Update to Urinalysis and Urine Culture Testing
Starting: 05/31/17
Affected: SHC inpatient units

What’s New?
The laboratory protocol for “Urinalysis Screen, Culture if Positive” has changed for SHC inpatient units. This change does not impact SHC emergency department, SHC outpatient clinics, or Stanford Children’s Hospital.

- Urine cultures will automatically be performed ONLY if the urinalysis detects > 10 leukocytes/HPF. Urinalysis with positive nitrite, bacteria, or leuk esterase will NOT automatically be cultured.

Benefits
- Previously, the clinical lab would automatically perform a urine culture if a urinalysis was positive for any of the following factors: Nitrite, Mod/Many Bacteria, Trace or greater Leukocyte esterase, and WBC >5/HPF.
- While this strategy certainly might maximize sensitivity, it likely has come at an excessive cost to specificity, therefore contributing to unnecessary use of resources, over-diagnosis of asymptomatic bacteriuria, and overtreatment.
- Studies have shown a cutoff of >10 WBC/HPF has a 92% negative predictive value in ED patients (1) and 92% in patients with indwelling urinary catheters. (2)

Key Points:
- Specimens with ≤10 leukocytes/HPF will be held for 24 hours to accommodate add-on requests.
- For pediatric or neutropenic patients, clinicians should consider ordering a separate urinalysis and urine culture rather than reflex testing.
- For patients in whom screening for and treatment of asymptomatic bacteriuria is currently indicated (pregnant women, pre-op assessment prior to some urologic procedures) urine cultures without a screening urinalysis should be ordered.

Please contact Dr. Jason Kurzer (kurzer@stanford.edu) or Dr. Marisa Holubar (mholubar@stanford.edu) with further questions.