

Evaluating Urine Cultures in Neuro-Oncology Patients

Pallavi Singh, MSN, FNP-C

DNP Chair: Tracy R. Vitale, DNP, RNC-OB, C-EFM, NE-BC DNP Team Member: Kristen Fessele, PhD, RN, ANP-BC, AOCN

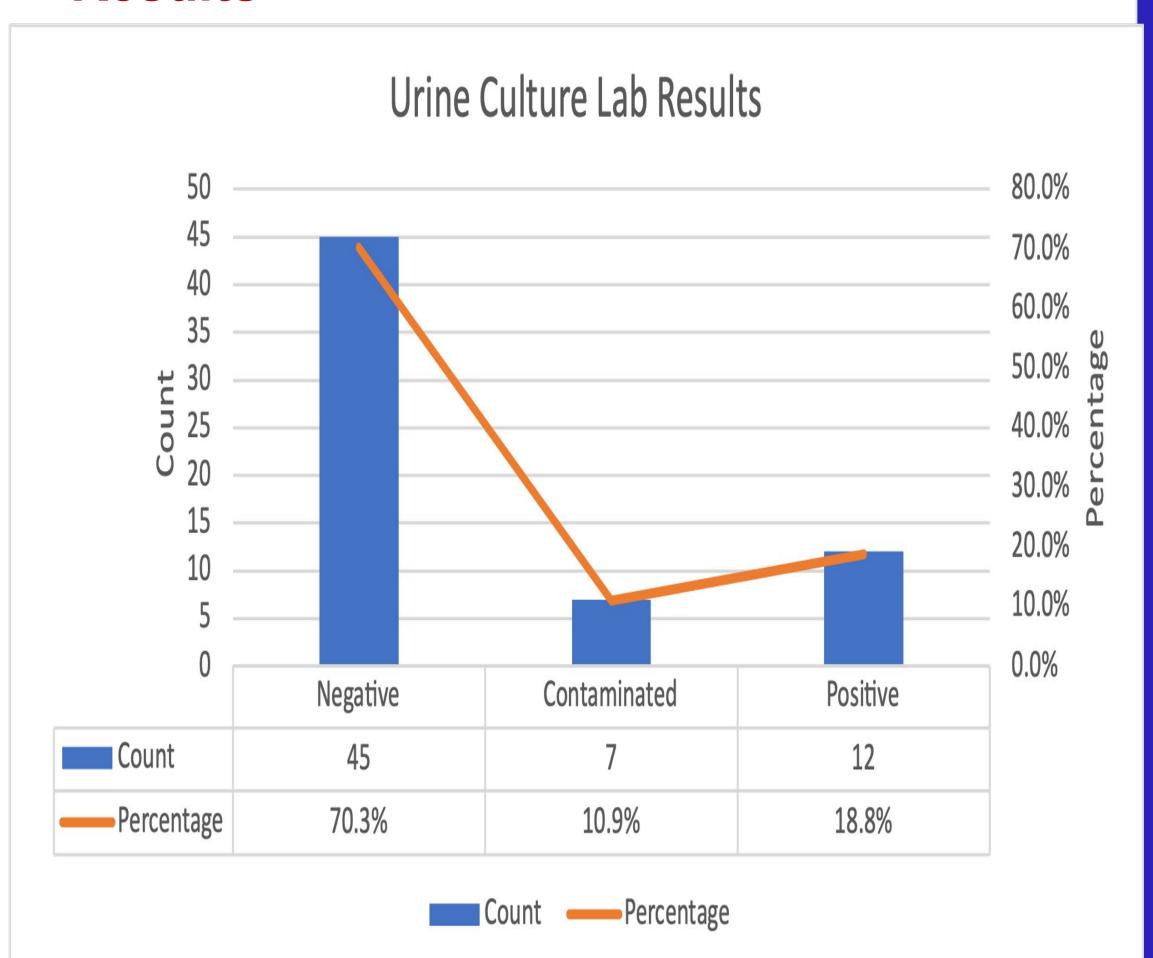
Introduction

- A urinary tract infection (UTI) is one of the most acquired infections in the inpatient setting.
- Neuro-Oncology patient population, with impaired cognitive status, get urine studies tested more often than those who can communicate their needs.
- This quality improvement project will retrospectively review charts of Neuro-Oncology patients who have had urine culture results.

Methods

- A retrospective chart review
- N= Neuro-Oncology patients with urine cultures over a 60-day period.
- Setting: Large Cancer Center in NYC
- EHR data was divided in demographic categories: age, accession number, admission date, discharge date, order entry date, order entry time, order collection date, order collection time, urine culture count and type of bacterium from urine culture with sensitivities.

Results



n=53 patients, 64 urine cultures ordered. 70.3% (45) were negative, 18.8% (12) were positive and 10.9% (7) were contaminated samples.

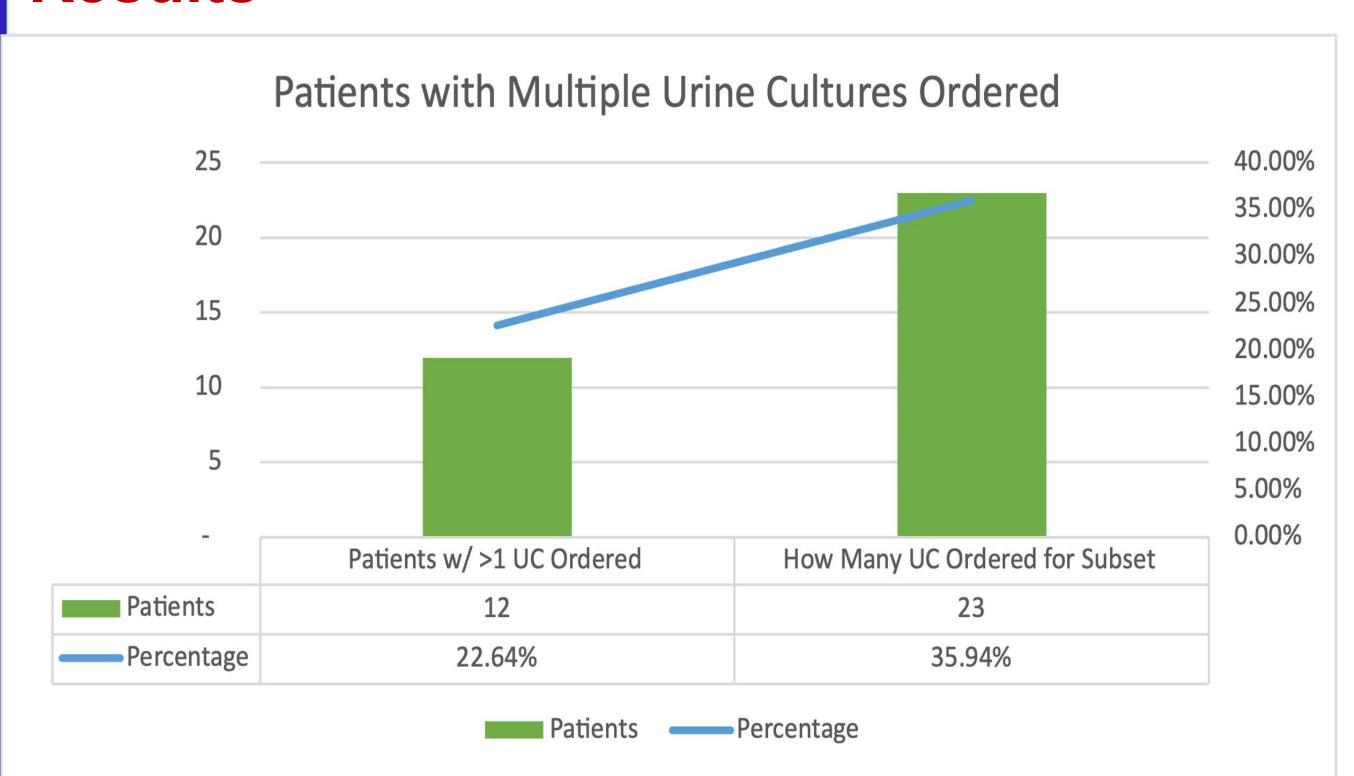
Urine cultures are overutilized for

cognitively impaired patients.





Results



There were 22.64% (12) of patients who had >1 urine culture ordered in one hospital stay. Of the 22.64%, there were 23 orders placed, which represents 35.94% of the total amount of urine cultures ordered. Patients w/> or = 2 orders within 3 days or less represented 50% (6) of increased usage of urine cultures.

Discussion

- The amount of urine cultures were predominantly negative in results, which shows that most patients do not need a urine culture.
- Implications on practice will reduce patient length of stay, decrease antimicrobial resistance and save money for the institutions.
- Educating APPs and teaming up with IT to approve a urine culture order set will help providers remember what steps to take while ordering urine studies.

Bacterial Urine Culture Order

Must select one box below: urine cultures are not recommended if you do not meet any of these criteria. If you do not meet the criteria and still need an order, type reasoning in "other," box.

- **♦ Neutropenic Fever**
- ♦ Flank pain or suprapubic tenderness or dysuria
- **♦ Acute Mental Status Changes (change from usual mental state), within 24-72 hrs**
- **♦ Fever after urology procedure**
- **♦ Other (type reason)**

References are available through QR code Contact Information: baskarp1@sn.rutgers.edu