



CLABSI underreporting remains a major concern; validations conducted by SHDs provide an important impetus for improved reporting. SHDs are uniquely positioned to engage facilities in collaborative validation reviews that allow transparency, education, and relationship building” Bagchi et al (2018).

Abstract:

Background: Numerous state health departments (SHDs) have validated central line-associated bloodstream infection (CLABSI) data, and results from these studies provide important insights into the accuracy of CLABSI reporting to the National Healthcare Safety Network (NHSN) and remediable shortcomings in adherence to the CLABSI definition and criteria.

Methods: State CLABSI validation results were obtained from peer-reviewed publications, reports on SHD Web sites, and via personal communications with the SHD health care-associated infections coordinator. Data accuracy measures included pooled mean sensitivity, specificity, positive predictive value, and negative predictive value. Total CLABSI error rate was computed as the proportion of mismatches among total records reviewed. When available, reasons for CLABSI misclassification reported by SHDs were reviewed.

Results: At least 23 SHDs that have completed CLABSI validations indicated sensitivity

(pooled mean, 82.9%), specificity (pooled mean, 98.5%), positive predictive value (pooled mean, 94.1%), and negative predictive value (pooled mean, 95.9%) of CLABSI reporting. The pooled error rate of CLABSI reporting was 4.4%. Reasons for CLABSI misclassification included incorrect secondary bloodstream infection attribution, misapplication of CLABSI definition, missed case finding, applying clinical over surveillance definitions, misapplication of laboratory-confirmed bloodstream infection 2 definition, and misapplication of general NHSN definitions.

Conclusions: CLABSI underreporting remains a major concern; validations conducted by SHDs provide an important impetus for improved reporting. SHDs are uniquely positioned to engage facilities in collaborative validation reviews that allow transparency, education, and relationship building.

Reference:

Bagchi, S., Watkins, J., Pollock, D.A., Edwards, J.R. and Allen-Bridson, K. (2018) State health department validations of central line-associated bloodstream infection events reported via the National Healthcare Safety Network. *American Journal of Infection Control*. June 11th. .

DOI: <https://doi.org/10.1016/j.ajic.2018.04.233>

