will collect these for their patients - would double check with RN if you think they will be the one collecting)
  - In the ICU: Usually MD/PA/NP, unless otherwise told by RN in your specific unit
- Tracheal aspirate
  - Collected by RN or respiratory therapy

### **Outpatient ID Follow UP**

- Patients who will need ID follow up will almost always have had an ID consult in the hospital and instructions on how to set up follow up are often in the ID sign-off note
- The office # for our HUP ID clinic, called the MacGregor Clinic, should you want to call to schedule follow up, is 215-662-6932
- Please inform patients that during this time, it will likely be a telemedicine visit

### **Infectious Diseases vs Infection Control**

- Infection control should be your first call regarding questions around isolation precautions, possible patient exposures, etc
- Infectious diseases consultants will help with management and diagnosis of patients

### **Important ID-related Phone Numbers**

Microbiology lab: 215-662-3406

General ID consult pager: 215-265-1634

ID Clinic at HUP: 215-662-6932

ID transition service Fax #: 215-662-7899

Infection control: 215-662-6995

Occupational medicine: 215-662-2358