

# Leveraging the EHR to Decrease UCx

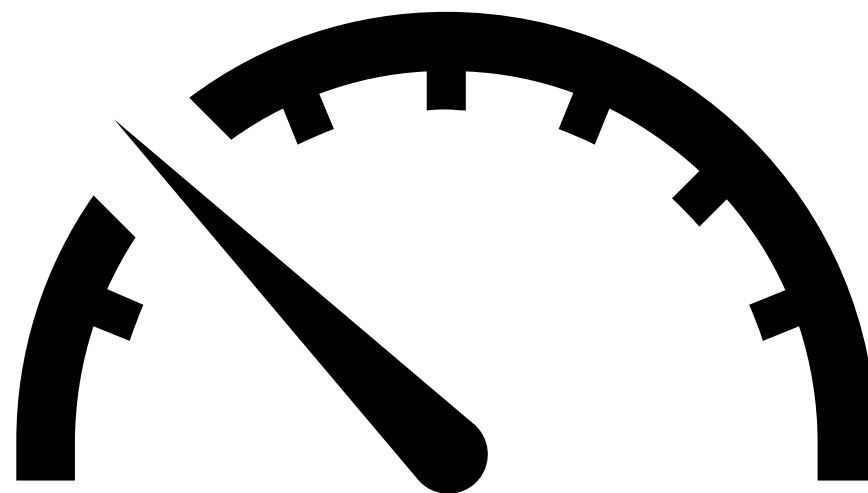
Acknowledgements:

Nandita Mani, MD

Mardi Labuguen

UW Medicine AMS Team

But first, a quick story  
to remind us how  
important this is



# Overtreatment of Asymptomatic Bacteriuria

Overwhelmed by all that we needed to do – education, diagnostic stewardship, antibiotic decision-making, case-review, feedback

**The problem is upstream!**

Developed standard recommendations for when to do urine culture & built an order-panel to help with very basic clinical decision support

## Urine Culture Panel

**SELECT ONE** of the following indications:

- ☒ NEW signs or symptoms of UTI – e.g. burning, urgency, suprapubic or flank pain

**General Guidelines:**

1. NOT a symptom of UTI: cloudy, high sediment, or malodorous urine
2. NOT a symptom of UTI: altered mental status alone without urinary symptoms or sepsis
3. UTI symptoms in patients with neurologic or spinal cord injury may be atypical
4. CAUTION in catheterized patients: urinary symptoms may be due to catheter and colonization is common

☒ Urinalysis with Reflex Culture

Once, today at 1018, For 1 occurrence

Release Result to Patient: Immediate

## Urine Culture Panel

✓ Accept

**SELECT ONE** of the following indications:

- ☐ NEW signs or symptoms of UTI – e.g. burning, urgency, suprapubic or flank pain
- ☐ Sepsis without known source
- ☐ Neutropenic (ANC < 500): NEW signs or symptoms of UTI OR sepsis without known source
- ☐ Suspected neonatal sepsis/UTI
- ☒ Screening for asymptomatic bacteriuria (pregnancy or prior to urological surgery)


For invasive urological procedures, screening is recommended only prior to procedures that cause mucosal trauma (e.g. TURP, lithotripsy).

☒ Culture Urine, Bact

✓ Accept

✗ Cancel

## Urine Culture Panel

 [Accept](#)

**SELECT ONE** of the following indications:

- ☐ NEW signs or symptoms of UTI – e.g. burning, urgency, suprapubic or flank pain
- ☐ Sepsis without known source
- ☐ Neutropenic (ANC < 500): NEW signs or symptoms of UTI OR sepsis without known source
- ☐ Suspected neonatal sepsis/UTI
- ☐ Screening for asymptomatic bacteriuria (pregnancy or prior to urological surgery)
- ☒ Unexplained persistent fever or leukocytosis

CAUTION in catheterized patients: colonization is common

☒ **Urinalysis with Reflex Culture**

Once, today at 2251, For 1 occurrence

Release Result to Patient: Immediate

# The intervention



ON NOV 19, 2024 – ALL AD HOC INPATIENT  
URINE CULTURE ORDERS COULD ONLY BE  
PLACED THROUGH THIS PANEL



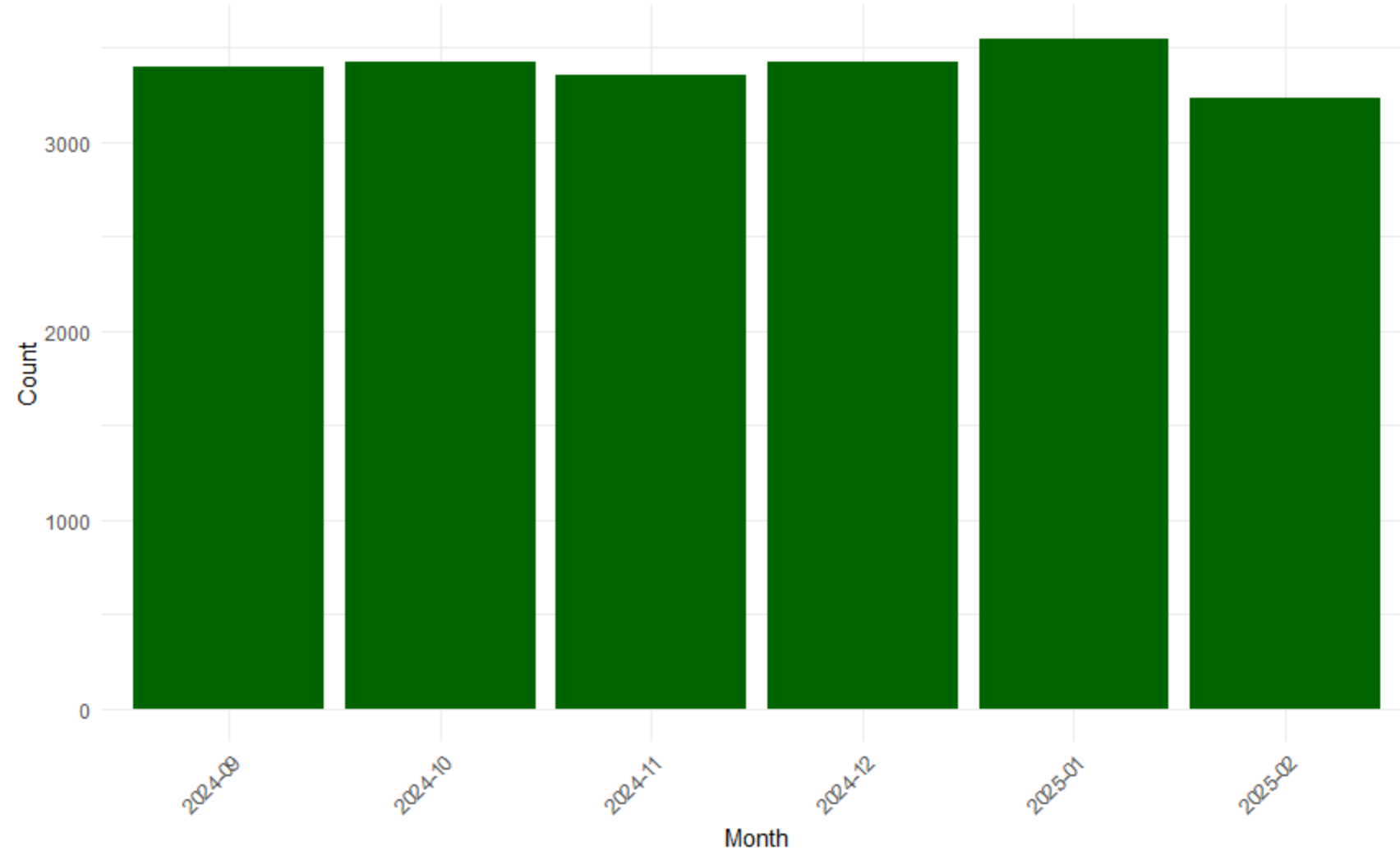
DID NOT IMPACT ORDER-SETS, ED,  
OUTPATIENT

# Now, for the data

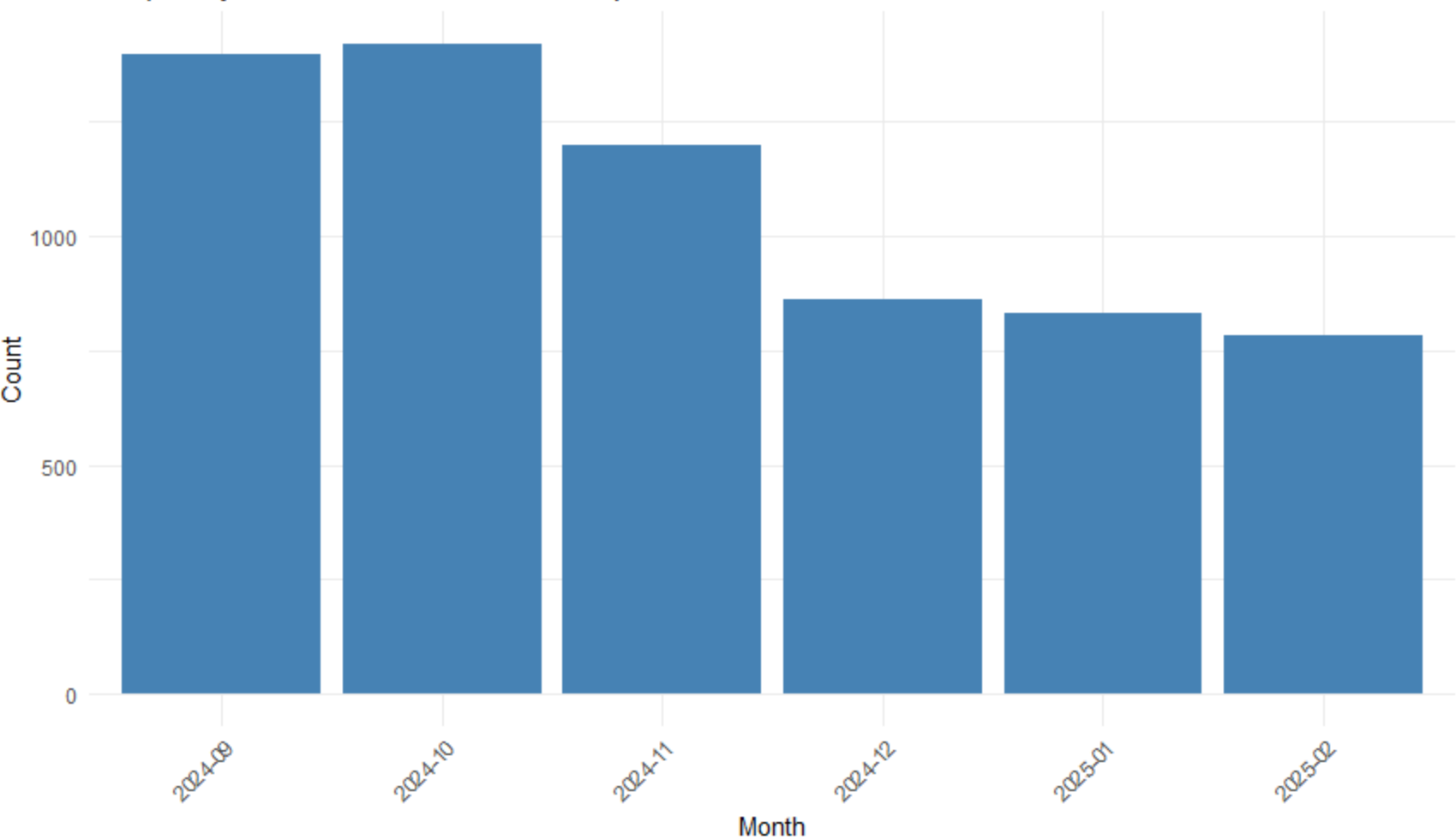
- This is total counts of culture orders, not cultures actually done.  
Includes Urine culture & UA with reflex
- Includes cancelled orders, duplicates
- Absolute counts (no denominators)



Frequency of Urine Culture Orders - ED, ALL SITES

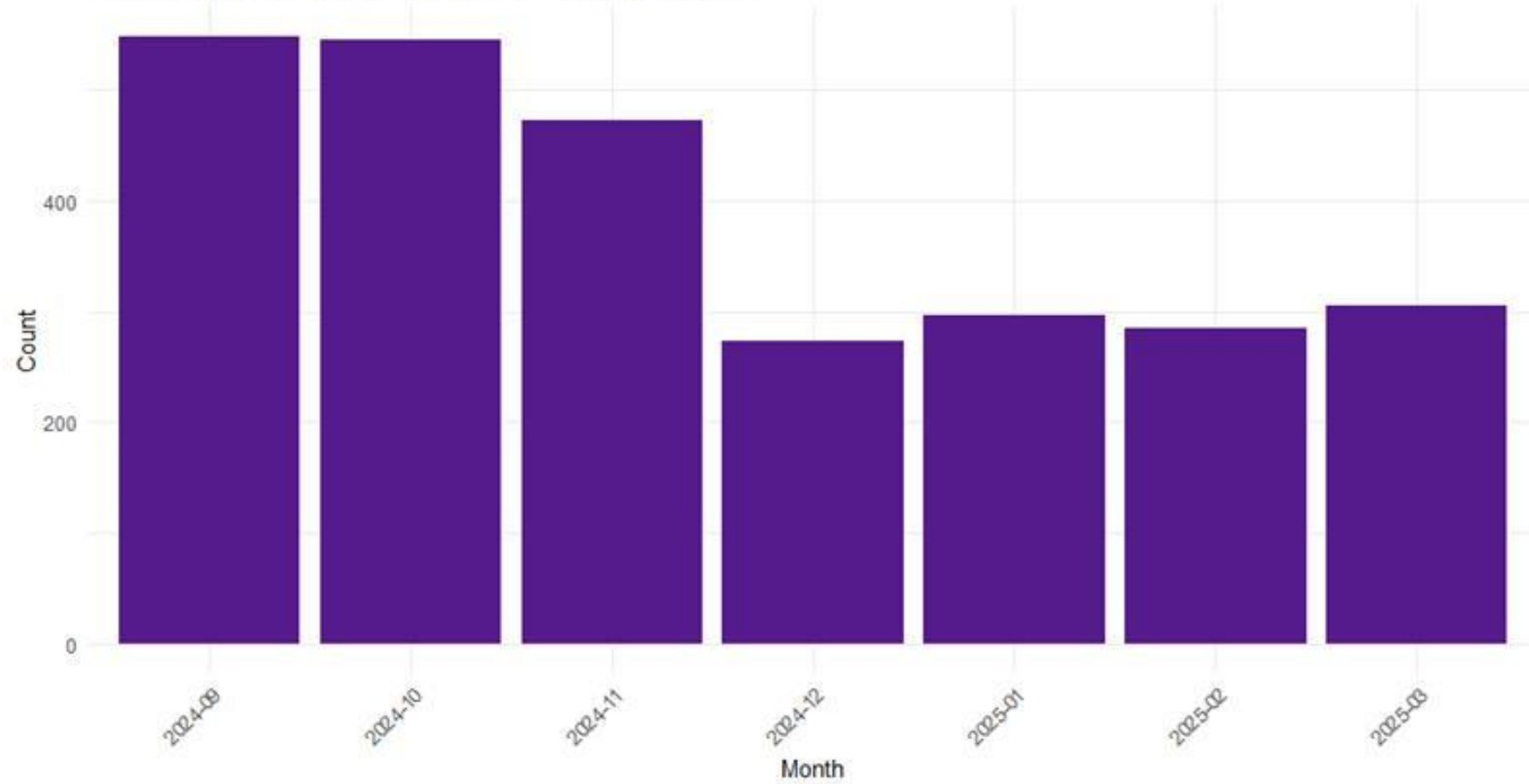


Frequency of Urine Culture Orders - Inpatient, ALL SITES



DATA ARE PRELIMINARY  
Contact Chloe Bryson-Cahn with questions

Frequency of Urine Culture Orders - Inpatient, HMC



DATA ARE PRELIMINARY  
Contact Chloe Bryson-Cahn with questions

# Other Outputs

- CAUTIs at HMC are down
  - As are the number of cases our IP reviews each month
- Antibiotic use for UTI – this one is tough, we are working on it!
- One complaint about our order-panel (needed to add a synonym for ua reflex!)
- Did our lab notice a decrease in urine test volume? Nope! Inpatient is a small fraction of our total urine testing.

# Takeaways

- Standardize it
- Embed it
- Make it easy (and if possible, impossible to circumvent)
- Measure it