

change in DOT/1,000 PD increased in the period without automatic stop orders compared to the period with automatic stop orders, it was not statistically significant ( $P = .41$ ). Manual chart abstraction revealed that in the period with automatic stop orders, 9 of 150 patients had 17 unintentionally missed days of therapy, whereas none (of 150 patients) in the period without automatic stop orders did. **Conclusions:** Following removal of the automatic stop orders, there was an overall increase in antibiotic use, although the change in monthly trend of antibiotic use was not significantly different. Even with a dashboard to identify missed doses, there was still a risk of unintentionally missed doses in the period with automatic stop orders. Therefore, this risk should be weighed against the modest difference in antibiotic utilization garnered from automatic stop orders.

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Poster Presentation

#### Impact of Screening for Methicillin-Resistant *Staphylococcus aureus* (MRSA) in Pneumonia on Vancomycin Utilization

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**Background:** Methicillin-Resistant *Staphylococcus aureus* (MRSA) is frequently targeted with empiric treatment for pneumonia in the hospital. Obtaining quality lower respiratory tract cultures to promote appropriate de-escalation can be difficult or impractical. Nasal screening for MRSA has a high negative predictive value for MRSA pneumonia and can be an effective tool for early de-escalation. **Methods:** A pharmacist-driven process for nasopharyngeal MRSA screening of patients prescribed intravenous vancomycin was implemented in October 2018. Vancomycin utilization was extracted from the electronic medical record (EMR) and summarized as days of therapy per 1,000 patient days (DOT/1,000 PD). Vancomycin utilization data for the 6 months following process implementation (November 2018–April 2019) were compared to the same period from the previous year (November 2017–April 2018). Specific patient outcomes data were manually collected for patients prescribed vancomycin for

pneumonia during the first 2 months following process implementation (November–December 2018; postintervention group) and comparable months (November–December 2017; preintervention group). Data were analyzed using the  $\chi^2$  test (nominal data) and Mann–Whitney U test (continuous data). **Results:** Total vancomycin utilization decreased from a monthly average of 114 to 95 DOT/1,000 PD (17% reduction) and from 27 to 14 DOT/1,000 PD for pneumonia (48% reduction). In-patient mortality was unchanged following process implementation at 17.2% versus 17.5% in the pre- and postintervention groups, respectively. Other clinical outcomes were also similar between the pre- and postintervention groups (Table 1). Fewer vancomycin levels were obtained following implementation with 34.4% of patients (0.61 levels per patient) having a level obtained in the preintervention group compared to 21.6% (0.30 levels per patient;  $P \leq .001$ ) in the postintervention group. **Conclusions:** Nasopharyngeal MRSA screening of patients prescribed vancomycin for pneumonia is an effective antimicrobial stewardship strategy to reduce unnecessary use of anti-MRSA therapy without negatively impacting clinical outcomes.

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#### Impact of Seasonality and Influenza Rates on Interventions to Reduce Hospital-Acquired *Clostridioides difficile* Rates

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**Table 1.** Clinical and process outcomes between comparator groups.

	Pre-Group (n=64)	Post-Group (n=97)	P-value
Vancomycin Duration (Days)*	2.9 (1.8, 4.2)	2.0 (1.5, 2.6)	<b>0.001</b>
Vancomycin Levels/patient	0.61	0.30	<b>&lt;0.001</b>
Patients with Vancomycin Level, n(%)	22 (34.4)	21(21.6)	0.109
De-Escalation, n(%)	20 (31.2)	91 (93.8)	<b>&lt;0.001</b>
Escalation/Restart, n(%)	8 (12.5)	2 (2.0)	<b>0.015</b>
Acute kidney injury, n(%)	13 (22.8)	12 (15.2)	0.364
Length-of-Stay(Days)*	5.5 (3, 10)	6.5 (3, 11)	0.433
ICU admission, n(%)	24 (37.5)	38 (39.2)	0.962
ICU Length-of-Stay(Days)*	5 (2, 7)	3.5 (2, 7)	0.549
Inpatient Mortality, n(%)	11 (17.2)	17 (17.5)	0.956

\* Continuous variable shown as median, (interquartile range)