To the ID Division in behalf of the JHH Department of Antimicrobial Stewardship

Dear colleagues,

We thought that it might be helpful for the ASP to send quarterly communications about new developments and active issues related to antibiotic use at JHH. Below is our first edition. Please let us know if you think of issues that we should address moving forward.

1) Blood cultures: The ASP is leading an initiative to reduce the number of unnecessary blood cultures ordered in hospitalized patients outside of the oncology center.

We are working with medicine and surgery house staff to stop routine collection of blood cultures for every fever or other change in vital signs AND follow up blood cultures for patients with bacteremia not caused by *S. aureus*, *S. lugdenensis*, or *Candida* spp or when there is no concern for endocarditis or other endovascular infection (some examples below).

We have developed an algorithm with indications for <u>initial</u> and <u>follow-up</u> blood cultures for adult non-neutropenic patients. These are available through our website, the Guidelines for Antibiotic Use app and they are attached to this email. In a recent survey, respondents indicated that consultants were seen as a barrier to reducing blood culture draws due to frequent recommendations to draw blood cultures.

These guidelines have been developed by a multidisciplinary team including the Vascular Access team, Clinical Micro, Critical Care, ID, and Surgery providers.

Examples in which follow up blood cultures are not routinely indicated:

- Gram negative bacteremia in patients with adequate source control and improvement on antibiotic therapy
- *E. faecalis* bacteremia due to biliary source if there is source control and adequate clinical response
- S. pneumoniae bacteremia due to pneumonia
- Surveillance cultures of any type (e.g., prior to TPN use, "high risk" patients)
- 2) CAP treatment: Please keep in mind that we recommend Moxifloxacin for CAP <u>only for patients with severe PCN allergy</u>. We do not recommend it for step down therapy at discharge when the patient has responded to Ampicillin/sulbactam or Ceftriaxone-based regimens. Specific step-down recommendations (none of which involve FQs outside of severe PCN allergy) can be found in the app.
- 3) *C. difficile* testing: We continue to see inappropriate *C. diff* testing and treatment in patients without diarrhea and no ileus or diarrhea on laxatives, including patients having only 1 or 2 soft bowel movements per day. Fellows, please keep this in mind when you are approving oral vancomycin. Also, we only recommend empiric oral vancomycin (i.e. C. diff NAAT result not available) for patients with severe illness plus a strong clinical suspicion that *C. diff* is the cause (rare occasion). For all other patients, waiting for C diff NAAT result is advisable.
- **4) ESBL reporting:** the Clinical Micro lab will now report ESBL production for *E. coli* and *K. pneumoniae* and *K. oxytoca* based on Phoenix results

- For *Proteus* ESBL positive by Phoenix (because *Proteus* is not validated by Phoenix) **OR** if *E. coli, K. pneumoniae* or *K. oxytoca* test susceptible to BOTH ceftriaxone and ceftazidime and flagged positive for ESBL by Phoenix, ESBL production will be confirmed with disk test. Confirmatory testing will take an additional 24hs.
- Updated treatment recommendations for ESBL BSI are available in the Guidelines for Antibiotic Use app.
- 5) JHH Antibiotic Guidelines app: If you have not downloaded the ASP Guidelines for Antibiotic Use app (previously known as the orange book) please see attached the instructions on how to download this to your phone.

Thank you so much,

Sara Cosgrove, MD, MS Valeria Fabre, MD Edina Avdic, PharmD Kate Dzintars, PharmD