Wirral working together to improve hydration and prevent and improve treatment of Urinary Tract Infections

Prevention, improving diagnosis and management of urinary tract infections (UTI) in older people is a major priority for antimicrobial stewardship for Wirral Place. Wirral has a higher proportion of older people compared to the England average. Urinary tract infections cause a significant burden of infections in this population and a high rate of hospital admissions.

Wirral has the highest rates of prescribing of antibiotics for UTI in England and one of the highest rates of broad-spectrum antibiotic use of which cefalexin prescribing for UTIs makes up a significant proportion.

Implementation of this work and the introduction of the UTI screening tool to care and nursing homes will begin in June 2022.

What are we aiming to achieve?

- Reduce burden of UTIs in older people by improving hydration
- Reduce UTI related hospital admissions
- Eliminate urine dipping for UTI diagnosis in > 65 years and individuals with indwelling catheters in accordance with NICE and PHE guidance
- Improve urine sampling in line with NICE PHE guidance

How do we plan to do this?

- A united approach to diagnosis and treatment of UTIs across all organisations and services.
- Working together to improve hydration
- Hydration champions in care sectors to lead on training and promotion of hydration
- A Wirral wide UTI screening tool to aid diagnosis of UTI on symptoms to remove the need for urine dips. This will replace urine dips and aide referral conversations with GP practices and teletriage.
- Monitoring of testing samples to support improvement in urine sampling to confirm diagnosis and guide treatment choices. This will be available in a UTI dashboard accessible at practice level.
- Collaborative working to support projects to improve hydration.

Other benefits

Hydration is enormously important to the general health and wellbeing of older people. It is well known that dehydration in older people causes UTIs, pressure sores, cognitive impairment, dizziness and falls, constipation, kidney damage and leads to increased hospital admissions.

Many of these benefits are difficult to measure, however we will be monitoring the impact on hospital admissions and incidence of UTI.

How are we asking GP practices to support the project?

- Support care providers to use the UTI assessment tool and not to dip
- Monitor practice progress for improving UTI sampling
- Provide hydration advice for older people at risk of dehydration

Resident:..DOB......................	**Healthy** Wirral
Date completed...........................Care Home..................................	

UTI / Infection Assessment tool: care home residents (over 65 years)

- **UTI suspected – complete assessment tool [Tick where symptoms are present]**
  - **DO NOT PERFORM URINE DIPSTICK IN RESIDENTS AGED OVER 65**
  - **NEVER DIPSTICK URINE FROM ANY RESIDENTS WITH A CATHETER**

Box 1. Could it be SEPSIS? Possible infection AND ONE of the following:	**Action**
☐ New deterioration in consciousness level (GCS/ AVPU)/new confusion ☐ Low blood pressure: Systolic ≤90 mmHg (or ≥40 mmHg below normal) ☐ Heart rate ≥ 130 beats per minute ☐ Respiratory rate ≥ 25 per minute ☐ Needs oxygen to keep SpO2 92% (88% in COPD) ☐ Non-blanching rash ☐ Mottled or ashen skin (blue/grey colouring of skin / lips /tongue) ☐ Not passed urine in last 18 hours ☐ Urine output less than 0.5 ml/kg/hr if catheterised ☐ Recent chemotherapy (within last 6 weeks)	**Refer urgently for assessment and treatment. Call 999** If possible, measure and monitor early warning score (NEWS) **!**

Box 2. Any new onset/worsening symptoms that suggest UTI?	**Action if UTI likely**
Either ☐ Burning, pain or discomfort when passing urine (dysuria) ▲ **or** ☐ Tenderness in back, under ribs (kidney pain) (Possible upper UTI/ pyleonephritis) ▲ **Or if 2 or more symptoms below:** ☐ Needing to pass urine much more often than usual or more urgently ☐ New or worsening urinary incontinence ☐ Visible blood in urine (macroscopic haematuria) ☐ Pain in lower tummy or above pubic area ☐ Inappropriate shivering/chills OR temperature below 36 or above 37.9°C Record temperature here if taken.............. ☐ New or worsening confusion, agitation or delirium [complete box 3]	• Do NOT dip urine • Obtain MSU urine sample • Contact GP / Teletriage 0151 514 2222 (opt2) / 111 if your home does not have Teletriage service. Explain symptoms highlighted by screening tool. • Encourage fluids • Obtain catheter sample and consider catheter change / removal by ANTT trained staff. Residential homes: contact **Community Nursing Service** on 0151 514 2222

Box 3. Check for other causes of delirium if relevant (PINCH ME)		**Action**
☐ **P:** Pain ☐ **I:** other Infection ☐ **N:** poor Nutrition ☐ **C:** Constipation ☐ **H:** poor Hydration (check urine color chart and look for signs)	☐ **M:** other Medication ☐ **E:** Environment change	• Address causative problems • Poor hydration identified – increase hydration **If needed** Contact GP / Teletriage 0151 514 2222 (opt2) / 111 if your home does not have Teletriage service

Box 4. Check for symptoms of other infections - new or worsening- (Tick if present)	**Action**
☐ Respiratory: shortness of breath, cough/sputum, new chest pain ☐ Gastrointestinal: nausea/vomiting, new abdominal pain/cramps, new onset diarrhoea. ☐ Skin/soft tissue: new redness, warmth, swelling, pus.	**UTI unlikely contact GP/ Teletriage** **0151 514 2222 (opt2)**

Hydration color chart
Dark or smelly urine alone does not indicate infection. 1 to 3 is healthy.

1	2	3	4	5	6	7
Good	Good	Fair	Dehydrated	Dehydrated	Very Dehydrated	Severe dehydration