

Conference abstract

Improving Urine Culture Stewardship to Reduce Inappropriate CAUTI Diagnoses

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Keywords: 2026 QI Summit Poster Presentation

<https://doi.org/10.69735/001c.163805>

INTRODUCTION

To reduce inappropriate urine culture orders and improve documentation through a standardized review process, with the goal of preventing avoidable CAUTI events.

METHODS

Baseline data included urine cultures collected on hospital day ≥ 3 with microbial growth. Pre-intervention analysis evaluated appropriateness of culture indications, symptom documentation, and concordance between order indications and clinical notes.

A standardized urine culture review form was implemented on December 15, 2025. The intervention required nursing staff to confirm clinical indications with providers prior to laboratory processing, verify catheter presence, ensure supervisor approval, and replace catheters in place for >14 days before specimen collection. A Plan-Do-Study-Act (PDSA) approach guided implementation.

RESULTS

Baseline analysis demonstrated that only 72% of urine cultures were appropriate, with 73% of inappropriate cultures ordered in the absence of symptoms. Additionally, 60% of order indications were discordant with progress note documentation. Among appropriate cultures, 36% were contaminated.

Post-intervention audit (January 2026) showed 96% compliance with completion of the urine culture review form. The last CAUTI prior to intervention occurred on December 12, 2025, and the first post-intervention CAUTI was identified on March 6, 2026, suggesting a temporal reduction in CAUTI events following implementation.

CONCLUSIONS

Inappropriate urine culture ordering contributes significantly to unnecessary testing and potential CAUTI misclassification. Implementation of a standardized urine culture review form demonstrated high compliance and represents a promising strategy to improve diagnostic stewardship. Ongoing monitoring is required to assess sustained impact on urine culture utilization and CAUTI rates.



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