SKIP THE DIP

for urinary tract infections in over 65s

Toolbox Talk

What is Skip the Dip?

The HSE "SKIP THE DIP for urinary tract infections in over 65s" quality improvement initiative aims to increase awareness of current best-practice guidance in assessment of UTI in people aged 65 years and older, for all community settings.

HSE guidance states that dipstick urinalysis is not recommended to assess for evidence of UTI in adults aged 65 years and over, or with urinary catheters.

Why is dipstick urinalysis not recommended to assess for evidence of UTIs in older people or adults with a urinary catheter?

- Bacteria can live in the urinary tract of older people and those with a urinary catheter without causing an infection. This is called asymptomatic bacteriuria (ASB).
- In the absence of clinical signs and symptoms of UTI, ASB is not harmful, but dipstick urinalysis can test positive for nitrites and/or leucocyte esterase.
- Positive dipstick urinalysis may lead to antibiotics being prescribed unnecessarily. Antibiotics provide no benefit for ASB in people 65 years or older or with a urinary catheter, and may lead to harm and antimicrobial resistance.

Approximately half of people aged 65 years or older, and all people with an indwelling urinary catheter in place for >30 days, will have ASB.

How should we assess whether an adult aged 65 years and over, or with a urinary catheter, has a UTI, if we don't use dipstick urinalysis?

- **A diagnosis of UTI should be based on clinical signs and symptoms.** The *'Decision aid for management of suspected urinary tract infection (UTI) in community settings: for adults aged 65 years and over or adults with a urinary catheter'* is designed to assist with this. Follow the decision aid (overleaf) in conjunction with medical advice.
- In those with non-specific signs and symptoms or when it is difficult to determine whether they have a UTI, consider all possible causes of symptoms (infective and non-infective), as described in the HSE decision aid, as well as considering UTI.
- If the service user is systemically unwell or symptoms worsen consider sepsis and seek urgent medical review.

Does foul smelling or dark urine indicate a UTI?

In the absence of clinical signs and symptoms of UTI, foul smelling or dark urine is more likely to indicate dehydration rather than infection. Encourage service users to drink enough fluids throughout the day (about 8 cups), if not on fluid restriction.

When should a urine specimen be sent to the laboratory?

- For adults aged 65 years and over, or with a urinary catheter, a urine culture is only indicated when there are clinical signs and symptoms of a UTI.
- As with dipstick urinalysis, a urine culture showing presence of bacteria does not distinguish between ASB and infection. Antibiotics should not be prescribed solely based on a urine culture result. A clinical assessment is required to decide whether antibiotic treatment is necessary.
- If there is a clinical need for an immediate antibiotic, do not wait to commence the antibiotic until the urine culture result is available. Urine culture results can help to guide antibiotic treatment choice when results are available.
- A urine specimen should ideally be sent to the laboratory before antibiotics are commenced. A clean catch, mid-stream urine specimen is recommended. In those with a catheter, consider changing the catheter and taking the sample from the sampling port of new catheter.

What if someone else asks you to perform dipstick urinalysis to assess for UTI?

- Discuss the rationale why dipstick urinalysis is not recommended to assess for evidence of UTI in people aged 65 years and over or with a urinary catheter.

Where can I find more information?

Resources to support healthcare professionals and patients/carers in managing suspected UTIs in older people are available on **www.antibioticprescribing.ie**

- HSE position statements on the use of dipstick urinalysis to assess for evidence of UTI in adults.
- Skip the Dip Staff Handbook
- UTI patient leaflet
- Antibiotic treatment guidelines
- Decision aid for the management of suspected UTI in community settings (also detailed overleaf)

RESIST

Decision aid for management of suspected urinary tract infection (UTI) in community settings: for adults aged 65 years and over or adults with a urinary catheter

- Do not perform dipstick urinalysis
- Focus on clinical signs and symptoms to guide management
- Only send urine culture for SYMPTOMATIC patients

- Bacteria can live in the urinary tract and not cause infection. Up to half of elderly patients with no symptoms will have a positive dipstick urinalysis and urine culture, without a UTI

UTI suspected (urinary signs and symptoms, abnormal temperature, non-specific signs and symptoms)

Do not perform dipstick urinalysis. Focus on clinical signs and symptoms.

Consider other causes of urinary symptoms. Infective: prostatitis, epididymo-orchitis, sexually transmitted infections. **Non-Infective**: genitourinary syndrome of menopause (GSM) [1], benign prostatic hyperplasia, overactive bladder.
[1]In women with symptoms suggestive of GSM, vaginal oestrogen should be considered.

Could this be sepsis? Check for signs and symptoms

Yes → Urgent medical review and transfer to acute hospital for evaluation, diagnosis and management if in line with the patient's wishes.

No

Does the patient meet the following criteria?

NO URINARY CATHETER

- ☐ **New onset dysuria alone OR 2 or more of [2]:**
- ☐ New urinary frequency
- ☐ New urinary urgency
- ☐ New onset incontinence
- ☐ New suprapubic/flank pain or tenderness
- ☐ Fever (Temperature >37.9°C, or 1.5°C above patient's baseline) or shaking chills, twice in the last 12 hours[3]
- ☐ New onset or worsening delirium/ debility (confusion/ agitation/ functional deterioration) or change from baseline[3]
- ☐ Visible haematuria(if trauma/other causes excluded)

URINARY CATHETER

If patient has any of the following new symptoms [2]:

- ☐ New suprapubic/flank pain or tenderness
- ☐ Fever (Temperature >37.9°C, or 1.5°C above patient's baseline) OR shaking chills, twice in the last 12 hours[3]
- ☐ New onset or worsening delirium/ debility (confusion/ agitation/ functional deterioration) or change from baseline[3]
- ☐ Visible haematuria (if trauma/other causes excluded)

Check for catheter blockage AND consider catheter removal or replacement

[2] Non-verbal adults may not reach the criteria threshold; clinical judgement is advised
[3] If fever/chills and / or delirium/debility only: consider other causes before treating for UTI (Box 1 and 2 below)

Yes

UTI LIKELY (lower UTI or pyelonephritis / upper UTI)

- Medical review advised
- Don't perform dipstick urinalysis
- Send urine for culture if symptomatic (pre-antibiotics, if feasible). Take catheter samples from sample port

Antibiotic treatment:

a) If mild symptoms, consider back-up antibiotics in women without catheter and with low risk of complications **OR**

b) Offer immediate antibiotics as per www.antibioticprescribing.ie

Consider pyelonephritis / upper UTI
(Immediate antibiotics indicated as per www.antibioticprescribing.ie)
Check for signs and symptoms:
- Flank pain which radiates to iliac fossa and suprapubic area
- Tenderness and guarding over kidney
- Sudden onset general systemic disturbance with fever / rigors / nausea / vomiting

- Review antibiotic choice when culture result available, and in accordance with treatment response
- Ensure adequate hydration
- For catheter-associated UTI, review ongoing need for the catheter. If catheter has been in place for > 2 weeks and is still indicated, it should be replaced whilst on antibiotics
- **If worsening symptoms, consider sepsis and escalate appropriately (See sepsis box above)**

No

UTI UNLIKELY

- Consider other causes of symptoms (Box 1 and 2 below)
- Provide safety netting to patient and monitor
- Ensure adequate hydration
- Re-evaluate if symptoms worsen

Box 1: Check for other causes of delirium if relevant (PINCH ME)

☐ **P**:	Pain
☐ **IN**:	**Infection[4]**
☐ **C**:	Constipation
☐ **H**:	Hydration / Nutrition (Is there major electrolyte imbalance?)
☐ **M**:	Medication (e.g. hypnotics, opioids)
☐ **E**:	Environment change

Box 2: Consider other sources of infection, if relevant

[4] Are there any symptoms suggestive of non-urinary infection such as?
- Respiratory - shortness of breath, cough or sputum production, new pleuritic chest pain
- Gastrointestinal - nausea/vomiting, new abdominal pain, new onset diarrhoea
- Skin/soft tissue - new redness, warmth, swelling, purulent drainage

If yes, medical review is advised and manage according to guidelines on www.antibioticprescribing.ie