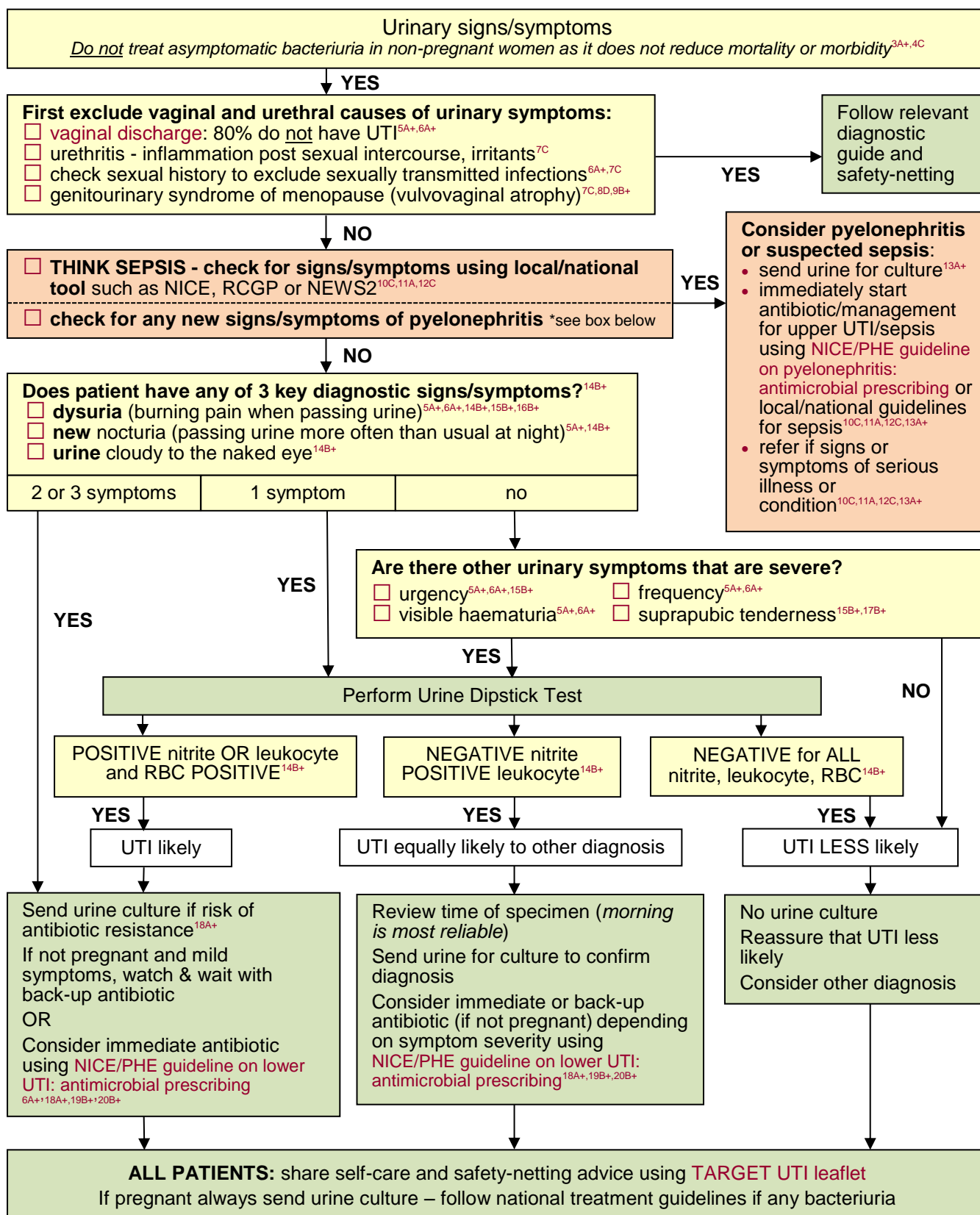


## Flowchart for women (under 65 years) with suspected UTI

This guide excludes patients with recurrent UTI (2 episodes in last 6 months, or 3 episodes in last 12 months)<sup>1D,2D</sup>



**\*Signs of pyelonephritis:<sup>21C</sup>**

- kidney pain/tenderness in back under ribs
- new/different myalgia, flu like illness
- shaking chills (rigors) or temperature 37.9°C or above
- nausea/vomiting

Key:

Suspected sepsis alert	UTI symptom	Action advised	Other advice
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## Table summary of diagnostic points for women under 65 years

**Using symptoms and dipsticks to help diagnose UTI:** <sup>5A+,6A+,14B+,15B+,16B+,17B+</sup> no individual or combination are completely reliable in diagnosing UTI, thus severity of symptoms and safety-netting are important in all

**First exclude other genitourinary causes of urinary symptoms**

- 75-80% with vaginal discharge will not have UTI <sup>15A+,6A+</sup>
- in sexually active check sexual history for STIs for example chlamydia and gonorrhoea <sup>6A+,7C</sup>
- urethritis - urinary symptoms may be due to urethral inflammation post sexual intercourse, irritants, or STIs <sup>7C</sup>
- genitourinary symptoms of menopause/atrophic vaginitis/vaginal atrophy <sup>7C,8D,9B+</sup>

**In all, check for new signs of pyelonephritis, systemic infection, or risk of suspected sepsis** <sup>10C,11A,12C,13A+,21C</sup>

If pyelonephritis or suspected sepsis: send urine for culture to inform definitive treatment and immediately start antibiotic using **NICE/PHE guideline on pyelonephritis: antimicrobial prescribing** or local/national guidelines for sepsis; refer if signs or symptoms of serious illness or condition <sup>10C,11A,12C,13A+</sup>

**In women <65yrs use signs/symptoms of dysuria, new nocturia or cloudy urine to guide treatment** <sup>14B+</sup>

- 2 or more** of these 3 signs/symptoms in general practice are likely to have a UTI: consider immediate antibiotic, or back-up if mild symptoms and woman is not pregnant <sup>14B+,18A+</sup>
- 1 sign/symptom:** UTI possible as 68% will have a culture confirmed UTI ( $\geq 10^6$  cfu/L) therefore use urine dipstick to increase diagnostic certainty <sup>14B+</sup>
- none** of the 3: UTI less likely - use urine dipstick if other severe urinary symptoms (frequency, urgency, haematuria, suprapubic tenderness) <sup>14B+</sup>

Dysuria, new nocturia or cloudy urine present <sup>14B+</sup>	% of GP patients with suspected UTI presenting with these sign/symptoms <sup>14B+</sup>	% with these symptoms who have culture confirmed UTI ( $\geq 10^6$ cfu/L) <sup>14B+</sup>	Suggested management
All 3	29%	82%	Consider immediate antibiotic OR back-up if mild symptoms and not pregnant <sup>18A+</sup>
$\geq 2$	71%	74%	
1	25%	68%	Use urine dipstick to increase diagnostic certainty <sup>14B+</sup>
None	4%	not specified	Use urine dipstick if other severe urinary symptoms

**For antibiotic choice: use NICE/PHE guideline on lower UTI: antimicrobial prescribing; check history to determine resistance risk** <sup>18A+</sup>

**Using urine dipsticks to predict UTI in women <65 years with only 0 or 1 of dysuria, new nocturia, cloudy urine increases the diagnostic certainty, and reduces unnecessary antibiotics** <sup>14B+</sup>

- positive nitrite OR positive leukocyte and blood: UTI likely <sup>14B+</sup> - offer empirical antibiotics for lower UTI OR if milder symptoms (and not pregnant) consider back-up antibiotic with self-care and safety-netting <sup>6A+,18A+,19B+,20B+</sup>
- leukocyte positive but nitrite negative: UTI equally likely to other diagnosis <sup>14B+</sup> - review time of specimen (morning is best); send urine for culture; use back-up (if not pregnant) or immediate antibiotic depending on symptom severity <sup>18A+,19B+,20B+</sup>
- ALL nitrite, leukocyte and blood negative: UTI Less likely - consider other diagnosis; reassure; give self-care and safety-netting advice <sup>14B+</sup>

If pregnant: always send urine culture; follow **NICE/PHE guideline on lower UTI: antimicrobial prescribing** if any bacteriuria

ALL patients: share self-care and safety-netting advice using **TARGET UTI leaflet**

**For all patients 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