

Title:	Outcomes Utilizing Pharmacist Intervention and Rapid Molecular Diagnostic Technology (RMDT) in Patients with Gram-Positive Bloodstream Infections (BSI)
Speaker:	S. L. Revolinski
Author(s):	S. L. Revolinski, J. M. Cowell, W. J. Peppard, A. M. Huang,
Affiliation(s):	Froedtert Hospital, Milwaukee, WI
Background:	
BSIs are associated with high rates of morbidity and mortality. Previous literature has shown that infection-related outcomes can be improved the faster the patient receives appropriate antimicrobial therapy. RMDT coupled with pharmacist intervention can allow for earlier initiation of appropriate therapy, thereby improving patient outcomes.	
Methods:	
A pre-post quasi-experimental study at FH evaluated adult inpatients with gram-positive BSI as identified by gold nanoparticle RMDT. During the pre-intervention control period, the microbiology lab directly notified the provider with the RMDT results. During the intervention period, the microbiology lab notified the clinical pharmacist with the results; the clinical pharmacist then contacted the provider to recommend therapy optimization and provide the RMDT results.	
Results:	
A total of 104 patients were included in the preliminary analysis: 46 in the intervention group (IG) and 58 in the pre-intervention group (pIG). Patients in the two groups were similar with regard to baseline characteristics, including age, gender, co-morbidities, and presence of an infectious diseases physician consult (p=NS). Preliminary data showed patients in the IG had decreased time to initiation of optimal therapy (47.0 hours vs. 57.1 hours, p=0.42), decreased hospital length of stay (LOS) (7.9 days vs. 8.9 days, p=0.7), and decreased ICU LOS (2.8 days vs. 5.3 days, p=0.89). One patient in the IG never received optimal therapy, compared to 6 in the pIG (p=0.13). Time to initiation of effective therapy was similar between the two groups: 4.3 hours in the IG and 3.6 hours in the pIG (p=0.51).	
Conclusions:	
Pharmacist intervention coupled with RMDT decreased time to initiation of optimal antimicrobial therapy, LOS, and ICU LOS in patients with BSI caused by gram-positive organisms identified by gold nanoparticle technology.	

Link: <http://www.abstractsonline.com/Plan/ViewAbstract.aspx?sKey=9c44a255-7792-40b9-82c4-5243f422e3a5&cKey=f7499722-ade2-43dc-ab12-c231872be29d&mKey=5d6b1802-e453-486b-bcbb-b11d1182d8bb>