**Date:** May 25, 2022

**To:** All D-HH Physicians, Advanced Practice Providers, Residents and Fellows

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**Subject:** Expanded Version of Rapid Sepsis Assay and Stewardship Opportunity

Effective immediately, the Clinical Microbiology Laboratory will be using a new version of the multiplex PCR assay (BCID2) used to provide rapid identification of the most common causes of sepsis when a blood culture bottle flags positive.

The new version of this assay offers an expanded range of bacterial and fungal targets, including staphylococci, streptococci, enterococci, *Listeria*, *Haemophilus*, meningococcus, common enteric Gram-negative rods, *Bacteroides fragilis*, *Pseudomonas*, *Stenotrophomonas*, *Cryptococcus*, and five species of *Candida*. In addition, key genes are detected that predict antimicrobial resistance in certain organisms (methicillin resistance in *S. aureus*, vancomycin resistance in *Enterococcus* spp., extended-spectrum beta-lactamase production and carbapenemase production in Gram-negative rods).

These rapid results provide an opportunity to escalate or de-escalate antimicrobial therapy, optimizing both patient care and antimicrobial stewardship.

A new guidance document is currently available [here](https://cms-intranet.hitchcock.org/intranet/docs/default-source/comprehensive-antimicrobial-program-documents/bcid2-therapy-guidance-document) on the Intranet and will soon be in EPIC (under Web Links/Clinical References/Antibiotic Resource Links) to aid in selection of appropriate empiric antimicrobial therapy based on the results of the rapid sepsis assay.

This guidance document should be used in conjunction with clinical judgement. Individual patient characteristics, including prior culture data, length of stay, and severity of illness should be considered when making empiric antimicrobial prescribing decisions for bloodstream infections.

**For questions or additional information, please contact:** [**Isabella.W.Martin@hitchcock.org**](mailto:Isabella.W.Martin@hitchcock.org) **or** [**Rebecca.Wang@hitchcock.org**](mailto:Rebecca.Wang@hitchcock.org)**.**