

Decision aid for diagnosis and management of suspected urinary tract infection (UTI) in people with indwelling catheters

This flowchart has been designed to help nursing and care staff and prescribers manage catheterised people with urinary tract infection. The national catheter passport should be used to support good practice in catheter care. Dipstick testing should not be used to diagnose UTI in patients with indwelling catheters. If a person has a fever (defined as temperature > 37.9°C or 1.5°C increase above baseline occurring on at least 2 occasions in last 12 hours) this suggests they have an infection. Hypothermia (low temperature of <36°C) may also indicate infection, especially in those with co-morbidities (heart or lung disease, diabetes). Some people may also have non-specific symptoms of infection such as abdominal pain, alteration of behaviour or loss of diabetes control.

Yellow action boxes (*) provide advice for nursing and care staff.

Red action boxes (**) provide advice for nursing staff and prescribers (medical & non-medical).

- * Contact medical/clinical staff to request review of person
- ** Take appropriate specimens and manage following local antibiotic policy

Are there any symptoms suggestive of non-urinary infection?
 Consider possibility of symptoms being due to covid-19 and take appropriate action. Then consider the following:
Respiratory – ↑shortness of breath, cough or sputum (phlegm) production, new pleuritic chest pain (sharp pain across ribs)
Gastrointestinal – nausea/ vomiting, new abdominal pain, new onset diarrhoea
Skin/soft tissue – new redness, warmth, swelling, purulent drainage (pus)

Does the person have one or more of following signs or symptoms?

- shaking chills (rigors)
- new costovertebral (central low back) tenderness
- new onset or worsening delirium (confusion)

UTI unlikely but continue to monitor symptoms for 72 hours and ensure adequate hydration

Ongoing fever and development of one or more of above symptoms?

UTI likely

*Contact medical/clinical staff to request review of person

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 - Assess if retention or sub-acute retention of urine is likely – blocked catheter or distended bladder
 - **DO NOT** use dipstick test in diagnosis of UTI in people with indwelling catheters as bacteriuria is common
 - Obtain a sample from the sample port for urine culture and send to Microbiology
 - Start antibiotic therapy following local policy or as advised by Microbiology
 - Consider removing and replacing the urinary catheter if it has been in place for > 7 days but do not delay starting antibiotic treatment. If appropriate also consider the ongoing need for a long term catheter in consultation with specialists.
 - Consider use of analgesia (paracetamol or ibuprofen) to relieve pain
 - Consider admission to hospital if person has fever with chills or new onset hypotension (low blood pressure)
 - Review response to treatment daily. If no improvement of symptoms or deterioration, consider admission to hospital or an increased level of care
 - Ensure urine culture results are reviewed when available in order to streamline antibiotic therapy