

887. Opportunities to Improve Completeness of MRSA Bloodstream Infection Reporting From Outpatient Hemodialysis Facilities to the National Healthcare Safety Network

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Background. In 2012 the Centers for Medicare and Medicaid Services provided incentives for outpatient dialysis facilities to report bloodstream infections (BSIs) among hemodialysis (HD) patients to the National Healthcare Safety Network (NHSN). Use of a BSI metric for performance measurement requires accurate and complete data from the > 5,000 dialysis facilities now participating in NHSN. We compared data reported to NHSN with data from the CDC's Emerging Infections Program (EIP) to evaluate the completeness of NHSN BSI reporting.

Methods. EIP conducts active, population-based surveillance in 9 states for invasive methicillin-resistant *Staphylococcus aureus* (MRSA) infections, including BSIs, and collects data regarding chronic dialysis status and the setting where blood cultures were drawn. Positive blood cultures drawn as an outpatient or on day 1 or 2 of hospitalization in a chronic HD patient are reportable to NHSN. Cases of MRSA BSI from EIP during January–June 2013 among chronic HD patients were matched to NHSN BSIs reported from dialysis facilities within EIP geographic areas by patient sex and date of birth. Two events were classified as a match if the reported BSI event dates were within 5 days of each other.

Results. Among HD facilities within the EIP geographic area, 275 S. aureus BSIs were reported to NHSN: 72 (26%) MRSA, 134 (49%) methicillin-sensitive, and 69 (25%) without susceptibility data. EIP surveillance identified 332 MRSA BSIs among chronic HD patients. Of these, only 33 (10%) matched to a NHSN MRSA BSI, 16 (5%) matched to a NHSN S. aureus BSI without susceptibility data, and 283 (85%) did not match. An additional 39 MRSA BSI were reported to NHSN but not EIP. Among EIP MRSA BSIs initially identified at dialysis facilities, 36/57 (63%) matched to a NHSN S. aureus BSI, whereas only 17/275 EIP MRSA BSIs (6%) with initial blood culture drawn on day 1 or 2 of hospitalization matched to a NHSN S. aureus BSI ($P < 0.001$).

Conclusion. MRSA BSI data identified substantial gaps in reporting of MRSA BSI from outpatient HD facilities to NHSN, particularly those identified in hospitals. Opportunities also exist to improve antimicrobial susceptibility reporting. Improving completeness of dialysis facilities' reporting will require coordinated efforts to strengthen inter-facility communication.

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