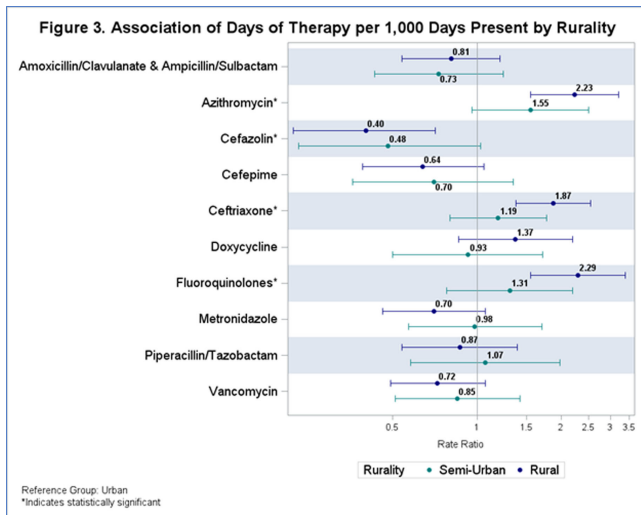




present. Pooled AU rates were used to provide a state rate by covariates and antibiotics. Descriptive statistics were used to describe prescribing patterns. A negative binomial regression model was used to understand the effect of hospital size and rurality on rate and one-way ANOVA to test significance. **Results:** AU data was analyzed for 51 facilities including 7 large hospitals (14%), 16 medium-sized hospitals (31%), and 28 critical access hospitals (55%). Of these, 27 facilities (53%) were located in rural and 9 (18%) in semiurban areas (Table 1). The top 5 antibiotics used were cefazolin, ceftriaxone, piperacillin/tazobactam, vancomycin, and cefepime (Figure 1). Although, there were no significant variations in total AU based on hospital size and rurality, some significant differences were noted when broken down by specific antibiotics (Figures 2 and 3). Critical access hospitals reported 1.8 times higher AU rate for ceftriaxone [95% CI: 1.2, 2.7], 2.2 times the rate for fluoroquinolones [95% CI: 1.3, 3.7], and 2.3 times the rate for azithromycin [95% CI: 1.4, 3.7], compared to large hospitals. Similarly compared to urban hospitals, rural hospitals reported 1.9 times higher AU rate for ceftriaxone [95% CI: 1.4, 2.5], 2.3 times the rate for fluoroquinolones [95% CI: 1.6, 3.4], and 2.2 times the rate for azithromycin [95% CI: 1.6, 3.2]. No significant difference was noted in the use of any antibiotics when comparing semiurban to urban and medium to large size hospitals. **Conclusions:** Significant variation exists in use of some antibiotics based on the hospital size and rurality. NHSN AU data can be leveraged to identify potential AS targets across various hospital settings.

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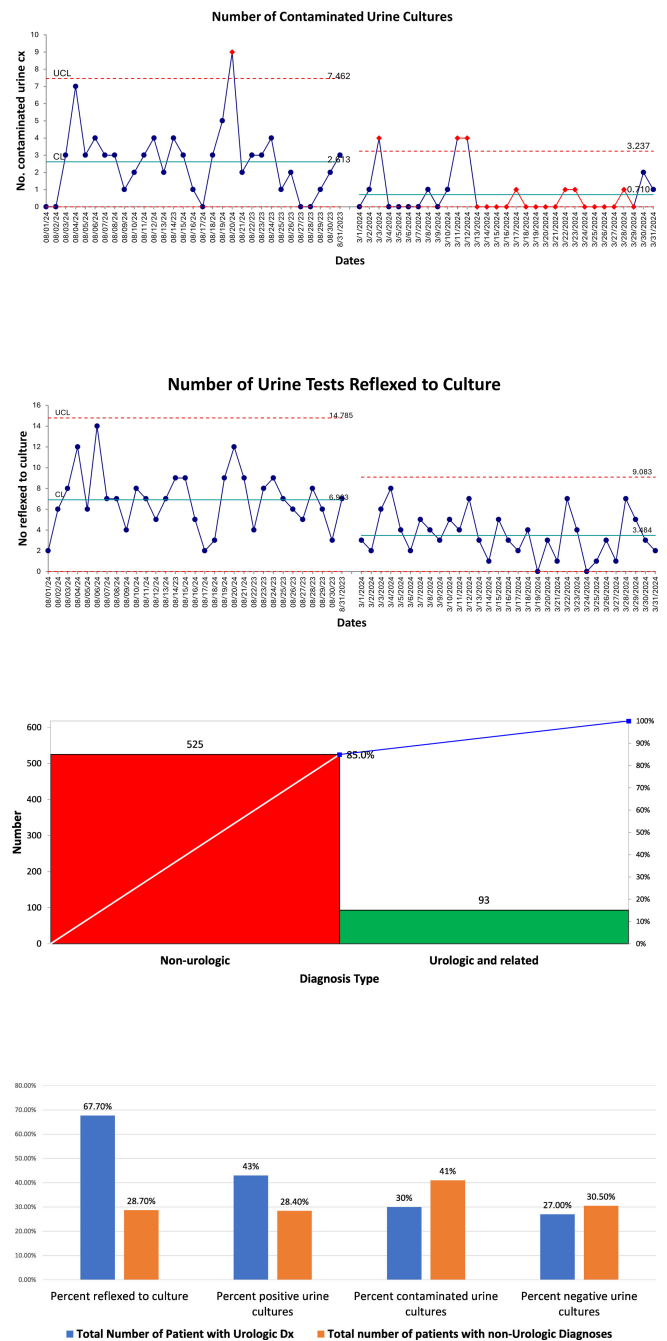
Subject Category: Antibiotic Stewardship

The “Streamlining” Initiative - Reduction of Unnecessary Urine Testing in Patients Presenting at CRH

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Background: Crisp Regional Hospital (CRH) in Georgia initiated a quality improvement project to address the excessive and inappropriate urine culture orders among inpatients. The project aimed to reduce these orders by at least 30% by June 2024, targeting the prevalent issues of increased healthcare costs and antibiotic misuse stemming from unnecessary testing. **Methods:** Using the Institute for Healthcare Improvement (IHI) framework, the project implemented a series of multidisciplinary strategies. These included nursing education on proper urine collection, policy



updates to facilitate accurate specimen collection from specific patient groups, medical staff education on appropriateness of urine test ordering and a change in reflex criteria for urine testing. Data was analyzed using statistical process control and T-tests to assess the impact of the interventions. **Results:** The intervention led to a reduction in urine tests from 618 to 570. Tests reflexed to culture decreased significantly from 34.63% to 18.95% (p Conclusion: The quality improvement initiative at CRH significantly reduced unnecessary urine cultures, optimized resource use, and maintained diagnostic integrity. The interventions implemented were effective and scalable, demonstrating substantial cost savings and enhanced patient care quality. Further efforts will focus on analyzing the impact of removing pre-checked orders and implementing mandatory testing indications to continue improving urine testing practices.

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