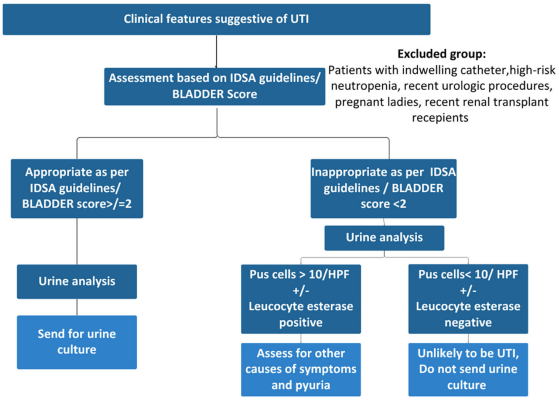
Positive predictive value		Negative predictive value	
Bladder score >/2:	77%	Bladder score<2:	88%
Bladder score + pyuria >10cells/ hpf:	89.28%	Bladder score + pyuria< 10 cells/hpf :	100%
Bladder score + pyuria >10 cells/hpf + Leucocyte esterase positive:	88.23%	Bladder score + pyuria<10 cells/hpf + Lecocyte esterase negative:	100%

Table 1. Performance of clinical score and urine analysis for diagnosis of UTI



in urine culture has the potential to improve culture appropriateness, reduce unnecessary antibiotic use.

Antimicrobial Stewardship & Healthcare Epidemiology 2025;5(Suppl. S2):s85–s86

doi:10.1017/ash.2025.308

Presentation Type:
Poster Presentation
Subject Category: Diagnostic Stewardship

Diagnostic Stewardship of Gastrointestinal Pathogen Panels: Impact on Test Utilization and Hospital Costs

Aaron Pathak[1], Todd Lasco[2], Mayar Al Mohajer[3] and Rogers Kisame
[1]Baylor College of Medicine; [2]Baylor College of Medicine and [3]Baylor College of Medicine

Background: While broad gastrointestinal (GI) multiplex polymerase chain reaction (PCR) panels can test for various bacterial, viral, and parasitic pathogens, their overuse may yield a high financial burden on hospital systems without clear clinical relevance of all covered organisms. This study aims to assess whether a multifaceted quality improvement intervention directing clinicians to a more limited panel and requiring several restriction criteria would reduce direct hospital costs for patients with suspected infectious diarrhea. **Methods:** Our quasi-experimental study included patients from a quaternary academic medical center in Texas. In the pre-intervention period (March 2024-June 2024), the Biofire® FilmArray® Gastrointestinal Panel (BioFire Diagnostics, Salt Lake City, UT) was the preferred test for patients presenting with suspected infectious diarrhea and had minimal ordering restrictions (Figure 1). In the post-intervention period (August 2024- November 2024), a second narrower panel (GI Common Pathogen PCR panel) was introduced as the preferred test with some restrictions, while the Biofire® FilmArray® GI Panel was only available to severely immunosuppressed patients and required Infectious Diseases consultation. The restriction criteria were built in the Epic electronic health system (Epic System Corporation, Verona, WI). Information on the intervention was distributed through email memorandums and an internal secure clinical messaging platform. Count control charts were used to visualize the number of FilmArray® GI Panels conducted, while individual control charts were used for the direct laboratory costs of both GI panels. **Results:** 893 patients had suspected infectious diarrhea in the study period (451 pre-intervention, 442 post-intervention). The average number of weekly FilmArray® GI Panel tests performed dropped from 24.8 to 1.9 (Figure 2), and an average of 21.9 GI Common Panel tests per week were performed in the post-intervention period. The average weekly testing cost decreased from $3,418.10 to $940.40 after the intervention (Figure 3). The two control charts demonstrated the presence of special cause variation for both outcomes (weekly FilmArray® GI Panel tests and combined costs), indicating a change after the intervention. **Conclusion:** Although the total number of tests did not change after adjusting the restriction criteria, this intervention significantly reduced the direct laboratory costs of the GI Panels after guiding clinicians to a more economical test (GI Common Panel), with an estimated annual savings of $128,840. This study provides a diagnostic stewardship opportunity for cost reduction in healthcare systems. Future evaluation

Figure 1. Overview of Quality Improvement Restrictions

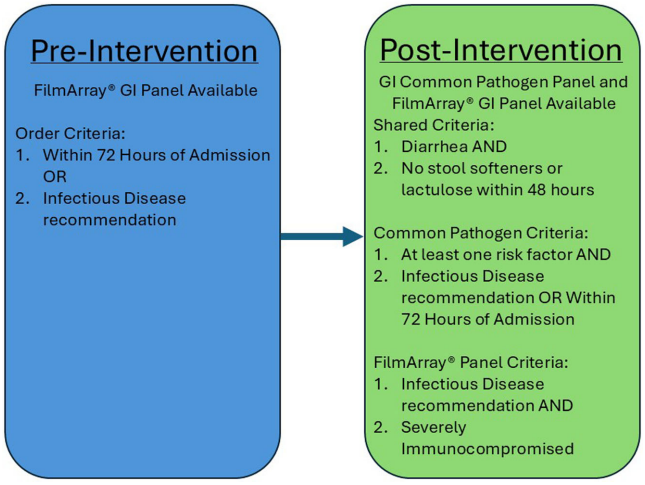


Figure 2. Number of FilmArray® GI Panels per Week

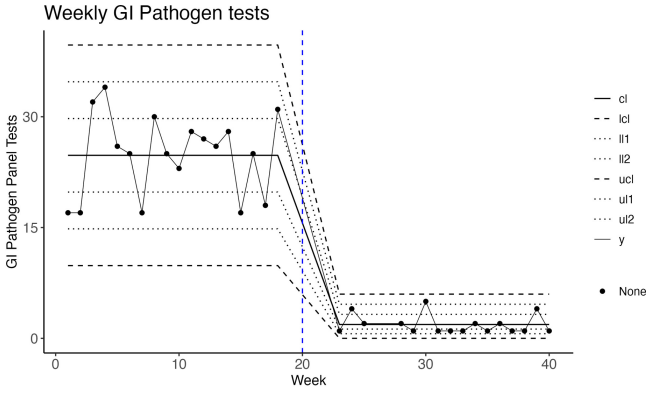
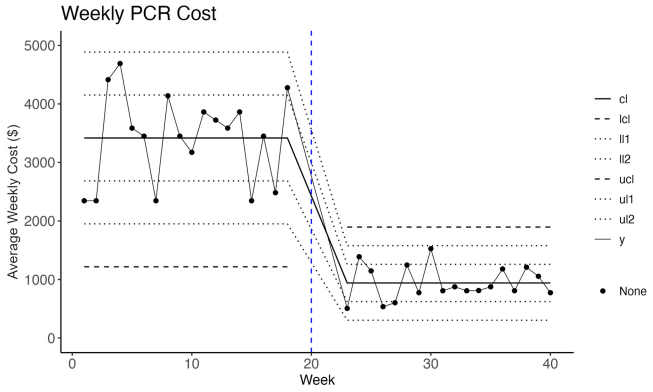


Figure 3. Total Direct Laboratory Costs of FilmArray® and Common Pathogen GI Panels per Week



will analyze its impact on antimicrobial utilization and infection control metrics.

Antimicrobial Stewardship & Healthcare Epidemiology 2025;5(Suppl. S2):s86–s87
doi:10.1017/ash.2025.309

Presentation Type:
Poster Presentation
Subject Category: Diagnostic Stewardship
Blood Culture Testing Outcomes among Non-Malarial Febrile Children at Antimicrobial Resistance Surveillance Sites in Uganda
Rogers Kisame

Background: Globally, Antimicrobial Resistance is a growing threat to global health security and economic development. Due to multidrug resistance, bloodstream infections (BSI) are a growing public health concern and a common cause of morbidity and mortality, especially among non-malarial febrile children **Method:** This study assessed laboratory BC process outcomes among non-malarial febrile children below five years of age at five AMR surveillance sites in Uganda between 2017 and 2018. Secondary BC testing data was reviewed against established standards. **Result:** Overall, 959 BC specimens were processed. Of these, 91% were from female patients, neonates, infants, and young children (1-48 months). A total of 37 AMR priority pathogens were identified; Staphylococcus aureus was predominant (54%), followed by Escherichia coli (19%). The diagnostic yield was low (4.9%). Only 6.3% of isolates were identified. AST was performed on 70% (18/26) of identified AMR priority isolates, and only 40% of these tests adhered to recommended standards. **Conclusion:** Interventions are needed to improve laboratory BC practices for effective patient management through targeted antimicrobial therapy and AMR surveillance in Uganda. Further research on process documentation, diagnostic yield, and a review of patient outcomes for all hospitalized febrile patients is needed.

Antimicrobial Stewardship & Healthcare Epidemiology 2025;5(Suppl. S2):s87
doi:10.1017/ash.2025.310

Presentation Type:
Poster Presentation
Subject Category: Diagnostic Stewardship
Low Diagnostic Yield of Repeating a Urine Culture in the Inpatient Setting
Eugenia Miranti[1], Mindy Sampson[2], John Shepard[1], Guillermo Rodriguez Nava[3], Karen McIntyre[1], Erika Paola Viana Cardenas[2], Barbara Trautner[4] and Jorge Salinas[2]
[1]Stanford Health Care; [2]Stanford University; [3]Stanford University School of Medicine and [4]Baylor College of Medicine

Background: Duplicative laboratory testing is prevalent in health care. Prior research surrounding repeat urine cultures showed that when a negative index culture is repeated within 48 hours, less than 5% of repeat urine cultures show a new bacteriuria. We evaluated the diagnostic yield of repeating urine cultures at longer time intervals, and of repeating a positive urine culture. **Methods:** We conducted a retrospective study of adult inpatients at Stanford Healthcare who had more than one urine culture collected during hospitalization between January 2023 and February 2024. We included urine cultures that were collected with or without urinary catheters; nephrostomy tubes were excluded. Urine cultures were classified as index or repeat. We analyzed the diagnostic yield of the repeat urine culture, defined as the percent of repeat urine cultures that detected a new bacteriuria not detected in the index culture. Bacteriuria was defined as growth of a bacterial species in quantities >100,000 CFU/mL. A negative urine culture was defined as one that did not have bacteriuria meeting this threshold. Sensitivity analyses used a threshold of 10,000 CFU/mL as the threshold for significant bacteriuria. **Results:** Overall, 6,955 urine cultures were performed from 6,058 patients. Of these,

Figure 1. Diagnostic yield of repeating a negative urine culture, stratified by threshold for significant bacteriuria (100,000 vs 10,000 colony forming units (CFU)/mL)