

UTI Diagnostic Criteria:

- Urinalysis with >5 WBC per HPF **OR** + leukocyte esterase **OR** + nitrite ([link to evidence](#)) **AND**
- Urine culture results, if resultd. Growth of a uropathgen:
 - Clean catch: $\geq 100,000$ cfu/ml
 - Cath specimen: $\geq 50,000$ cfu/ml (**new data suggests 10,000 may be appropriate**)

Admission Criteria

- Requiring IV fluids
- Outpatient follow up cannot be arranged
- Failed oupt therapy defined by:
 - Persistent clinical symptoms > 48h on appropriate therapy, **or**
 - Inability to maintain hydration status

RBUS Indications

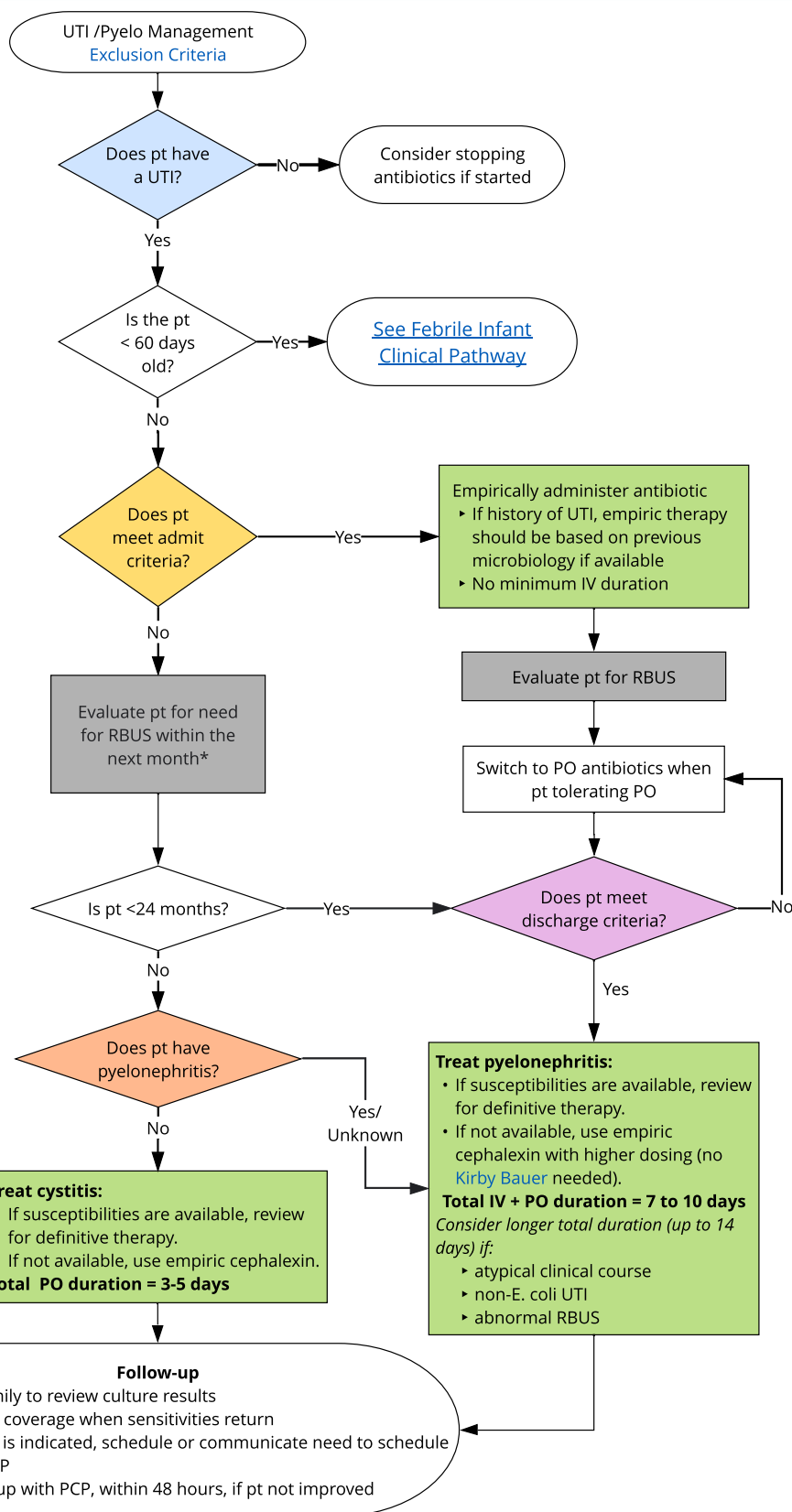
- ≤ 24 months of age with febrile UTI
- Recurrent (more than 1) febrile UTI
- Male with febrile UTI
- *Concern for renal abscess:
 - If no clinical improvement after 48 hours of antibiotic to which the organism is susceptible obtain RBUS within 24
- UTI due to atypical organism (not *E.coli*, *Klebsiella spp.*, or *Enterococcus spp.*)

Pyelonephritis

- CVA tenderness
- Vomiting
- Fever ≥ 39 C
- If RBUS performed, evidence of pyelo

Acronyms:

CVA: Costovertebral angle
Pyelo: Pyelonephritis
RBUS: Renal bladder ultrasound
UTI: Urinary tract infection
w/u: Work up



- Diagnosing UTI/Pyelo Algorithm
- Renal Imaging for UTI/Pyelo Algorithm

[Antibiogram link](#)

Empiric Therapy

Pyelonephritis or unknown:

Oral:

Cephalexin (high dose) 75 to 100 mg/kg/day divided q8h (max: 1000 mg/dose)

IV:

Cefazolin (high dose) 100 mg/kg/day divided q8h (max: 6g/day)

IM:

Ceftriaxone 50 mg/kg/dose IM q24h (max: 2000 mg/dose)

Cystitis:

Oral:

Cephalexin 25 - 50 mg/kg/day divided q8h (max: 500 mg/dose)

For patients at low-risk for IgE-mediated reaction to penicillins or cephalosporins, consider an observed dose of the preferred treatment and continue if tolerated

For patients at high risk for severe delayed or IgE-mediated reaction to:

- Cephalosporins
- Penicillins

Discharge Criteria

- Clinical response to therapy (i.e. tolerating PO)
- Modifyable risk factors for UTI (e.g. voiding dysfunction) addressed
- Family education provided
- If indicated, RBUS completed or scheduled



QR Code for mobile access