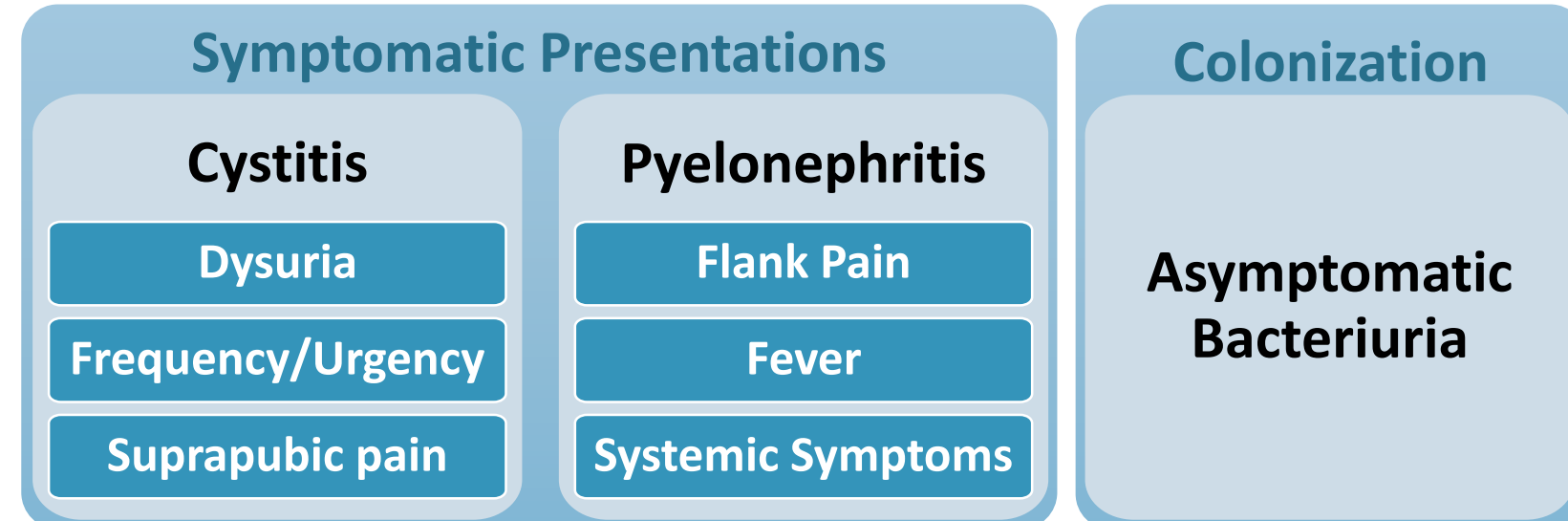


Evaluation of Urinalysis and Urine Culture Use within a Community Health-system

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BACKGROUND

Asymptomatic Bacteriuria (ASB)



Guideline Recommended Approach for ASB

Screen & Treat	Pregnant patients Urological procedures with mucosal trauma
Do Not Screen & Treat	Patients without symptoms of a urinary tract infection (UTI)

Antimicrobial Treatment for ASB

What's the harm?

- *Clostridioides difficile* infection (CDI)
- 8.5-fold higher risk within 3 months
- Increased antimicrobial resistance rates
- 48% had multi-drug resistant organisms

Who's likely to be treated?

- Older age
- Acute altered mental status (AMS)
- Abnormal urinalysis (UA)
- Positive urine culture (UC)

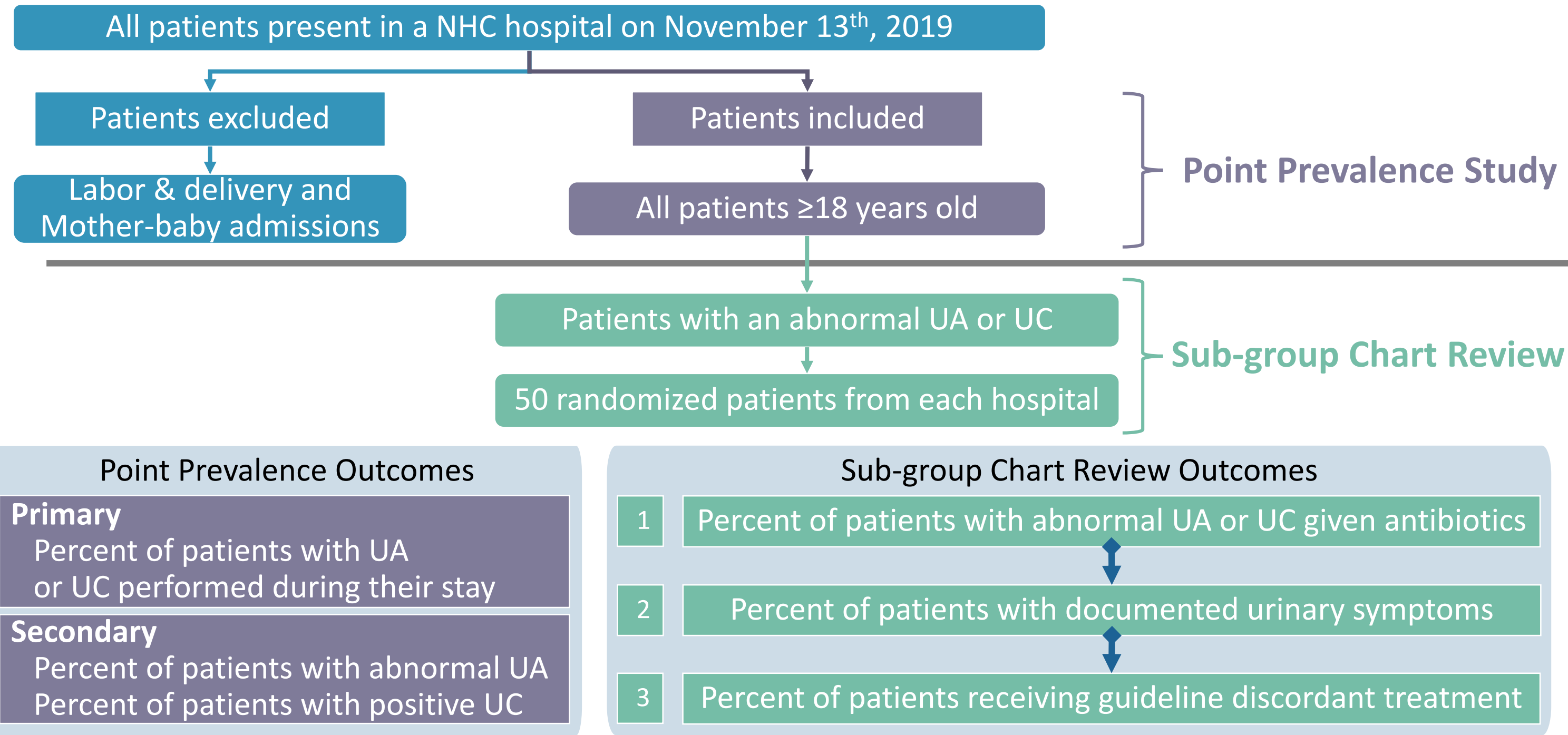
Diagnostic Stewardship

ORDERING	Requiring documentation of symptoms Removing labs from standard order sets
PERFORMING	Urinalysis reflex to urine culture cancellation
REPORTING	Selective reporting of antibiotic susceptibilities Comments in microbiology reports

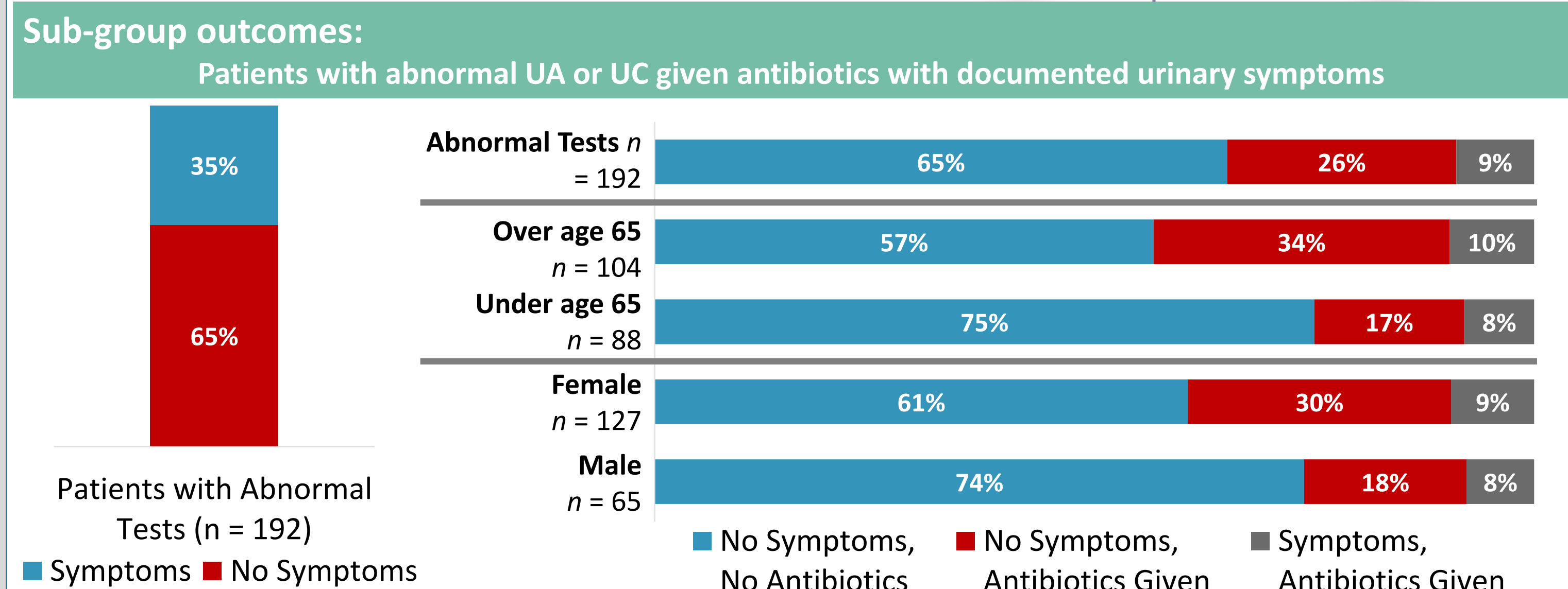
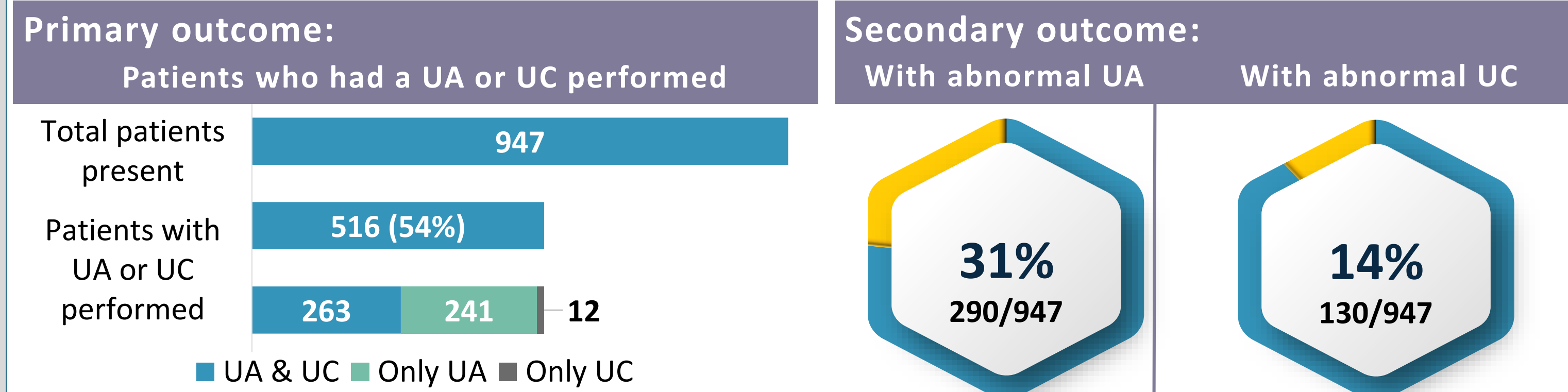
STUDY RATIONALE

- To
- 1) describe current UA & UC ordering practices at Norton Healthcare (NHC)
 - 2) compare current practices with ASB guideline recommendations

STUDY DESIGN & OUTCOMES



RESULTS



DISCUSSION

Take Home Points

- Over 50% of patients had UAs or UCs performed
- 91% were inappropriately screened and/or treated
- 26% with abnormal results were inappropriately treated
- Higher rates of guideline discordant testing & treatment
 - Elderly patients
 - Female patients

Strengths

- Pre-COVID-19
- Assessment of symptoms & antimicrobial use
- Point prevalence design
 - Reusable for internal monitoring
 - True "snapshot" of a day at NHC

Limitations

- Retrospective design
 - Potential for undocumented symptoms
- Did not assess length or appropriateness of antimicrobials
- Criteria for abnormal UA may vary from outside of NHC
- Did not assess reason for ordering UA

CONCLUSIONS

On this given day at NHC

- Over 50% of patients had a urinalysis or urine culture performed
- 26% of patients with abnormal urine testing results received inappropriate treatment

Our data suggest a potential role for diagnostic stewardship at NHC based on current practices

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