**Supplemental Materials**

**Title**: Impact of Diagnostic Stewardship on Catheter-Associated Urinary Tract Infections and Patient Outcomes

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# **Table S1.** COVID-19 Hospitalizations Quartiles

|  |  |  |  |
| --- | --- | --- | --- |
| **Rank****Number** | **Number of****Months** | **Mean Number of Covid-19 Hospitalizations**(±SD) | **Range of Covid-19 Hospitalizations per Month**  |
| 0 | 23 | 0 | 0 |
| 1 | 9 | 39.3 (±19.8) | 23 – 64 |
| 2 | 17 | 93.5 (±17.6) | 66 – 122 |
| 3 | 15 | 230.7 (±78.9) | 134 – 364  |

# **Table S2.** Medical Record Review of 44 Patients with Urine Cultures Collected After Diagnostic Stewardship Intervention

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Hospital Day****of First****Alert**  | **Days from First** **Alert to Urine** **Culture** **Collection** | **Diagnosis** **Associated with** **First Alert** | **Criteria for Urine** **Culture Collected** **within 7 Days of First****Alert**  | **Result of Subsequent Urine Culture** **(colony forming units)** | **Did the patient** **experience a** **change in treatment** **due to the** **intervention?**  | **Was the patient** **diagnosed with** **an invasive** **infection during** **hospitalization?**  |
| 22 | 0 | sepsis evaluation | did not meet criteria | Yeast (10-50K) | no | no |
| 13 | 0 | gross hematuria | did not meet criteria | No growth | no | no |
| 2 | 0 | altered mental status | did not meet criteria | *Klebsiella pneumoniae* NDM-1 (10-50K) *Escherichia coli* ESBL (10-50K)  | **no**, **antimicrobial resistance not otherwise known** | no |
| 7 | 0 | sepsis evaluation | did not meet criteria | Escherichia coli (50-100K) | no | no |
| 23 | 0 | sepsis evaluation | did not meet criteria | No growth | no | no |
| 11 | 0 | sepsis evaluation | did not meet criteria | No growth | no | no |
| 2 | 0 | sepsis evaluation | did not meet criteria | *Proteus mirabilis* (>100K) | no | no |
| 11 | 0 | sepsis evaluation | did not meet criteria | Enterococcus species (>100K) | no | no |
| 14 | 0 | sepsis evaluation | did not meet criteria | No growth | no | no |
| 1 | 0 | altered mental status | did not meet criteria | Gram-negative rods (<10K) | no | no |
| 2 | 0 | pre-operative assessment | did not meet criteria | *Staphylococcus aureus*  | no | no |
| 1 | 0 | pre-operative assessment | did not meet criteria | *Staphylococcus aureus* | no | no |
| 3 | 0 | no associated diagnosis identified | did not meet criteria | No growth | no | no |
| 0 | 0 | urinary retention  | did not meet criteria | No growth | no | no |
| 5 | 0 | urinary symptoms | did not meet criteria | *Klebsiella pneumoniae* (50-100K) | no | no |
| 2 | 0 | altered mental status | did not meet criteria | >3 organisms identified | no | no |
| 8 | 1 | urinary frequency | did not meet criteria | *Pseudomonas aeruginosa* (>100K) | no | no |
| 3 | 1 | abnormal urinalysis (pyuria) | did not meet criteria | *Escherichia coli* (50-100K) | **yes, change in antimicrobial** | no |
| 12 | 1 | sepsis evaluation | did not meet criteria | No growth | no | no |
| 9 | 1 | urinary symptoms | did not meet criteria | *Klebsiella pneumoniae* (10-50K) | no | no |
| 16 | 1 | sepsis evaluation | did not meet criteria | *Enterobacter cloacae* (>100K) | **yes, change in antimicrobial** | no |
| 2 | 1 | sepsis evaluation | did not meet criteria | No growth  | no | no |
| 3 | 1 | sepsis evaluation | did not meet criteria | No growth  | no | **yes, *Klebsiella oxytoca* bacteremia**  |
| 5 | 1 | sepsis evaluation | did not meet criteria | *Pseudomonas aeruginosa* (50-100K) | no | no |
| 4 | 2 | no associated diagnosis identified | did not meet criteria | No growth | no | no |
| 13 | 4 | sepsis evaluation | did not meet criteria | *Escherichia coli* (>100K) | no | no |
| 3 | 4 | sepsis evaluation | did not meet criteria | No growth | no | no |
| 10 | 1 | bacteremia | ID Consultation  | No growth  | no | no |
| 3 | 0 | obstructive uropathy | radiologic evidence of urinary tract obstruction | No growth | no | no |
| 23 | 0 | obstructive uropathy | radiologic evidence of urinary tract obstruction | *Enterobacter cloacae* (>100K) | no | **yes, *Enterobacter cloacae* bacteremia** |
| 5 | 0 | sepsis evaluation | urine catheter removed >24 hours prior | *Escherichia coli* (>100K) | no | no |
| 2 | 0 | gross hematuria | urine catheter removed >24 hours prior | *Klebsiella pneumoniae* (>100k) | no | no |
| 3 | 0 | asymptomatic bacteriuria of pregnancy | urine catheter removed >24 hours prior | No growth | no | no |
| 2 | 1 | sepsis evaluation | urine catheter removed >24 hours prior | *Escherichia coli* (>100K) | no | no |
| 6 | 1 | sepsis evaluation | urine catheter removed >24 hours prior | No growth | no | no |
| 9 | 1 | altered mental status | urine catheter removed >24 hours prior | No growth  | no | no |
| 5 | 1 | sepsis evaluation | urine catheter removed >24 hours prior | No growth  | no | no |
| 8 | 1 | sepsis evaluation | urine catheter removed >24 hours prior | Yeast (not quantified) | no | no |
| 9 | 1 | sepsis evaluation | urine catheter removed >24 hours prior | No growth  | no | no |
| 4 | 2 | sepsis evaluation | urine catheter removed >24 hours prior | No growth | no | no |
| 5 | 3 | sepsis evaluation | urine catheter removed >24 hours prior | Enterococcus species (50-100K) | no | no |
| 1 | 4 | sepsis evaluation | urine catheter removed >24 hours prior | *Enterobacter cloacae* (50-100K) | no | no |
| 2 | 4 | urinary symptoms | urine catheter removed >24 hours prior | *Escherichia coli* (>100K) | no | no |
| 7 | 6 | urinary frequency | urine catheter removed >24 hours prior | Non-hemolytic Streptococci species (not quantified) | no | no |

# **Figure S1.** Standardized Order Audit Feedback Message

