The objective of this study was to evaluate whether antibiotic use in the PICU changed in association with a reduction in blood culture utilization" Sick-Samuels et al (2019)

Abstract:

Blood cultures are essential for the evaluation of sepsis. However, they may sometimes be obtained inappropriately, leading to high false-positive rates, largely due to contamination. As a quality improvement project, clinician decision-support tools for evaluating patients with fever or signs and symptoms of sepsis were implemented in April 2014 in our pediatric intensive care unit (PICU). This initiative resulted in a 46% decrease in blood culture obtainment and has been replicated in other institutions. It is important to evaluate antibiotic use as a balancing measure because a reduction in blood cultures could lead to an increase in antibiotic treatment days if clinicians continued empiric treatment in scenarios when blood culture results were not available. The objective of this study was to evaluate whether antibiotic use in the PICU changed in association with a reduction in blood culture utilization.

You may also be interested in…

Blood culture contamination quality improvement project
Phlebotomy teams and blood culture contamination reduction
Reducing blood culture contamination rates

Reference:
Sick-Samuels, A.C., Woods-Hill, C.Z., Fackler, J.C., Tamma, P.D., Klaus, S.A., Colantuoni, E.E. and Milstone, A.M. (2019) Association of a blood culture utilization intervention on antibiotic use in a pediatric intensive care unit. Infection Control and Hospital Epidemiology. February 15th. .

doi: 10.1017/ice.2019.10.