Obstetric Management

- Screen **all** pregnant women for ASB with a clean-catch, mid-stream urine for culture and sensitivity at their initial prenatal visit. If the culture comes back contaminated, repeat by mini-cath.

Quality Indicator/Benchmark
- Urine culture at initial visit

- If negative, repeat cultures are not needed except in patient with Sickle cell disease or trait, insulin dependent diabetes, or autoimmune disease. In these patients, repeat urine culture each trimester(clean catch, mid-stream urine; if the culture comes back contaiminated, repeat by mini-cath).
- Cystitis: Diagnose by history and examination of un-spun mini-cath urine for evidence of WBCs or bacteria. Confirm with culture and sensitivity. As an alternative to microscopy, urine dipstick with leukocyte esterase and nitrite can be utilized to diagnose infection in the setting of suggestive symptoms.
- If urine culture is positive, treat empirically with a 3 day course of Nitrofurantoin 100 mg two times per day or trimethoprim-sulfamethoxazole (Bactrim DS) 160/100 mg two times per day if not sulfa allergic and beyond the first trimester but prior to 34 weeks. Repeat urine culture and sensitivity in 7-10 days after treatment. An increasing number of organisms are developing antibiotic resistance therefore culture and sensitivity is more important than in the past in order to ensure the patient is receiving appropriate therapy.
- If repeat culture continues to be positive, check compliance and bacteria sensitivity and re-treat.
- Women with repeat positive urine cultures may be treated with chronic antibiotic suppression such as Nitrofurantoin 100 mg at bedtime.

Management of Acute Pyelonephritis

1. Hospitalize patient.
2. Obtain urine culture. If patient appears significantly ill, obtain blood cultures as well as these may be positive prior to the urine culture.
3. Evaluate CBC, serum creatinine, and electrolytes.
4. Administer IV hydration to ensure adequate urinary output and replete any electrolyte disturbances.
5. Monitor vital signs, including pulse oximetry, and urinary output frequently and strictly.
6. Administer intravenous antimicrobial therapy with a 3rd generation cephalosporin (e.g. ceftriaxone), a beta-lactam with good gram negative coverage (e.g. piperacillin/tazobactam) or ampicillin and gentamicin.
7. Obtain chest radiograph if dyspnea or tachypnea is present. If evidence of pulmonary edema or oxygen saturation <95%, consider MFM or pulmonary consultation.
8. Repeat hematology and chemistry studies in 48 hours.
9. Change to oral antimicrobials when afebrile 24-48 hrs.
10. Discharge when afebrile 24-48 hours, provide oral antimicrobial therapy for an additional 14 days.
11. After completion of acute course of therapy, patient should receive suppressive therapy for the remainder of pregnancy such as Nitrofurantion 100 mg at bedtime.