



Intravenous literature: DiGiorgio, M.J., Fatica, C., Oden, M., Bolwell, B., Sekeres, M., Kalaycio, M., Akins, P., Shane, C., Bako, J., Gordon, S.M. and Fraser, T.G. (2012) Development of a Modified Surveillance Definition of Central Line Associated Bloodstream Infections for Patients with Hematologic Malignancies. *Infection Control and Hospital Epidemiology*. 33(9), p.865-868.

Abstract:

Objective – To develop a modified surveillance definition of central line associated bloodstream infection (mCLABSI) specific for our population of patients with hematologic malignancies to better support ongoing improvement efforts at our hospital.

Design – Retrospective cohort study.

Patients – Hematologic malignancies population in a 1,200-bed tertiary care hospital on a 22-bed bone marrow transplant (BMT) unit and a 22-bed leukemia unit.

Methods – An mCLABSI definition was developed, and pathogens and rates were compared against those determined using the National Healthcare Safety Network (NHSN) definition.

Results – By the NHSN definition the CLABSI rate on the BMT unit was 6.0 per 1,000 central line days, and by the mCLABSI definition the rate was 2.0 per 1,000 line-days (). On the leukemia unit, the NHSN CLABSI rate was 14.4 per 1,000 line-days, and the mCLABSI rate

was 8.2 per 1,000 line-days (). The top 3 CLABSI pathogens by the NHSN definition were Enterococcus species, Klebsiella species, and Escherichia coli. The top 3 CLABSI pathogens by the mCLABSI definition were coagulase-negative Staphylococcus (CONS), Pseudomonas aeruginosa, and Staphylococcus aureus. The difference in the incidence of CONS as a cause of CLABSI under the 2 definitions was statistically significant ().

Conclusions - A modified surveillance definition of CLABSI was associated with an increase in the identification of staphylococci as the cause of CLABSIs, as opposed to enteric pathogens, and a decrease in CLABSI rates.

