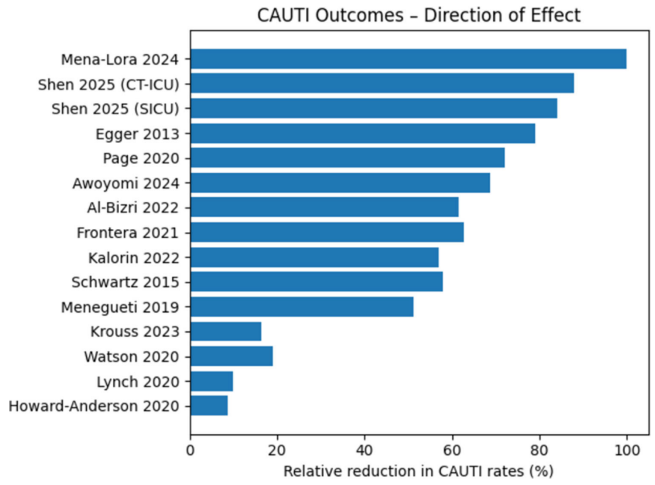
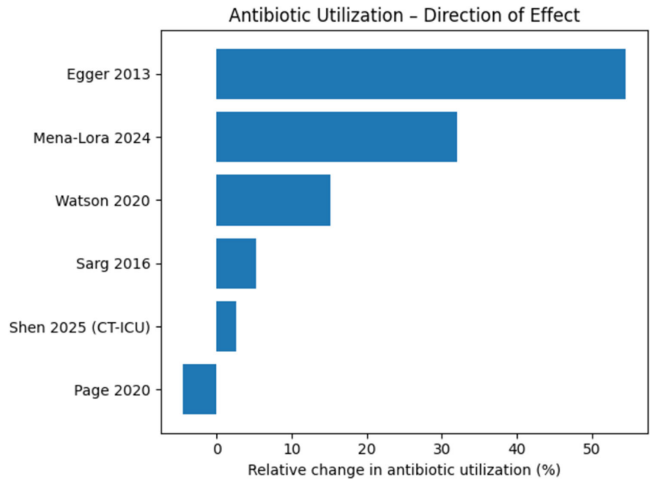




strategies. Interventions included reflex urine culture protocols, catheter replacement prior to specimen collection, educational initiatives, and multicomponent stewardship bundles. Outcomes of interest were urine culture utilization, CAUTI rates, and antibiotic utilization. Data were extracted independently by two reviewers using Covidence. Results were synthesized descriptively, and ranges of relative change were calculated by the review authors when pre- and post-intervention rates were explicitly reported. **Results: Conclusion:** Urine culture stewardship interventions in hospitalized adults with urinary catheters are consistently associated with meaningful reductions in urine culture utilization and CAUTI rates, with variable but generally favorable effects on antibiotic use. Education-based and reflex urine culture strategies, particularly when embedded within multicomponent stewardship bundles, appear most frequently studied and effective. These findings highlight the potential of diagnostic stewardship as a key component of infection prevention and antimicrobial stewardship efforts, while underscoring the need for standardized outcome reporting and to better quantify downstream clinical impact.

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Presentation Type:
Poster Presentation
Subject Category: CAUTI

Urine Collection Practices in Catheterized Adults: Implications for UTI Classification and Antibiotic Use‡

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Background: Urine testing is common among hospitalized patients with indwelling urinary catheters, yet variation in collection practices may compromise diagnostic accuracy and contribute to unnecessary downstream interventions. Guidelines recommend avoiding sampling from indwelling catheters when feasible to reduce contamination and detection of asymptomatic colonization. However, real-world compliance and its relationship to diagnostic urine test results, subsequent UTI diagnosis, and antimicrobial prescribing remain incompletely characterized. **Methods:** We conducted a retrospective medical record review of adult patients who underwent urine testing between March and November 2024 and had an indwelling urinary catheter or catheter removal within the prior 24 hours. Urine samples were classified as compliant if obtained after catheter removal and noncompliant if collected with a catheter in place. Analyses included all urine samples, with urinalysis-specific analyses limited to samples with available results. Urine collection practices, urinalysis parameters, urine culture outcomes, provider-documented UTI diagnoses, concordance with symptom-based criteria and IDSA/NHSN definitions, and antimicrobial prescribing following urine testing (receipt, timing, route, and duration) were summarized descriptively and stratified by compliance status. **Results:** A total of 921 urine samples were included; 663 had an initial urinalysis with reflex urine culture, while the remainder underwent urine culture alone. Samples compliant with recommended collection practices accounted for 59% of cases. Among samples with urinalysis, overall positivity was similar in compliant and noncompliant samples (57% vs 55%), with comparable urinalysis component positivity across compliance groups. Urine culture positivity was also similar across compliance groups in both reflex-culture and culture-only samples (29% vs 27% and 27% vs 29%). Gram-negative organisms predominated (13-15%), followed by fungi (7-12%) and Gram-positive organisms (2-4%), with fungal isolates more common among noncompliant samples. Antimicrobial therapy was prescribed in 19% of compliant samples compared with 15% of noncompliant samples and was frequently initiated before culture results in both groups. Median treatment duration was similar (7 vs 6 days).

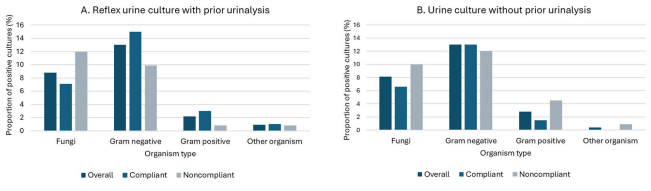


Figure 1. Urine culture organism distribution by urine collection compliance

‡The abstract titles in this supplement have been corrected since original publication. A notice detailing the changes has been published at https://doi.org/10.1017/ash.2026.10802.

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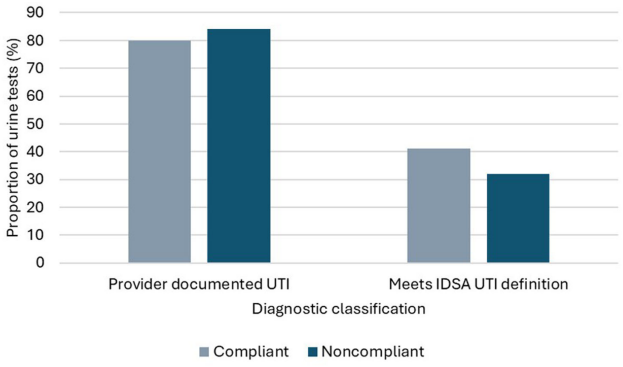


Figure 2: UTI classification by urine collection compliance

Provider-documented UTI diagnoses were common (80% vs 84%); however, only a portion met standardized UTI definitions (IDSA criteria: 41% compliant vs 32% noncompliant), with greater concordance observed among compliant samples. **Conclusion:** Recommended urine collection practices were followed in just over half of samples, with similar urine test positivity across compliance groups. Differences in organism distribution, antimicrobial prescribing, and concordance between provider-documented and standardized UTI diagnoses suggest that urine collection practices may influence diagnostic classification and antimicrobial decision-making in hospitalized adults.

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Subject Category: CLABSI
CLABSI prevention with secure chat messaging‡
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[1]Advocate Health

Background: Central line-associated bloodstream infections (CLABSIs) remain a significant source of preventable harm in hospitalized patients, often resulting from missed dressing changes and mislabeled tubing. Research indicates that most CLABSIs occur more than five days after catheter insertion, highlighting the importance of maintenance practices. This project, conducted at Atrium Health Union/Union West, aimed to reduce CLABSI rates by improving adherence to central line care protocols through innovative use of secure chat photography. **Methods:** Using the Plan-Do-Study-Act (PDSA) framework, the team identified procedural gaps in dressing changes and tubing labeling. A novel intervention was implemented: frontline nurses sent secure chat photos of central line dressings and tubing labels to leadership at each shift change via the electronic medical record (EMR). This real-time visual verification system enhanced compliance monitoring and accountability. Stakeholder engagement was prioritized through shared governance, pilot testing, and feedback loops. Pre- and post-intervention audits measured compliance, and statistical analysis validated the impact. **Results:** Pre-intervention compliance with central line maintenance protocols was 83%. Post-intervention, compliance improved to a range of 92.4% to 100% across seven units, averaging 95.5% with sustained results for a year thus far. This improvement correlated with a reduction in CLABSI rates, contributing to better patient outcomes and potential cost savings, as each CLABSI can cost between $16,000 and $45,000. The project is on track to meet its goal of ≥99% compliance, supported by ongoing audits, leadership feedback, and integration of the secure photo process into standard workflows. **Conclusion:** This initiative successfully leveraged digital tools to address a persistent clinical challenge. Secure photo documentation via EMR messaging proved to be an effective, scalable, and low-cost strategy for improving central line care compliance. The intervention not only enhanced patient safety and reduced infection risk but also promoted health equity by standardizing care across units. Its replicability across other healthcare settings makes it a valuable model for broader dissemination. The project demonstrates how technology-driven solutions can transform infection prevention practices and support institutional goals of safety, quality, and equity in care delivery.

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Presentation Type:
Poster Presentation
Subject Category: CLABSI
Optimizing Pediatric ICU Central Line Maintenance and Removal Through Weekly Multidisciplinary CLABSI Prevention Rounds‡
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Background: Central line-associated bloodstream infections (CLABSIs) remain a challenge in pediatric intensive care units (PICUs); central line days have been directly correlated with risk of CLABSI. The Mayo Clinic PICU is a 23-bed multidisciplinary unit including dedicated bone marrow transplant beds with an average of 1048 admissions annually. In 2024, the unit's CLABSI rate was 0.82 per 1,000 central line days or approximately 1–3 CLABSIs per year. Weekly multidisciplinary CLABSI Prevention Rounds were piloted from August 2024 to March 2025 with the aim of reducing central line device utilization rate as a method to reduce CLABSI risk. **Methods:** A multidisciplinary team of Clinical Nurse Specialists (CNS), Nurse Managers, and off-service PICU physicians conducted weekly CLABSI rounds on PICU beds (excluding 4 BMT beds), meeting with each bedside nurse as well as the on-service providers. The CLABSI team assessed central line necessity using a standard questionnaire and provided education to physicians and nurses regarding central line care and CLABSI prevention. Monthly data were compared for the same 8 calendar months pre versus post intervention for central line days, patient days, and device utilization rate (DUR; central line days/patient days), both unadjusted and adjusted for PRISM (Pediatric Risk of Mortality) 3 severity of illness score. Pre- and post-implementation staff surveys assessed confidence in line management and interdisciplinary communication using Likert scales. **Results:** Thirty-two CLABSI rounds with a total of 118 individual patients and 45 discrete interventions were noted over 8 months and compared to the 8 pre-intervention corresponding months. Pre versus post monthly DUR was 0.42 [0.32–0.57] vs 0.46 [0.30–0.55], $p = 0.49$ (PRISM 3–adjusted $p = 0.97$). Nursing confidence in 'discussing central line need' significantly improved post-implementation, 5 [4–5] vs 5 [5–5], $p = 0.035$. Nurses also positively perceived third-party involvement in need assessment, 4 [3–4] vs 4 [3–4], $p = 0.06$. All surveyed clinicians trended toward being less likely to think a central line was left in too long, 3 [3–4] vs 3 [2–4], $p = 0.06$. **Conclusion:** Structured weekly multidisciplinary CLABSI rounds are a feasible intervention that empowers bedside nurses and improves confidence in line maintenance and interdisciplinary communication. Median DUR was not significantly altered by the intervention, but nursing perception of central line management improved qualitatively in pre- versus post-implementation surveys. Continued expansion of multidisciplinary initiatives addressing central line necessity and management is needed to further evaluate overall effects on DUR and CLABSI incidence.

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