**Background**

- Indwelling urinary catheters (IUC) may cause inflammation and colonization, decreasing the diagnostic yield of urinalysis and urine cultures (UC).
- Indiscriminate testing can lead to misinterpretation of positive results as a catheter associated urinary tract infection (CAUTI), increasing antibiotic use and CAUTI rates.
- We studied the burden of UC and implemented a UC stewardship initiative (USCI) as part of a comprehensive CAUTI reduction program.

**Methods**

- A retrospective review of cases with IUC and positive UC in 2014 was performed.
- USCI was implemented in 3/2017 (Figure 1).
- Nursing staff were instructed to contact the infectious diseases physician when UC from IUC were ordered.
- Cases were reviewed and, if no UC indication based on IDSA guidelines was met, cultures were discontinued after conferring with ordering physician.
- Twelve months pre and post intervention data was collected; including case description, catheter days, UC ordered, alternative cause of fever, and recommendations.

**Results**

- The pre-USCI cohort had 23 UC in 19 cases.
- One UC (4%) met indication (Figure 2).
- Three (16%) met NHSN criteria for CAUTI and did not meet UC indication.
- The USCI cohort had 21 UC orders in 13 cases.
- Most UC did not meet indication and were cancelled (90%, 19/21).
- Alternative causes for fever were found in all cases with cancelled UC orders (19/19), including pneumonitis, pneumonia, pancreatitis and tuberculosis.
- Antimicrobials were used in 53% (7/13). UC orders per hospitalization ranged 1-4 (average 1.7).
- IUC days ranged from 3-18 days (average 8).
- In both cohorts, UC with indication (3) did not meet NHSN criteria for CAUTI and did not receive antimicrobials.

**Conclusions**

- Patients with IUC frequently underwent UC without evidence-based indications.
- This may lead clinicians down the wrong diagnostic path and contribute to antimicrobial use.
- Critically ill patients with inflammatory conditions are at high risk of UC testing.
- USCI is a cost-effective intervention that reduced indiscriminate testing, antibiotic use and CAUTIs.
- USCI can play an important role in CAUTI prevention strategies and antibiotic stewardship programs.