OHSU Infectious Diseases
Resident and Student Orientation

Welcome!

We are delighted to have you join us on the inpatient infectious diseases (ID) consult service. This guide will provide information you need to get started. Please don't hesitate to connect with our fellows, faculty and/or program coordinator if there is anything you need during your rotation. If you have an interest in learning more about a career in infectious diseases after your rotation with us, please contact both Dr. Erin Bonura (bonura@ohsu.edu) and Dr. Luke Strnad (strnad@ohsu.edu). If you have any difficulties or questions during this rotation please contact our ID Fellowship Coordinator (Shanelle Almeida, almeidas@ohsu.edu) or the ID Resident Rotation Liaison (Holly Villamagna, villamag@ohsu.edu.)

Phone numbers:

- OHSU ID contacts and phone numbers:
    - ID program fellowship coordinator: Shanelle Almeida (x8-8920 or email)
    - ID rotation residency liaison: Holly Villamagna (villamag@ohsu.edu)
    - OHSU lab central: 503-494-7383
    - ID Division main office: 503-494-7735
    - ID Division patient number: 503-494-4971
    - ID Division fax number: 503-494-4264

- PDX VA ID contacts and phone extensions:
    - Amy Tran (ID Scheduler): x53003
    - Suzanne Sweek (ID patient care RN): x51018
    - Julia Poole (ID OPAT RN): x33813
    - Noelle Hartwick (ID community care RN case manager): x33757
    - Kim MacKay (ID HIV pharmacist): x54505
    - Lisa Woo (ID OPAT pharmacist): x51660
    - VA ID FAX: 503-273-5322 – located in room 7c-100

General ID consult service:

- The inpatient ID consult service provides care to patients at OHSU and the Portland VA. There are 2 ID teams – Team A and Team B. Each team is composed of an attending (1 or 2-week rotation), almost always an ID fellow (1 month rotation), and often a resident (1-3 week rotation) and medical student (2 or 4 week rotation.)
    - Team A sees all the ID consults at the PDX VA and consults at OHSU (roughly 50/50 split between sides of bridge).

- Team B sees only ID consults at OHSU
- There is also a Transplant ID consult service, but residents typically do not rotate on this service unless specifically requested.

Nuts and Bolts for the First Day:
Our day generally begins at 8am. On your first day please page the fellow on the team that you are assigned to at 8 am (residents) or after orientation (students). You will be assigned to either Team A or Team B – please refer to MedHub for your team assignment. The fellow will give you patients to follow, update you to and note specific details, and inform you about rounding plans for the day. In the rare event that there is no ID fellow on your team, then the ID attending will perform this role, and you should not hesitate to contact them at 8am on your first day.

You will see a diversity of patients on the ID consult service. All consultations are requested by the primary services, although the ID consult service attempts to see all patients at both hospitals with Staphylococcus aureus bacteremia, endocarditis, and all patients who will be discharged on IV antibiotics. The consult request will come to the ID service through the on-call ID fellow, or in the event there is no fellow, the on-call ID attending. They will then assign some of these consults to you to work up.

Expectations/Your role on the team:

- You are expected to attend team rounds each day. Often follow-up patients are discussed at morning rounds and the new consults at afternoon rounds. This schedule is subject to change, depending on the volume and any commitments your team has for the day. Your fellow will make sure you are aware of the rounding schedule each day.
- You will generally be assigned to follow 3-6 patients total at any given time, typically with 1-3 new consultations per day. You will hear about new consults from your fellow/attending per above.
- You are expected to follow your patient(s) each day – reviewing the chart, seeing the patients(s), staying up to date on events, and communicating with primary teams.
- You are expected to read about the problems your patients have. Ideally you will present on rounds any key learning points you obtain during care of your patients. This will enhance education and help your fellow/attending refine the resources you access for learning. Please see below for reading materials and web-based resources.
- Notes: You should write a note (in Epic or CPRS) for the patients you are following unless your fellow tells you otherwise – see below for the suggested elements of a good ID consult note. Please list your attending as a signer on notes at OHSU (Epic) and at the VA (CPRS). Your attending should be a cosigner on all of your notes.
- When signing off on a patient, it is important to communicate directly to the primary team the final recommendations for antibiotic course/duration and any need for ID clinic follow-

up. Your fellow and attending will guide you on the process of outpatient parenteral antibiotic therapy (OPAT) referrals and help to coordinate ID clinic follow-up.

TYPICAL ID WEEKLY CONFERENCES*

Monday	Tuesday	Wednesday	Thursday	Friday
12:00 ID Core Curriculum	8:00 Medicine grand rounds	8:15 ID Case Conference *2nd/4th Wednesdays of the month there will be an 1230pm ID journal club (2nd Wed) or faculty seminar (4th Wed)	12:00 ID Citywide *2nd/4th Thursdays of the month there is an 815am antimicrobial tutorial	8:00 HIV Pre-Clinic Conference
*Currently all ID conferences are held remotely via WebEx. Please ask your fellows/attendings to forward the links for each conference				

We strongly encourage you to attend the core Internal Medicine conferences to help maximize your educational experience. Please remind your attending and fellow to round at times that allow you to make it to these conferences. While you're with us we would also encourage you to attend our weekly conferences above when you are able. If the timing of a sub-specialty conference conflicts with IM core conferences, then prioritization is to be given to attendance at the IM conferences, unless you think your educational goals will be better met by attending the sub-specialty conference.

Learning Objectives:
We expect you will learn more than what is outlined in the following objectives, but list below will help give you an idea of what we consider the most important topics to learn while on rotation. These will usually be covered over the course of 4 weeks, so be aware that with shorter rotations there may not be patients on service with one or more of the below infections. Please discuss these objectives with your fellow and attending and seek out relevant opportunities and extra avenues for learning if you want to know more about something you have not seen on service.

By the time you finish the rotation, you should be able to:

1. Describe the epidemiology and clinical presentation of a variety of clinically significant bacterial infections, including but not limited to: endocarditis, *Staphylococcus aureus*

bacteremia, osteomyelitis, prosthetic joint infection, urinary tract infection, brain abscess, meningitis, and pneumonia.
2. Describe the epidemiology and clinical presentation of a variety of clinically significant viral infections, including but not limited to community respiratory viruses, herpesviruses, and human immunodeficiency virus (HIV).
3. Describe the epidemiology and clinical presentation of Candida infections, particularly Candidemia.
4. Describe the importance of host immune status on both risk for infection as well as disease severity.
5. Compare the uses and characteristics of culture-based techniques vs molecular or serologic diagnostics.
6. List the spectrum of activity for the major antibiotic classes (beta-lactams, fluoroquinolones, glycopeptides, macrolides, sulfonamides, etc.)
7. Understand the basics of antibiotic resistant organisms and their clinical impact.
8. List some general principles of antimicrobial stewardship.
9. Explain basic principles of antibiotic drug delivery and the need for "source control" procedures.

Presenting on rounds

This is similar in format to medicine ward rotations but with a specialty-specific focus. The key is to stay organize, structured, and present about the things that are pertinent to this particular patient regarding infectious considerations and the reason for which we have been consulted. Do not worry about missing items in the presentation. If there is something we want to know that you did not say, we will ask.

In general, here are some high-yield pointers:

- Start with the reason for the ID consultation request by the primary team (ie, S. aureus endocarditis or duration of treatment for E coli bacteremia). This will help your team listen to what you are saying within the correct context.
- While a chronological HPI is generally recommended, feel liberated to only discuss the parts of the chronology that are relevant to the ID consultation or to present the chronology out of order if this makes understanding the ID specific considerations more transparent.
- Make sure to pay special attention to results for and dates of the below items, including when some of the data is from outside facilities:
    - Culture data
    - Antibiotic use
    - Disease-specific imaging
    - Disease-specific surgical interventions/other procedures

- When asking the patient about important ID specific history such as sexual practices, injection substance use, and environmental exposures, make sure to pay attention to the context around you while asking (who is there, how private is the space, how is the patient's emotional state, etc) as well as whether the information is relevant to answering the consult question (ie, knowing details of the sexual history may not be relevant to a prosthetic joint infection consult where you already know Cutibacterium acnes is growing in the OR cultures). You DO NOT NEED TO ASK all the classic ID questions if they are irrelevant and/or doing so at this moment/in this environment would not be patient-centered or trauma-informed.
    - Do not hesitate to ask your fellows/attendings for clarification or help in navigating either the decisions about what to ask or about how to do the asking.
- When you get to the assessment and plan, you may not know the answer, and that is okay! The ID service is being asked to help with that by other board-certified physicians. However, try to state a clear assessment as well as the reasons for why that is your assessment and plan about what you think we should do next. Even if the assessment and plan are not perfect, doing this will help your fellow and attending see the areas where you know the answer vs the areas where you would benefit from guidance. This will help them teach you more effectively.
- After we formalize our group assessment and recommendations, if there is anything about these which are not transparent, either in the details or the rationale, please ask your fellow and attending for clarification. This will ensure you are providing clear and accurate communication to the primary teams verbally and in your notes.

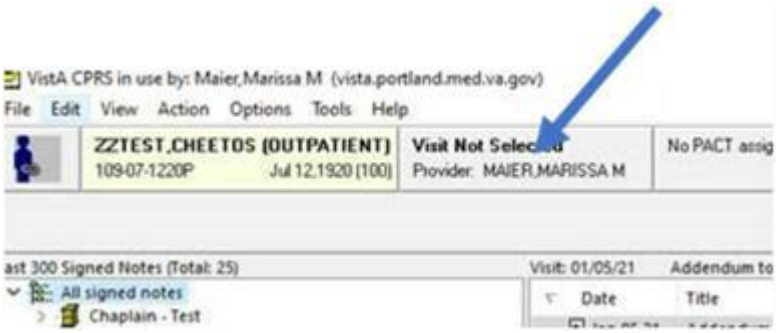
Writing the Consult Service Note (in EPIC)

- Write "consult" into the top left field specified "Type"
- Then write your attending's name in the box "Cosigner" (they must cosign ALL of your notes -- daily notes and new consult notes))
- Use the DOT phrase that your fellow has shared with you (generally .RESIDCONSULT) to write your note. Example template at end of document.
- Please try to stay within the ID realm with writing your assessment and plan (unless we discuss other issues in rounds that should specifically be mentioned).

Writing the Consult Service Note (in CPRS)

- Unlike OHSU (but similar to other VA rotations), you will be encountering the note. Complete encounter forms for outpatient, inpatient, and phone notes. “Non-visit notes” are not encounterable – do not bill for these
- “Visit location” must be correct to encounter (Step 1)
    - For inpatients, for EACH day, you have a to create a new visit (Step 1)
    - For clinic patients (in-person, VVC, phone)— the encounter is most often assigned to ID correctly.
        - Exception: For CLC patients in clinic, the CLC visit location sometimes needs to be changed to your ID clinic location.
- The “Primary” provider on encounters must be the attending (otherwise we do not get credit).

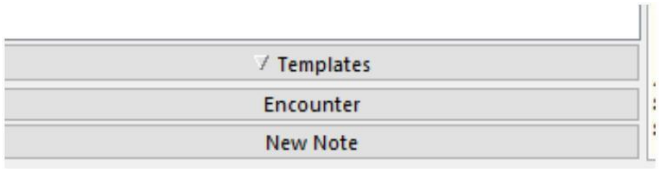
Step 1: Click here



Step 2: Click the “new visit” tab, then type in “inpatient” and scroll down to INPATIENT ID. This step must be done before starting the note.

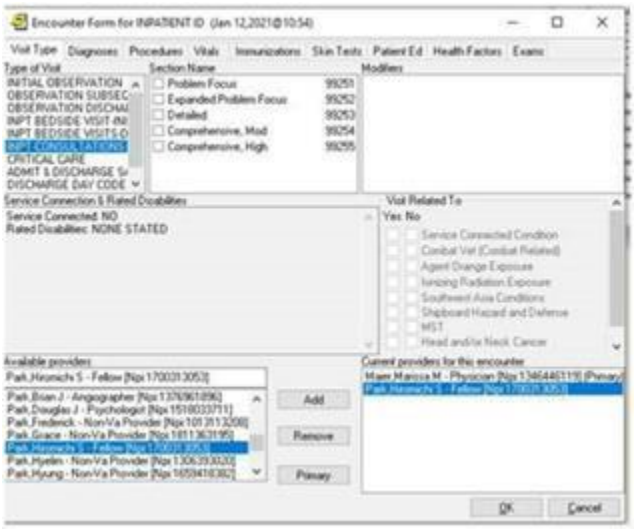
Step 3: Start and complete note (don’t start note before you’ve done the first two)

Step 4: When done with note, and ready to enter the encounter, click “encounter” in the lower left corner



Step 5: Choose your INPATIENT ID encounter, then in the pop-up box:

- Add the attending’s name and click “primary” to get it labelled as primary, then add your name.
- Click whether or not the visit is service connected (sometimes this option isn’t given, in which case don’t worry about it)
- For diagnosis – you may have to clinic around to find something that works. if you add that diagnosis to the problem list, then the next ID visit it will be available on the quick pick option.
- For a NEW consult, choose “INPT-CONSULTATIONS”
- For a FOLLOW UP consult, choose INPT BEDSIDE VISITS- DAILY VISITS
- Choose the billing code that corresponds to best of your judgment—99251-99295



- Inpatient Notes/Consults: Visit Location = INPATIENT ID
    - INFECTIOUS <INPAT - INFECTIOUS DISEASE - INITIAL>
    - INFECTIOUS <INPAT - INFECTIOUS DISEASE - FOLLOWUP>
    - INFECTIOUS <INPAT - TRANSPLANT INFECTIOUS DISEASE - INITIAL>
    - INFECTIOUS <INPAT - TRANSPLANT INFECTIOUS DISEASE - FOLLOW UP>
- Create/use a template similar to your DOT phrase template in EPIC as above or using one of the example VA templates below the OHSU template.

- If you are arranging follow up at the VA ID clinic, specify clearly either at the bottom of your note or as an addendum the date range and which provider(s) you would like to arrange follow-up for, then add Amy Tran an additional signer to assist with scheduling.
- If you are arranging OPAT through the VA, add Lisa Woo, Julia Poole, Amy Tran as a CPRS co-signer to the note.

Documenting your OHSU ID consult note:

Please use the dot phrase .RESIDCONSULT which your fellow will share with you. Below we have an annotated example of a completed consult.

Don't forget to mark Team A or B

Jane S Doe Patient MRN Rm/Bed: 9k21

INPATIENT INFECTIOUS DISEASES INITIAL CONSULT NOTE - TEAM B

Author: RESIDENT NAME
Referring Attending Physician: Dr. X
ID Consult Attending Physician: Dr. Y

History should be chronological and coherent. Start from the very beginning of this problem. Mention prior cultures/antibiotic data

Reason for Consult: Prosthetic Joint Infection

HPI: Jane S Doe is a 72 y.o. woman with a history of diabetes, CAD, and R hip THA in 2009 who was admitted with presumed recurrent R hip PJI. Jane underwent R hip THA in 2009 at St. Charles, Bend due to severe osteoarthritis. She did well until 6 months later when she developed swelling and redness at the surgical site. She underwent washout and exchange of her acetabular liner and femoral head component on 10/10/2009 with cultures that were positive for coagulase negative staphylococcus. She was treated with oxacillin for 6 weeks and placed on doxycycline suppressive therapy. She did well until May 2016 when she developed recurrent pain, swelling and a fluctuant mass about her hip joint. She presented to Orthopedics clinic with the above complaints and denied any fevers or chills. The team was concerned about repeat infection and discussed operative management which the patient agreed to. She underwent washout and removal of all hardware. The operative note stated "gross purulence found upon entry to the hip joint". Cultures grew coagulase-negative Staphylococcus from 6 out of 7 cultures. The patient was started on vancomycin while we await cultures.

Jane is in pain today but overall is feeling better. She denies any fevers, chills or night sweats.

Don't forget the current subjective history.

Read the OP note and include findings.

ROS:
No headache. No nausea, vomiting or diarrhea. No rash. No dysuria.
A 12-point ROS was performed and negative except as detailed above.

Past Medical History:

Past Medical History

Diagnosis	Date

- Cancer, liver, primary (HCC)
- Anemia
- Headache
- Peripheral vascular disease (HCC)
- Blood transfusion without reported diagnosis
- Carcinoma of biliary duct or passage (HCC)

Past Surgical History:
R hip THA in 2009
Washout and exchange right THA acetabular liner and femoral head component on 10/10/2009

Relevant Infectious Disease History:
Sick Contacts: none
Place of Birth: Coos bay

~~You may not report all of these while staffing if you have~~ determined that they aren't relevant to the case.

Past and Current Residences: lived in San Francisco, Seattle, Bend
Travel Hx: most of Europe, Alaska, west and east coast of US, Bahamas, Hawaii
Pets/Animal Exposure: lives on a 20 acre ranch just outside of Bend, Oregon with sheep, chickens, dogs, cats, horses
Occupational Hx: Professor of Economics
Environmental Exposure: hay
Food/Water exposure: well water
Hobbies: ranching, gardening, reading
TB exposure/testing: no history of TB, negative PPD 20 years ago
Prison or Homelessness: no
Immunosuppression: none

Immunization History:

Immunization History

Administered	Date(s) Administered
• Influenza-high dose	01/08/2016

Social History:
Sexual Hx: widowed, male partner currently
HIV status: negative in 2009
IVDU: none
Tobacco: 10 pack/years, quit in 1980
Alcohol: 1 glass of wine a night

Family history:

Family History

Problem	Relation
• Cancer	Mother
• Cancer	Father

Current Medications (Antimicrobials in Bold)
Aspirin 325 mg daily PO
Metoprolol 50mg BID PO
Atorvastatin 40 mg daily PO
Lisinopril 20mg daily PO
Vancomycin 1250 mg daily IV

Recent Antimicrobial Rx:
Vancomycin 5/17- present

Always get the start/stop dates of antibiotics and keep it running throughout your consult notes. We will need this to calculate duration of therapy both inpatient and outpatient.

Allergies:
No Known Allergies

Physical exam:
Last Vitals: BP 106/46 | Pulse 108 | Temp 38.2 °C (100.8 °F) | RR 13 | Wt 82.1 kg (181 lb) | SpO2 98%

24 Hour Vital Min/Max:
Pulse Min: 63 Max: 130
Temp Min: 36.4 °C (97.5 °F) Max: 38.2 °C (100.8 °F)
Resp Min: 9 Max: 28
SpO2 Min: 91 % Max: 100 %

General Appearance: comfortable, NAD

HEENT: EOMI, no conjunctival petechiae, no scleral icterus
OP: clear mucous membranes, good dentition
Neck: supple, no neck masses noted

For the exam, have a plan when you enter the room – if it is endocarditis, look for a murmur or stigmata of endocarditis. If it is a joint, look for dehiscence, etc. Not all exam features are relevant to every case, and you do not need to document things you do not need to do (or did not do)!

Nodes: no palpable lymphadenopathy of cervical, submandibular, supraclavicular chains
Respiratory: clear bilaterally, no wheezes or crackles
Cardiovascular: regular rhythm, no murmurs, rubs
Gastrointestinal: +BS, soft, non-tender, non-distended
Back: no spine or CVA tenderness
Skin: no ecchymoses or rashes
Extremities: warm & well perfused, R hip edematous with dressing in place – clean, dry & intact, JP draining serosanguinous fluid
Neurologic: grossly non-focal
Lines: PIV x 2 – sites okay, no PICC line

Laboratory Data:

Recent Labs

	05/17/16 0026	05/18/16 0543	
WBC	13.16*	13.67*	< >
RBC	3.18*	2.69*	< >
HB	9.8*	8.4*	< >
HCT	29.6*	25.0*	< >
PLT	571*	518*	< >
NEUTROPERC	69.5	69.4	--
LYMPHPERC	18.3	18.2	--
MONOPERC	8.4	8.1	--
BASOPERC	0.4	0.6	--
EOSPERC	2.6	2.4	--

< > = values in this interv l not displayed.

Recent Labs

	05/17/16 0942	05/18/16 0459
NA	132*	137
K	3.3*	3.4
CL	97	103
BICARB	29	28
BUN	10	11
CR	0.65	0.62
GLU	130*	71
CA	8.1*	8.1*

Lab Test Name	Results	Date/Time

Lab Results

- APTT 48.2 5/18/16
- FIBRINOGEN 381 5/18/16

No results found for: ESR
No results found for: CRP

Micro
5/17 blood cultures x 2 no growth to date
5/17l tissue cultures x 6 coagulase-negative Staphylococcus

Susceptibility

	Staphylococcus Epidermidis SUSCEPTIBILITY-MIC
Cefazolin	**R**
Clindamycin	**S**
Erythromycin	**S**
Oxacillin	**R**
Penicillin	**R**
Tetracycline	**R**
Trimethoprim/Sulfa	**S**
Vancomycin	**S**

Do not use a micro dot phrase. Enter it yourself to ensure, (a) you know all the data well, (b) we don't miss anything and (c) it is concise.

Imaging: not available

Problems:

Use the Problem list to name the issue directly and as specifically as you can. This will help you develop an assessment and plan.

1. Staphylococcus epidermidis R hip prosthetic joint infection
2. DMII
3. CAD

Assessment:

The assessment should include your medical decision making. What is the problem, why do you think this? What do you want to do and again, why?

Jane S Doe is a 72 y.o. woman with a history of diabetes, CAD, and R hip THA in 2009 complicated by coagulase-negative Staphylococcus PJI s/p 6 weeks of oxacillin therapy and follow-on doxycycline suppression. She is now admitted with recurrent coagulase-negative Staphylococcus PJI, s/p first stage of 2-stage procedure on vancomycin. At this time, Ms. Doe has undergone source control operative management with the removal of hardware. Considering her sensitivities, we will continue the vancomycin for an estimated 6-8 weeks of therapy while monitoring for toxicities. We will follow inflammatory markers and clinical progression. She will then undergo a time off antibiotics prior to her second stage procedure to ensure eradication of the infection and minimize her risk of reseeding the new hardware.

The patient states her significant other can give her the infusions at home. Will need to discuss ortho needs and discharge with case management to determine safest location. The patient also states she would like to establish care with an ID provider in Bend.

Recs should include: antibiotic choice, DOSE & duration, lab monitoring, follow up plan, IV access and infusion plan.

Recommendations:

1. **Please place picc line (single lumen only)**

2. **Please continue the vancomycin at 1250mg IV daily for now**
3. **Duration of vancomycin will be 6-8 weeks from the time of surgery (5/17)**
4. **Please check a trough prior to the fourth dose (goal 10-15); target trough 10-15**
5. **Please send an ESR and CRP prior to discharge**
6. **Please ensure the patient has the following labs drawn weekly: CBC, CMP, vancomycin trough, ESR, CRP**
7. **Please discuss home infusion with case management**
8. **Please ensure patient has a PCP to follow up labs**
9. **Please ensure patient has ID follow up in Bend as desired. Dr. Z is located in the area. We are happy to see if she decides to return to OHSU for management.**

Recommendations were communicated directly to the primary team. This patient was staffed with Dr. Y who agrees with the above assessment and plan unless otherwise documented.

Thank you for the consult, we will follow along with you.

RESIDENT NAME
Pager: #####

VA NOTE TEMPLATES– IF YOU WANT TO CUT/PASTE THESE INTO CREATING YOUR OWN TEMPLATES TO USE

ID INPATIENT NEW CONSULT

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INFECTIOUS DISEASE INPATIENT CONSULT NOTE – TEAM: A/B/Transplant***

REQUESTING ATTENDING:
CONSULT ATTENDING:
CONSULT QUESTION:
_____

HPI:

ROS:

PMHx:

Social History/Habits:
        Born-
        Current residence-
        Travel-
        Pets/Animal Exposure-
        Occupational Hx-
        Hobbies-
        Marital status/Sexual Hx-
        IDU-
        Tobacco-
        ETOH-
        Homelesness/Prison-
        TB Exposure-
        Sick Contacts-

FH:

MEDS:
|ACTIVE MEDS COMBINED|

ALL:
|ALLERGIES/ADR|
_____
```

PHYSICAL EXAM:
Weight:|PATIENT WEIGHT|; BMI: |BMI SINGLE|
Vitals: T: |TEMPERATURE|; BP: |BLOOD PRESSURE|; R: |RESPIRATION|; P: |PULSE|

GEN: NAD, non-toxic
HEENT: sclera anicteric, OP clear
NECK: supple, no LAD
CHEST: CTA B
CV: RRR, no m/r/g
Abd: S, NT, ND
EXT: no edema, warm
Neuro: MAE, sensation intact
Skin: no rashes

LABS:
|LAB-CBC|
|LAB-DIFF|
|LAB-CHEM 7|
|LAB-LIVER PROFILE|

MICROBIOLOGY:

IMAGING:

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IMPRESSION:

RECOMMENDATIONS:

Thank you for the opportunity to participate in the care of this patient.
The patient was educated on assessment, plan, follow-up.
Impression and Recommendations were communicated to primary team.

The patient was staffed with Dr. *** who agrees with my assessment and plan.

We will continue to follow. *** We will sign off. Followup:

INPATIENT FOLLOW UP

INFECTIOUS DISEASE FOLLOW UP INPATIENT NOTE - TEAM ***A/B/Transplant***

Patient Problem/ID:

Interval update/24-hour events:

S:

MEDS:
|ACTIVE MEDS COMBINED|

ALL:
|ALLERGIES/ADR|

EXAM:
Vitals: T:|TEMPERATURE|; P:|PULSE|; BP:|BLOOD PRESSURE|; R:|RESPIRATION|
GEN: NAD, non-toxic
HEENT: sclera anicteric, OP clear
NECK: supple, no LAD
CHEST: CTA B
CV: RRR, no m/r/g
Abd: S, NT, ND
EXT: no edema, warm
Neuro: MAE, sensation intact
Skin: no rashes

LABS:

|LAB-CBC|
|LAB-DIFF|
|LAB-CHEM 7|
|LAB-LIVER PROFILE|

MICROBIOLOGY:

IMAGING:

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IMPRESSION:

RECOMMENDATIONS:

Thank you for the opportunity to participate in the care of this patient.
The patient was educated on assessment, plan, follow-up.
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The patient was staffed with Dr. *** who agrees with my assessment and plan.

We will continue to follow. *** We will sign off. Followup:

Reading materials and web-based resources:

- Up-to-date (http://www.uptodate.com/contents/search) is a good, basic web-based reference. However, it is inadequate for many complex subspecialty questions.
- Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases (http://site.ebrary.com/lib/ohsu/detail.action?docID=11045510). Mandell's is the go-to ID textbook. While it can be dense reading, it is a good source if you feel able to "dig deeper" on a topic.
- The IDSA Practice Guidelines (https://www.idsociety.org/practice-guideline/practice-guidelines/#/+/0/date_na_dt/desc/) provide up-to-date reviews of best practices for many common ID issues. Guidelines commonly discussed on rounds include:
    - Asymptomatic Bacteriuria
    - *C. difficile* and 2021 update
    - Endocarditis management
    - Prosthetic joint infection
- The Johns Hopkins antibiotic guide (http://hopkins-abxguide.org) is a good source for basic antibiotic information.
- The CDC's website (http://www.cdc.gov) is an excellent reference for issues of public health concern. Particularly useful pages include:
    - Immunization schedules
    - Yellow Book: information for international travel, including pages on infectious diseases risks for countries and destinations that can aid in creating a differential for a fever or illness in a returned traveler.
- HIV resources:
    - The UCSF HIV website (https://hivinsite.ucsf.edu/) is a well-maintained site on HIV/AIDS treatment and prevention.
    - The University of Washington maintains an HIV case-based site: https://www.hiv.uw.edu/
    - Stanford maintains a comprehensive HIV drug resistance database: http://hivdb.stanford.edu
    - The Aids Education and Training Center (AETC) maintains a resource library with guidelines and other references: https://aidsetc.org/resources
- Your fellow and attending will provide relevant journal articles for you to review. As a starting place, below are a few recent articles you will hear referenced on rounds:
    - STOP-IT Trial: fixed-duration antibiotic therapy in patients with source-controlled intra-abdominal infections
    - OVIVA Trial: oral versus IV antibiotics for bone and joint infections
    - POET Trial: partial oral versus IV antibiotics for endocarditis