“EDs with high blood culture contamination rates should strongly consider evidence-based strategies to reduce contamination. In addition to improving quality, implementing a sterile collection kit or phlebotomy team strategy is likely to result in net cost savings.” Self et al (2014).

Reference:

Blood culture contamination in the emergency department http://ctt.ec/b24b5+ @ivteam #ivteam

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Abstract:

Objective: Blood culture collection practices that reduce contamination, such as sterile blood culture collection kits and phlebotomy teams, increase up-front costs for collecting cultures but may lead to net savings by eliminating downstream costs associated with contamination. The study objective was to compare overall hospital costs associated with 3 collection strategies: usual care, sterile kits, and phlebotomy teams.
Design: Cost analysis.

Setting: This analysis was conducted from the perspective of a hospital leadership team selecting a blood culture collection strategy for an adult emergency department (ED) with 8,000 cultures drawn annually.

Methods: Total hospital costs associated with 3 strategies were compared: (1) usual care, with nurses collecting cultures without a standardized protocol; (2) sterile kits, with nurses using a dedicated sterile collection kit; and (3) phlebotomy teams, with cultures collected by laboratory-based phlebotomists. In the base case, contamination rates associated with usual care, sterile kits, and phlebotomy teams were assumed to be 4.34%, 1.68%, and 1.10%, respectively. Total hospital costs included costs of collecting cultures and hospitalization costs according to culture results (negative, true positive, and contaminated).

Results: Compared with usual care, annual net savings using the sterile kit and phlebotomy team strategies were $483,219 and $288,980, respectively. Both strategies remained less costly than usual care across a broad range of sensitivity analyses.

Conclusions: EDs with high blood culture contamination rates should strongly consider evidence-based strategies to reduce contamination. In addition to improving quality, implementing a sterile collection kit or phlebotomy team strategy is likely to result in net cost savings.

Other intravenous and vascular access resources that may be of interest (External links – IVTEAM has no responsibility for content).