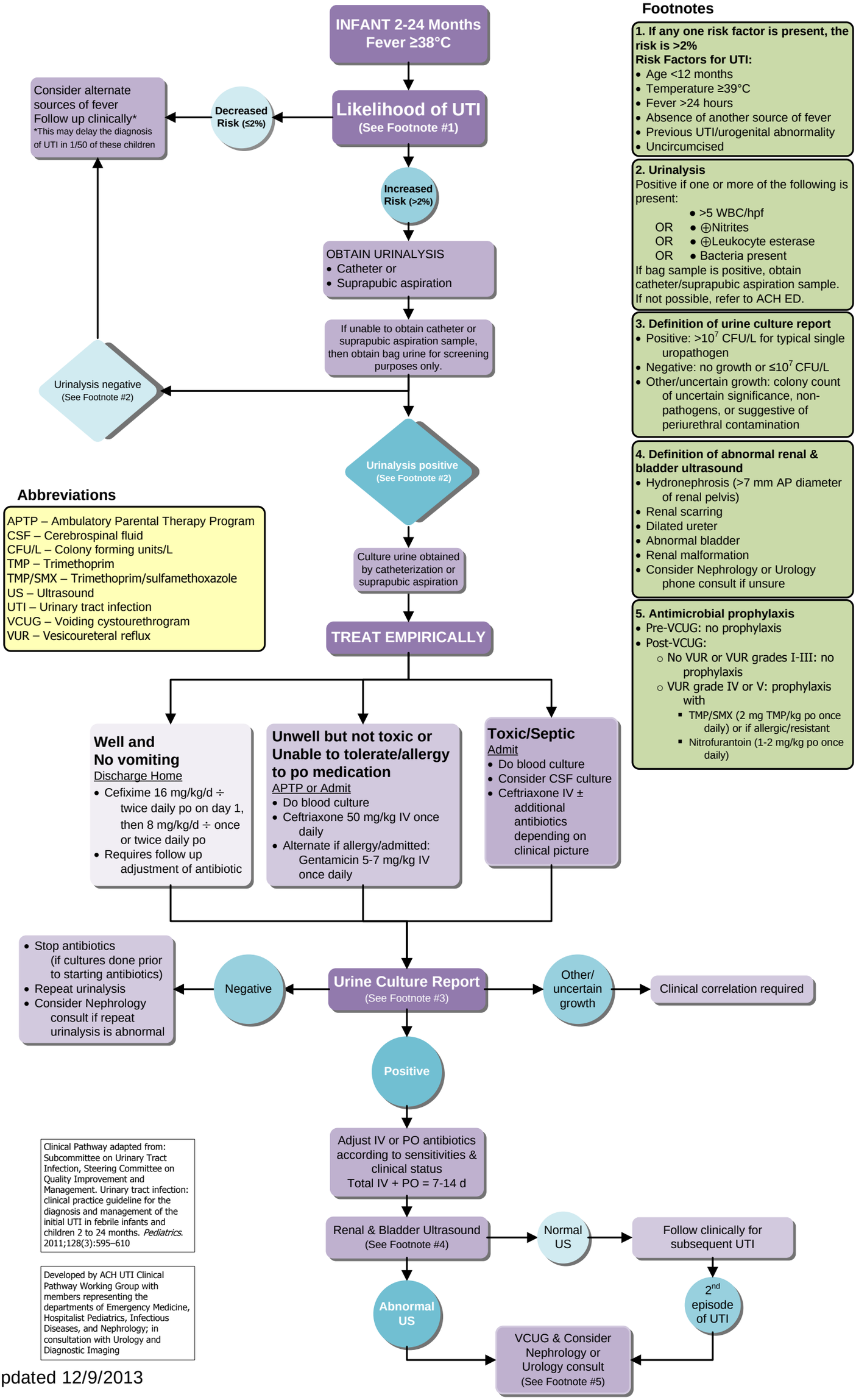
CLINICAL PATHWAY FOR SUSPECTED FIRST FEBRILE URINARY TRACT INFECTION IN 2-24 MONTH OLD CHILDREN

Alberta Health Services

Alberta Children's Hospital



Abbreviations

APTP – Ambulatory Parental Therapy Program
CSF – Cerebrospinal fluid
CFU/L – Colony forming units/L
TMP – Trimethoprim
TMP/SMX – Trimethoprim/sulfamethoxazole
US – Ultrasound
UTI – Urinary tract infection
VCUG – Voiding cystourethrogram
VUR – Vesicoureteral reflux

Footnotes

1. If any one risk factor is present, the risk is >2%
Risk Factors for UTI:
- Age <12 months
- Temperature ≥39°C
- Fever >24 hours
- Absence of another source of fever
- Previous UTI/urogenital abnormality
- Uncircumcised

2. Urinalysis
Positive if one or more of the following is present:
- >5 WBC/hpf
- OR ⊕Nitrites
- OR ⊕Leukocyte esterase
- OR Bacteria present

If bag sample is positive, obtain catheter/suprapubic aspiration sample. If not possible, refer to ACH ED.

3. Definition of urine culture report
- Positive: $>10^7$ CFU/L for typical single uropathogen
- Negative: no growth or $\leq 10^7$ CFU/L
- Other/uncertain growth: colony count of uncertain significance, non-pathogens, or suggestive of periurethral contamination

4. Definition of abnormal renal & bladder ultrasound
- Hydronephrosis (>7 mm AP diameter of renal pelvis)
- Renal scarring
- Dilated ureter
- Abnormal bladder
- Renal malformation
- Consider Nephrology or Urology phone consult if unsure

5. Antimicrobial prophylaxis
- Pre-VCUG: no prophylaxis
- Post-VCUG:
  - No VUR or VUR grades I-III: no prophylaxis
  - VUR grade IV or V: prophylaxis with
    - TMP/SMX (2 mg TMP/kg po once daily) or if allergic/resistant
    - Nitrofurantoin (1-2 mg/kg po once daily)

Clinical Pathway adapted from: Subcommittee on Urinary Tract Infection, Steering Committee on Quality Improvement and Management. Urinary tract infection: clinical practice guideline for the diagnosis and management of the initial UTI in febrile infants and children 2 to 24 months. *Pediatrics*. 2011;128(3):595–610

Developed by ACH UTI Clinical Pathway Working Group with members representing the departments of Emergency Medicine, Hospitalist Pediatrics, Infectious Diseases, and Nephrology; in consultation with Urology and Diagnostic Imaging

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