Ongoing antibiotic treatment
- Adjust treatment in light of new culture results.
- Consider prostatitis in men with fever, perineal pain, or a tender prostate. Antibiotic treatment is different for prostatitis - see local empirical guidance.

Antibiotic prophylaxis for catheter change is only recommended when
- Trauma occurs during insertion.
- Sepsis or symptomatic UTI occurred following a previous catheter change.
Why is it important to correctly diagnose CA-UTI?

UTIs are becoming more difficult to treat because of increasing antibiotic resistance. Catheterisation increases the risk of developing a UTI, but also runs the risk of misdiagnosis.

Diagnosis of CA-UTI can be difficult
- Typical signs and symptoms of UTI are not present.
- Positive urine cultures do not necessarily mean infection. Urethral catheters normally become colonised with bacteria at a rate of 3 – 10% per day.

Appropriate antibiotic use reduces:
- Risk of side effects
- Antibiotic resistance
- Risk of C. difficile infection

When to send a CSU
- Before antibiotics are started
- When signs or symptoms of CA-UTI are present
- If changing the catheter, obtain CSU after the change

Signs and symptoms of CA-UTI

<table>
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<tbody>
<tr>
<td>Fever</td>
<td>Cloudy urine</td>
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<tr>
<td>Rigors</td>
<td>Smelly urine</td>
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<tr>
<td>Suprapubic/flank discomfort</td>
<td>Abnormal dipstick</td>
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<tr>
<td>Acutely altered mental status</td>
<td>Blocked catheter</td>
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<tr>
<td>Lethargy</td>
<td></td>
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<tr>
<td>Malaise</td>
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Dipstick testing cannot be used to diagnose UTI in catheterised patients.

How to send a CSU
- Use aseptic technique.
- Collect urine by sampling through the catheter port.
- Drain a few ml of urine before collecting the CSU sample.

Management
Catheter management
- Remove the catheter if possible,
  OR
- Replace the catheter, especially if it is a long term catheter.

Initial antibiotic treatment
- A positive urine culture does not necessarily mean that the patient has an infection.
- Only treat if signs or symptoms of CA-UTI are present.
- Review previous culture results before prescribing an antibiotic, as empirical therapy may not be appropriate.
- If no previous culture results are available, refer to local empirical guidance for antibiotic advice.
- Choice of treatment will depend on whether the patient has lower or upper UTI.