Blood Culture Contamination: How low can you go?
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Program Goals

• Reduce blood culture contamination rates to <3.0%

• Develop a sustainable program

• Build staff ownership
Relevance

• National standard <3.0%

• Increased healthcare related costs

• Increased potential for harm
Strategy and Implementation

• Identified the problem
  – Monthly contamination rates: 1.2%-6.4%

• Problem analysis
  – Review of data for trends
  – Observation
  – Literature review
Strategy and Implementation

• Develop plan and measures
  – Blood Culture Crew
  – Elimination of high risk collection methods
  – Feedback plan

• Implement
  – Skills competency
Evaluation

Emergency Department Blood Culture Contamination Rates

Implementation

Contamination Rate
Goal

Rate

Contamination Rate
Goal

Sept-13
Oct-13
Nov-13
Dec-13
Jan-14
Feb-14
Mar-14
Apr-14
May-14
Jun-14
Jul-14
Aug-14
Sept-14
Oct-14
Nov-14
Dec-14
Jan-15
Feb-15
Mar-15
Apr-15
May-15
Jun-15
Jul-15
Aug-15
Sept-15
Oct-15
Nov-15
Implications for practice

• End user involvement
• Culture of ownership & safety
• Collaboration
References


Self, W.H., et al. Blood culture collection through peripheral catheters increase the risk of specimen contamination among adult emergency department patients. *Infection Control and Hospital Epidemiology, 33*(5), 524-526
Questions