

LHD3 Quality Improvement Project 2023



CENTER FOR
STEWARDSHIP
IN MEDICINE

UW Medicine

Asymptomatic Bacteriuria (ASB)



What is Asymptomatic Bacteriuria?

- Asymptomatic bacteriuria occurs when **bacteria is present in a voided urine sample.**
 - It's caused by bacterial colonization of the urinary tract.
 - A urinary tract infection (UTI) causes symptoms such as frequent urination, painful urination, or pelvic pain.
 - But asymptomatic bacteriuria doesn't cause any noticeable symptoms.
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Incidence of Bacterial Colonization in Urine:

Age Category	ASB Incidence in General Population
Pre-Menopausal Females	1-6%
Females > 65 years	> 15%
Females > 90 years	22%
Females residing in LTC	25-50%

Nicolle LE. Asymptomatic bacteriuria in the elderly. *Infect Dis Clin North Am.* 1997;11(3):647–62. [[PubMed](#)] [[Google Scholar](#)]

Luu, T., & Albarillo, F. S. (2022). Asymptomatic Bacteriuria: Prevalence, Diagnosis, Management, and Current Antimicrobial Stewardship Implementations. *The American Journal of Medicine*, 135(8), e236–e244. <https://doi.org/10.1016/j.amjmed.2022.03.015>

UTI SYMPTOMS!

- Urgency
- Rigors
- Frequency
- Dysuria
- Suprapubic pain or tenderness
- Flank pain
- Fever without other explanation
- Sepsis

SCREEN & TREAT all patients that are symptomatic of UTI appropriately!

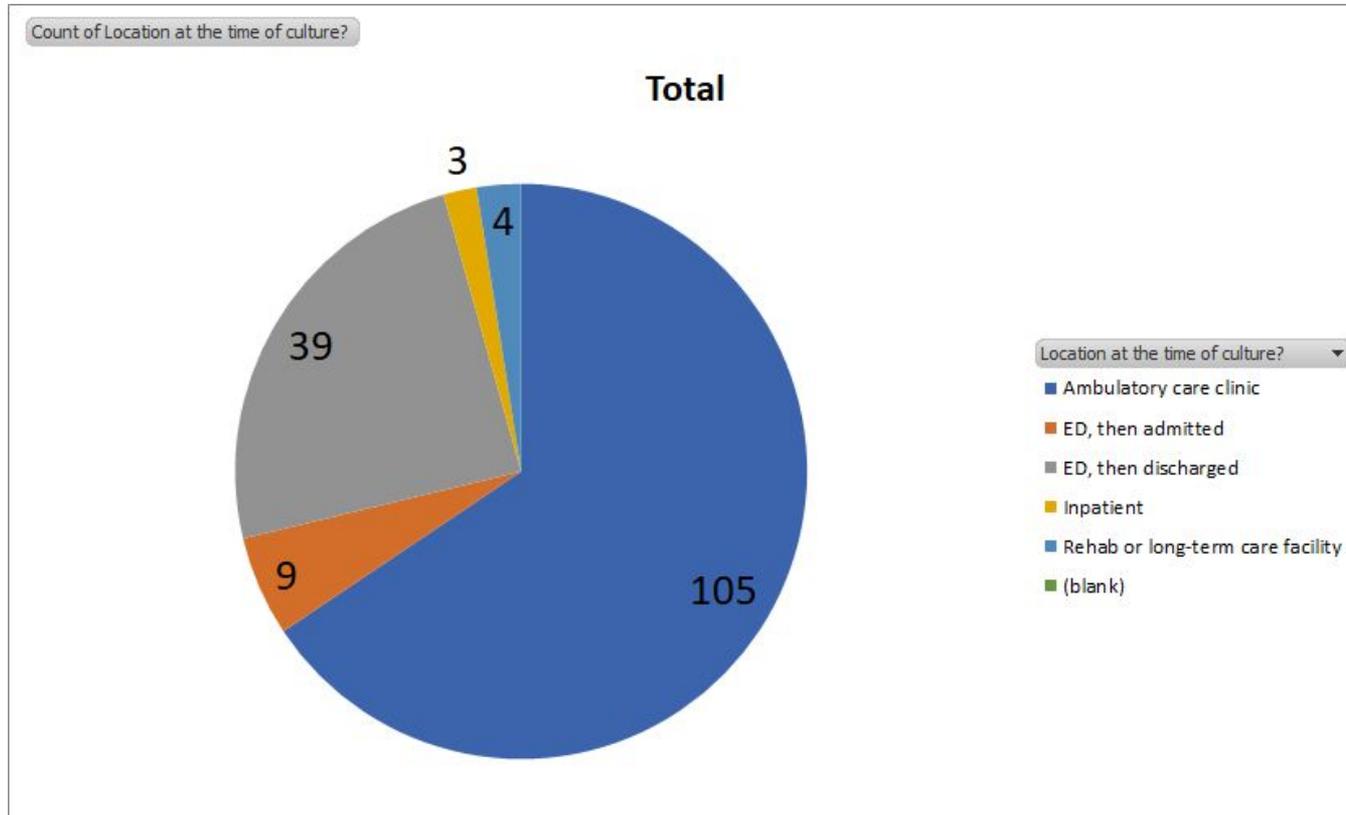
NOT UTI Symptoms on their own!

- Pyuria
- Cloudy urine/Sediment in urine
- Dark urine/Change in urine color
- Odorous urine/Change in urine odor
- Falls/Dizziness
- Altered Behavior/Delirium

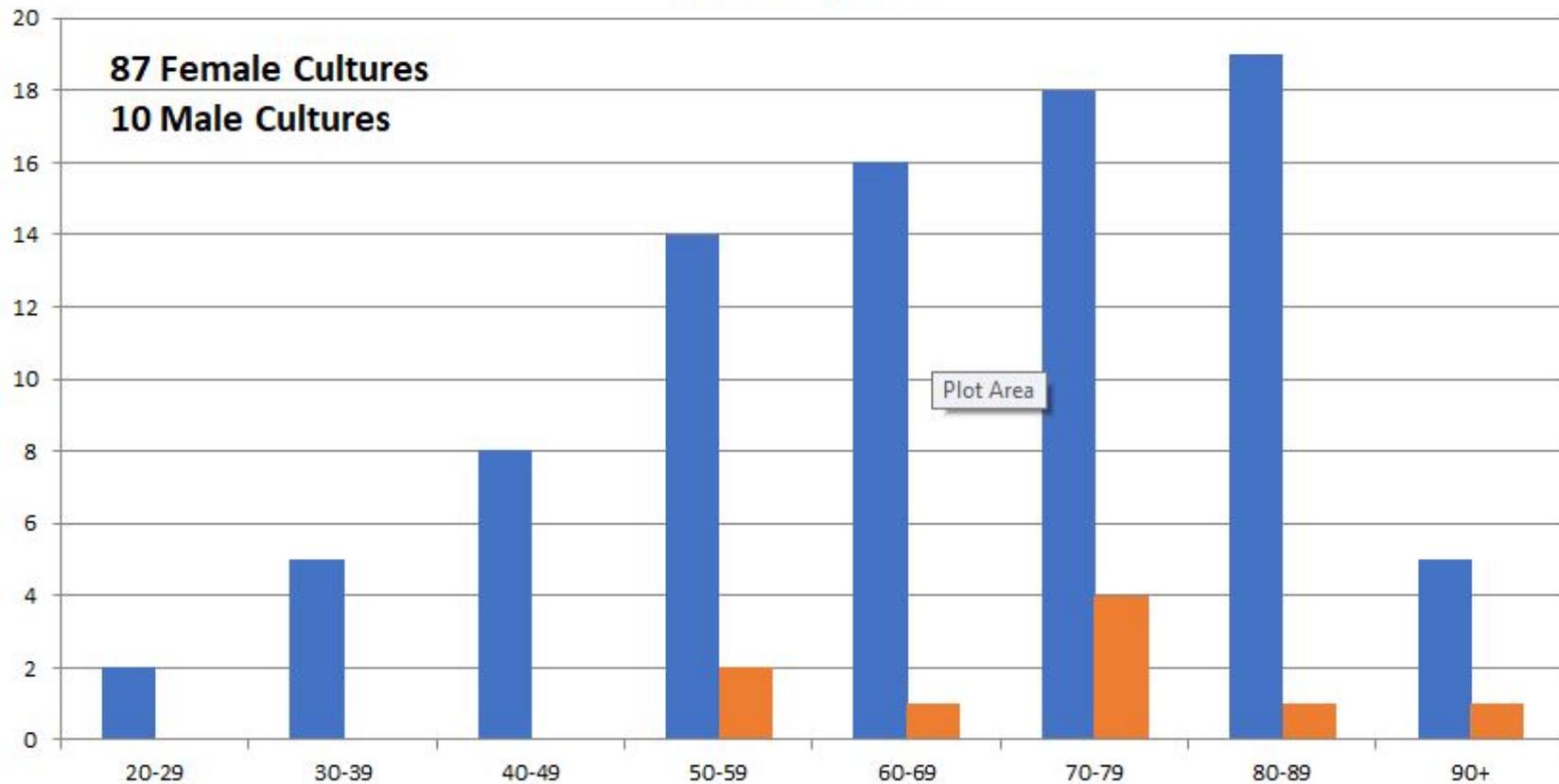
*If one/some of these are the ONLY symptoms
-consider investigating for other potential
causes prior to ordering a UA:*

- Dehydration
- Hyperglycemia/Hypoglycemia
- Dementia
- Medications

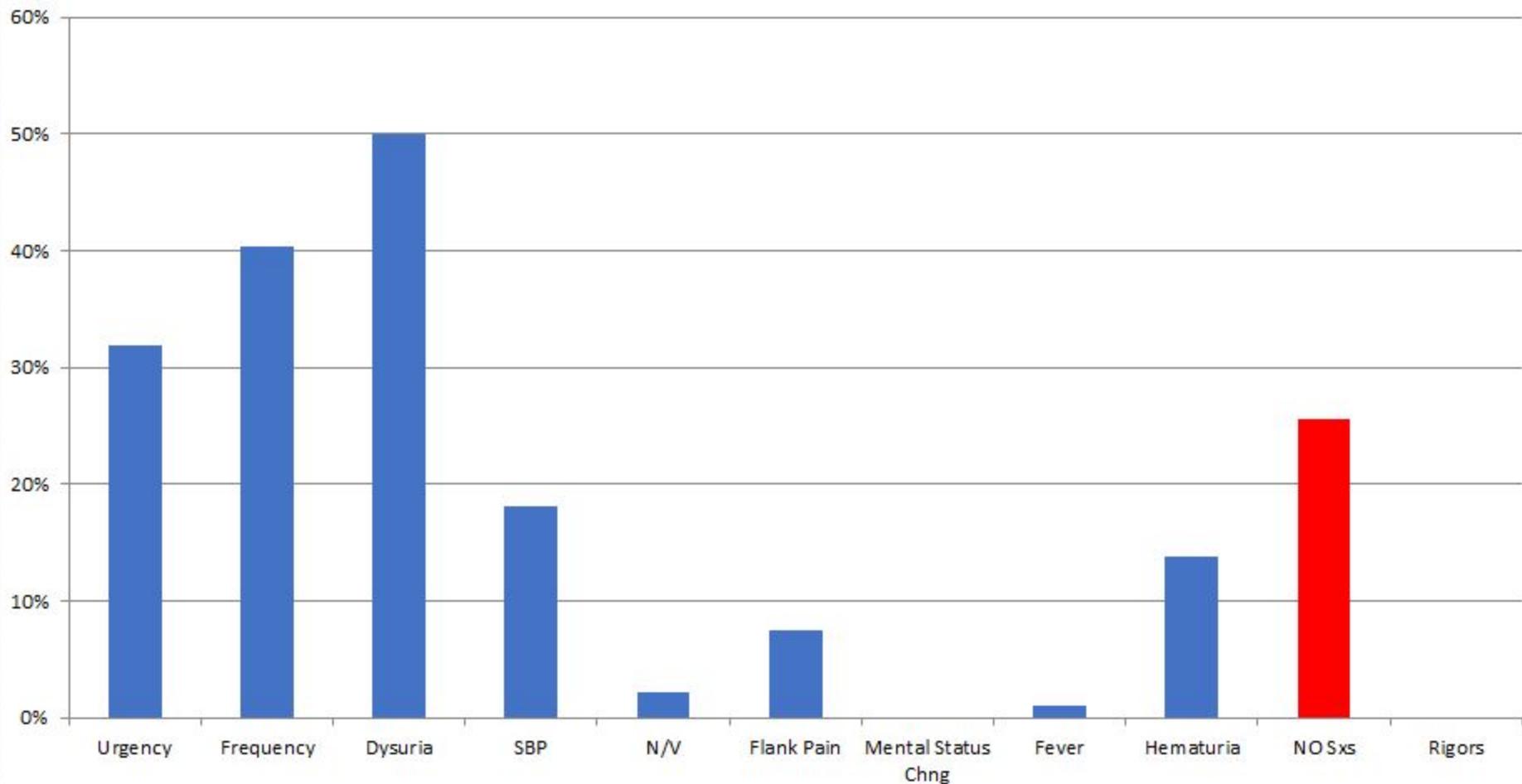
ASB IQIC Initial Data: October-December 2022



Female Cx Male Cx



NBMC: % of Pts with Specific Sxs (N=94)



Summary of Data

24/94 patients with NO symptoms charted had a UA that was sent for culture.

14/24 Asymptomatic Patients were prescribed antibiotics.

8/24 Patients were Asymptomatic and the UA was completely negative! (*LE, Nitrates, Squamous Cells, Bacteria, WBC < 10, WBC > 10*)

P&T March 30, 2023

IQIC Provider Level Data - ASB and Abx Rxs in the Clinics

Count of Positive UA Markers	Column Labels									
Row Labels	Carpenter	Mongrain	Olson	other	Panke	Reed	Yoon	Young	Zaugg	Grand Total
0 Positive UA Markers		1			2		1		4	8
Cipro							1			1
Levo									1	1
T/S									2	2
No Abx RX		1			2				1	4
1 Positive UA Marker	1			1		2		2		6
Keflex	1					1		2		4
Nitrofurant				1						1
No Abx RX						1				1
2 Positive UA Markers	1				1					2
Augmentin	1									1
Keflex					1					1
3 Positive UA Markers		2	1			1	1		1	6
Nitrofurant		1					1			2
No Abx RX		1	1			1			1	4
4 Positive UA Markers				1	1					2
Keflex					1					1
No Abx RX				1						1
Grand Total	2	3	1	2	4	3	2	2	5	24

Symptomatic Patients:

Urinary Tract Infection Symptoms:

- Urgency
- Rigors
- Frequency
- Dysuria
- Suprapubic pain or tenderness
- Flank pain
- Fever (>38°C) without other explanation
- Sepsis

****Please note:** The following symptoms on their own are not indicative of a UTI. Please proceed with caution if none of the above signs and symptoms are present:

- Pyuria — WBCs in urine
- Cloudy urine / Sediment in urine
- Dark urine / Change in urine color
- Odorous urine / Change in urine odor
- Falls / Dizziness
- Altered Behavior / Delirium

SCREEN AND TREAT all patients that are symptomatic of urinary tract infection appropriately!

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Asymptomatic Patients:

