**MEMORANDUM**

**Date**: 10/31/2017

**RE: Biannual Blood Culture Draw Volume Monitoring & Feedback to Clinical Staff drawing Blood**

**Cultures**

**Date of Study: Oct 12-18, 2017**

Blood culture results are extremely important to clinicians in the management of patients with suspected septicemia (micro-organisms in the blood stream), a life-threatening illness.

In order to provide feedback to those drawing blood cultures, the Boyce and Bynum Pathology Laboratory Microbiology Department conducts a study of the volume of blood that is drawn into each Blood Culture bottle received in the central laboratory for one week. This study is performed on a bi-annual basis.

The amount of blood placed into a blood culture bottle is the most important factor affecting the sensitivity of blood cultures. The volume of blood drawn for culture directly affects the ability to recover micro-organisms from a patient’s blood**.**

**Low volumes of blood may result in false negative blood cultures. Percentage of Low Volume Blood Cultures submitted during this study period was 19.7%; up from 14.0% in the April 2017 study.**

**For best results, the recommended blood culture draw volume for adults is 2 bottles (one SA and one SN) with 10ml of blood in each.**

**Overfilling a bottle may also result in a false negative blood culture.** **Percentage of Overfilled Blood** **Cultures submitted during this study period was 23%; this is up from 17.5% in the April 2017 study.** When the volume of nutrient broth and anticoagulant in the bottle is overwhelmed by the volume of blood, micro-organisms may not be able to grow properly and a false negative may result.

**Do not place more than 10ml blood in the SN (purple cap) bottle or SA (blue cap) bottle, or more than 4ml in the PF (yellow cap) bottle.**

Along with the results, a copy of the Boyce and Bynum Blood Culture Draw Requirements is included. Please use this information as an aid to assist in educating/re-education staff on the critical importance of obtaining optimal draw volumes for Blood Cultures.

Respectfully,

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