

Flowchart for suspected UTI in catheterised adults or those over 65 years

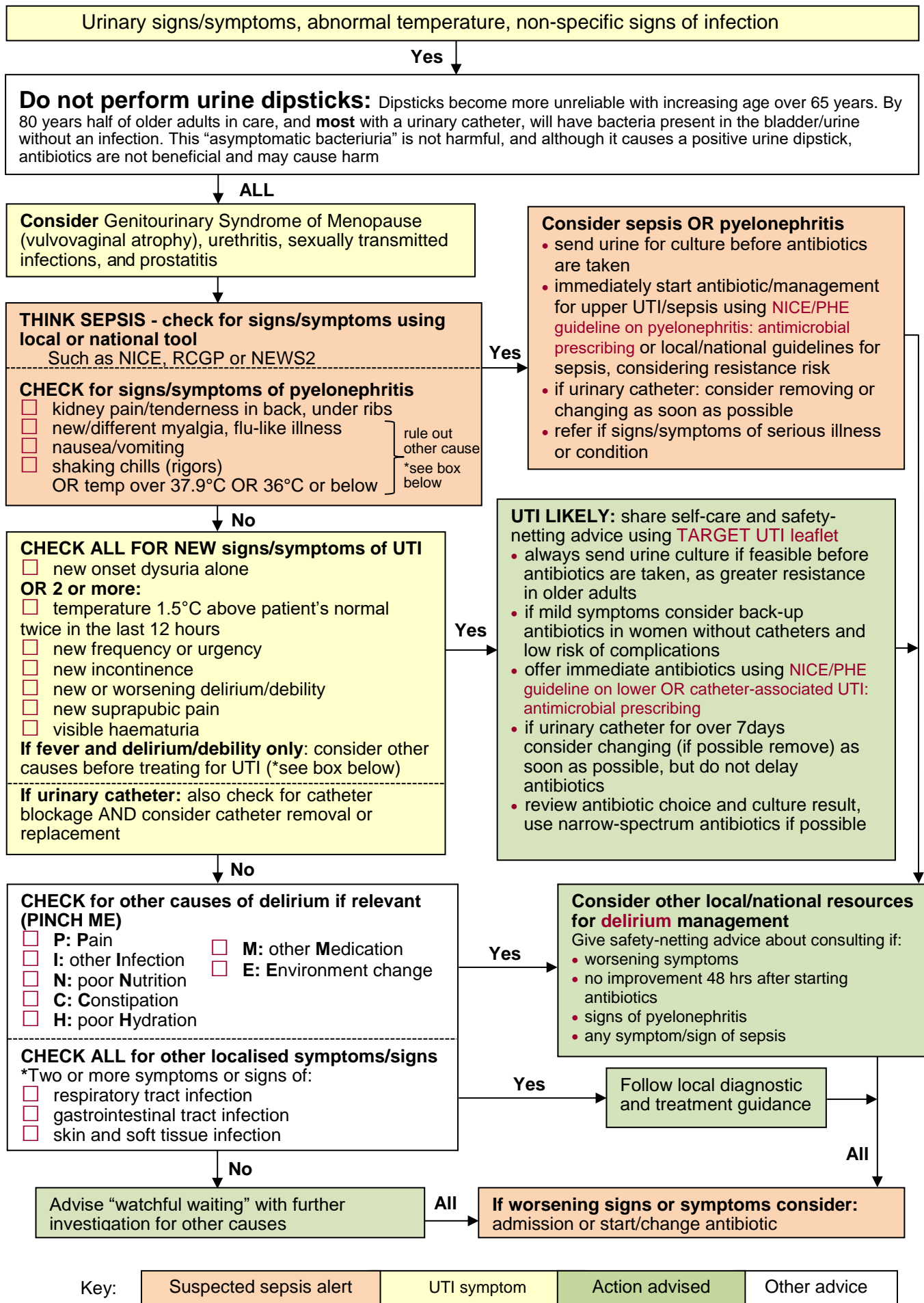


Table summary: catheterised adults or those over 65 years with suspected UTI

Men and women over 65 years may present with:

- localised signs or symptoms of a UTI including new onset dysuria; incontinence; urgency
- temperature: 38°C or above; 36°C or below; 1.5°C above normal twice in the last 12 hours
- non-specific signs of infection: for example delirium; loss of diabetic control

Do not perform urine dipstick as they become more unreliable with increasing age over 65 years

By 80 years half of older adults in care, and most with a urinary catheter, will have bacteria present in the bladder/urine without an infection. This "asymptomatic bacteriuria" is not harmful, and although it causes a positive urine dipstick, antibiotics are not beneficial and may cause harm

Consider: Genitourinary Syndrome of Menopause (vulvovaginal atrophy) as can present with dysuria.

Also consider risk of urethritis, prostatitis or STI

Use symptoms and signs to determine the most appropriate management

First think sepsis: check for signs using local or national tool such as NICE, RCGP or NEWS2

Exclude pyelonephritis checking for any one sign:

- kidney pain/tenderness in back, under ribs
- new/different myalgia, or flu-like symptoms
- nausea/vomiting
- shaking chills (rigors) or temp over 37.9°C or 36°C or below

If signs of sepsis or pyelonephritis

(if no kidney pain rule out other localised infection *see symptoms of other infection box below):

- send urine for culture before antibiotics **are taken**
- assess antibiotic resistance risk and immediately start antibiotic for upper UTI/sepsis **using NICE/PHE guideline on pyelonephritis: antimicrobial prescribing** or local/national guidelines for sepsis
- if urinary catheter for more than 7 days: consider changing (if possible remove) as soon as possible but do not delay antibiotics
- refer if signs or symptoms of serious illness or condition

Then check all for **NEW URINARY symptoms/signs**

- NEW onset dysuria alone
- OR 2 or more new:
 - temperature: 1.5°C above normal twice in the last 12 hours
 - new frequency or urgency
 - new incontinence
 - new or worsening delirium/debility
 - new suprapubic pain
 - visible haematuria

If fever and delirium/debility only: consider other infections before treating for UTI

If urinary symptoms suggest UTI:

- always send urine culture if feasible before antibiotics are taken, as greater resistance in older adults
- if mild symptoms consider back-up antibiotics in women without catheters and low risk of complications
- consider immediate antibiotics for lower UTI
- offer immediate antibiotic in men or if urinary catheter
- consider antibiotic resistance risk using patient history
- for antibiotic choice use **NICE/PHE guideline on lower UTI: antimicrobial prescribing** OR **NICE/PHE guideline on catheter-associated UTI: antimicrobial prescribing**

If indwelling URINARY CATHETER for over 7 days: check for catheter blockage AND consider catheter removal

- consider changing (if possible remove) catheter as soon as possible but do not delay antibiotics
- **leaking or blocked long-term indwelling catheters:** offer antibiotic treatment if signs/symptoms UTI;
- check bag positioning, constipation, see **guidance** for other causes
- **at catheter change:** only consider antibiotic prophylaxis if trauma or symptomatic UTI after previous changes

Check all for 2 or more signs or symptoms suggesting **other infection**

- respiratory tract infection: shortness of breath; cough or sputum production; new pleuritic chest pain
- gastrointestinal tract infection: nausea/vomiting; new abdominal pain; new onset diarrhoea
- skin and soft tissue infection: new redness; warmth

Follow diagnostic and treatment guidance if infection suspected

Check all for other causes of **DELIRIUM (PINCH ME)** and manage as needed

- | | | |
|--|---|--|
| <input type="checkbox"/> P: Pain | <input type="checkbox"/> M: other Medication | <ul style="list-style-type: none"> • using PINCH ME can help identify other potential underlying causes of delirium superimposed on dementia. It can be used in different clinical settings • consider other local/national delirium management resources • Advise watchful waiting, with further investigation if needed |
| <input type="checkbox"/> I: other Infection | <input type="checkbox"/> E: Environment change | |
| <input type="checkbox"/> N: poor Nutrition | | |
| <input type="checkbox"/> C: Constipation | | |
| <input type="checkbox"/> H: poor Hydration | | |

Share self-care and safety-netting advice using **TARGET UTI leaflet for older adults**

Safety-netting to seek advice if:

- worsening symptoms
- signs of pyelonephritis
- signs/symptoms of sepsis
- no improvement after 48 hours

Self-care advice

- drink enough fluids to avoid feeling thirsty and to keep urine pale
- take paracetamol regularly up to 4 times daily for pain/fever relief
- ways of preventing further episodes of UTI

Please refer to the information and reference tables in joint NICE/PHE guidance: NICE guidelines on UTI (lower): antimicrobial prescribing or NICE guidelines on pyelonephritis (acute): antimicrobial prescribing or NICE/PHE guideline on catheter-associated UTI: antimicrobial prescribing