**INTRODUCTION**

Staphylococcus aureus is a common cause of community- and hospital-acquired bacteremia that is known to be particularly virulent. Infections with this organism have become increasingly difficult to treat due to antibiotic resistance, methicillin-resistant Staphylococcus aureus (MRSA) strains have a demonstrably increased mortality rate (41%) compared to methicillin-susceptible S. aureus (MSSA).1,2 Based on the Infectious Diseases Society of America (IDSA) Guidelines for Treatment of MRSA Infections in Adults and Children, appropriate management of SAB involves monitoring of blood cultures, echocardiography to rule out infectious endocarditis, and appropriate antibiotic selection and duration. A SAB treatment checklist was developed and approved for use within a 13-hospital health system in August 2015. The checklist includes the four components recommended by IDSA.

**METHODS**

- Retrospective chart review of patients with SAB from January 1, 2016, to June 30, 2017.
- Results of this review were compared to a historical data set (n=200) from prior to implementation of the treatment checklist. Patients in this cohort fell under the same study protocol as the current review.
- Primary endpoint was adherence to a four-part bundle: treatment of MRSA Infections in Adults and Children, appropriate antibiotic selection and duration. A SAB treatment checklist was recommended by IDSA.
- Results of this review were compared to a historical data set (n=200). Retrospective chart review of patients with SAB from January 1, 2016, to June 30, 2017.
- IDSA guidelines were followed.

**RESULTS**

- 200 patients met the inclusion criteria in the post-implementation period; 14 were excluded due to transfer to another hospital (n=7) or transition to comfort care (n=7).
- Bundle adherence was significantly improved in patients with an ID consult compared to those without, and this applied to an analysis of the pre-implementation group, the post-implementation group, and pooled pre- and post-implementation data (p<0.001 for all).
- There were no statistically significant differences in adherence to the checklist after implementation. Imaging, repeat blood cultures, antibiotic selection, and antibiotic duration all improved numerically.
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- ID providers were consulted on a greater number of patients post-implementation.
- Bundle compliance may be difficult in clinical contexts that require a different approach to therapy based on patient specific factors.
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**DISCUSSION**

- The authors have no conflicts of interest or financial ties to disclose.