Appendix A: Urinary Tract Infection Prevention and Management Flowchart for Use During Team Travel

**Urinary Tract Infection Prevention & Management**

**Well athletes**
- Adequate hydration (2-2.5L per day)
- Hand washing and catheter hygiene
- Signs and symptoms of UTI
- Early medical review for signs or symptoms of UTI
- No need for routine urine testing
- Those who dehydrate for travel are at greater risk

**Asymptomatic athlete with cloudy urine**
- Ask regarding signs and symptoms of UTI
  - No
  - Yes
  - Increase hydration
  - Check catheterisation frequency
  - No need for urine dipstick
  - Educate

**Unwell athletes**
- Ask regarding signs and symptoms of UTI
- If signs and symptoms of UTI but dipstick negative – medical review
- +ve urine m/c/s, or clinically suspicious for UTI and awaiting results

**EDUCATE – basic UTI prevention**
- Increased frequency of catheterisation
- Burning sensation when urinating
- Passing frequent, small amounts of urine
- Pain (upper back or pelvic)
- Acute or worsening fever
- Rigors (sudden shaking / shivering)
- Altered mental state
- Feeling tired or generally unwell
- Sense of unease
- Urine colour = red, bright pink, or colo coloured
- Urinary incontinence
- Increased asexuality
- Autonomic dysreflexia (sudden severe elevation in blood pressure, sweating, flushing, goose bumps, chills, pounding headaches, anxiety and bradycardia)

**EDUCATE – signs & symptoms of UTI**
- Bacteriuria is seen in:
  - >50% of catheterised patients
  - 100% in long term indwelling catheter users
- Asymptomatic bacteriuria should not be treated with antibiotics

**Recurrent UTI:**
- If ≥ 3 UTIs per year, review with medical staff
- Consider prophylactic antibiotics for recurrent travel related UTIs
- Ensure review with urologist for bladder screen

**The following has not been shown to be effective for prevention of UTI in patients with neuropathic bladder:**
- Cranberry products (juice, tablets etc)
- Methylene blue salts.
- Other acidification / alkalinisation agents (including ammonium chloride, sodium bicarbonate, acetazolamine and ascorbic acid)

**Medical review essential for**
- +ve urine m/c/s
- If m/c/s unavailable consider dipstick
- If signs and symptoms of UTI
- Start antibiotic therapy
- If no antibiotics, consider cephalaxin, or norfloxacin and check sensitivity
- Antibiotics for 7-10 days (10-14 if delayed response)
- Re-evaluate antibiotics choice once culture results available
- If possible, check temperature and use Panadol as appropriate
- Focus on hydration (2-2.5L per day), aim for clear urine
- Change catheter if IDC
- Alkalise the urine with Urol if required for symptomatic relief
- Educate regarding basic UTI prevention and signs and symptoms of UTI