

Hertfordshire and West Essex Integrated Care System



Community Pharmacy service for Treatment of Simple Lower urinary tract infection (UTI) in non-pregnant women aged 16 years to 64

Monday 20th November

7.30pm – 8.30pm

Contact: HWE ICB Pharmacy and Medicines Optimisation Team hweicbhv.medicinesoptimisationteam@nhs.net

Working together for a healthier future



Agenda

- Welcome and Introductions
- HWE ICB UTI PGD Overview Janet Weir, HWE ICB
- Urinary Tract Infections and Antimicrobial Stewardship Janet Weir, HWE ICB
- PharmOutcomes Helen Musson, Chief Officer, Community Pharmacy Hertfordshire
- Round Up and Questions ALL



Aims of the HWE ICB UTI PGD Service

- To improve patient's access to advice and appropriate treatment via community pharmacy
- To reduce GP and NHS 111 acute appointment workload
- To educate patients to seek advice and treatment from the most appropriate healthcare setting
- To promote the role of the pharmacist and self-care
- To reduce requests for inappropriate supplies of antibiotics
- To improve working relationships between doctors and pharmacists



UTI Service Extension Overview

- Available to non-pregnant female patients aged 16- 64 years in the absence of current or recent fever (48 hours) registered (including temporary registration) with a GP contracted to HWE ICB
- Following successful pilot in Hertsmere and Dacorum localities, UTI PGD service is being extended to the whole of HWE ICB. Local service will run until national Pharmacy First UTI service implemented.
- If considered clinically appropriate and no contraindications, pharmacists will be able to supply prescription only medications (Nitrofurantoin/Trimethoprim) under the terms of a PGD
- Consultation is free
- Patients may be advised to purchase OTC products as per NHS guidelines
- Usual prescription charges apply when an antibiotic is supplied
- Where a pharmacist sees a patient and considers that treatment is required but they are excluded from the PGD based inclusion and exclusion criteria, the pharmacist will make an onward referral e.g. GP or 111 or signpost as appropriate e.g. accident & emergency



How can patients access the UTI PGD Service?

- CPCS referral from a GP
- CPCS referral from NHS 111
- Walk-in self-referrals
- Signposted from another pharmacy not participating in the UTI PGD service:
 - A list of community pharmacies participating in the UTI PGD service will be made available.



Training and Competency

- NICE Competency Framework for health professionals using patient group directions
- PHE Diagnosis of urinary tract infections Quick reference tool for primary care for consultation and local adaptation
- <u>NICE guideline [NG109] Urinary tract infection (lower): antimicrobial prescribing Published: 31 October 2018</u>
- <u>RCGP eLearning Urinary Tract Infections</u>
- <u>NHS Guidance on OTC Products</u>
- Safeguarding Vulnerable Adults <u>HEE elfh Hub (e-lfh.org.uk)</u>
- Declaration of Competence (DoC) for Minor Ailments (UTI = Level 2 Minor Ailments Service) completed on CPPE website ☑
- Confirmation that all training and competency requirements are met will be required at Enrolment on PharmOutcomes.



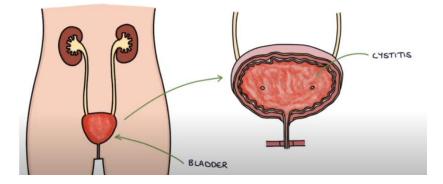


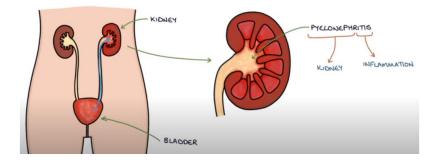
Lower Urinary Tract Infections

July 2023

Lower UTI

- Infection in the bladder, causing cystitis (inflammation of the bladder).
- Can spread up to the kidneys and cause pyelonephritis.
- More common in women, where the urethra is much shorter
- Primary source of bacteria is from the faeces. Short journey to the urethral opening from the anus
- Sexual activity, incontinence or poor hygiene can also contribute
- Urinary catheters are a key source of infection, and catheterassociated urinary tract infections tend to be more significant and challenging to treat.





Presentation

Suprapubic pain or disco	nfort	
Frequency		
Urgency		
Incontinence		
Haematuria		
Cloudy or foul smelling u	ine	

PGD inclusion criteria

	CHOICE.
Criteria for inclusion	 Informed consent Non pregnant females aged 16 years to 64 years Signs and symptoms and diagnosis of UTI using the appropriate <u>Public Health England Urinary tract infection:</u> <u>diagnostic tools for primary care</u> including the use of dipsticks where this is identified in the guidance No nitrofurantoin use in the past 3 months
1	

Notable PGD exclusion criteria (not exhaustive)

 Criteria for exclusion Individuals aged 65 years or over or 15 years and younger Males Pregnancy or suspected pregnancy Current breastfeeding Immunocompromised individuals Any individual identified with symptoms of severe/life- threatening infection or systemic sepsis using <u>NEWS2</u> should be referred urgently via ambulance Recurrent UTI (>2 in 6 months, >3 in 12 months) – requires urine culture Treatment for UTI with any antimicrobial in the past 3 months. Known previous nitrofurantoin resistant UTI (recorded in accessible information e.g. SCR, clinical record if available) OR known previously resistant UTI to any antibiotic self- reported by the individual <u>where</u> records not available. Individuals currently using urinary catheter devices including indwelling urethral catheters, supra-pubic catheters or intermittent self-catheterisation
Care home resident

Documents

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Diagnosis of urinary tract infections: quick reference guide for primary care

Ref: PHE publications gateway number: GW-1263 PDF, 1.19 MB, 78 pages

This file may not be suitable for users of assistive technology.

Request an accessible format.

Diagnosis of urinary tract infections: quick reference guide for primary care

Ref: PHE publications gateway number: GW-1263 MS Word Document, 1.75 MB

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Related content

Primary care guidance: diagnosing and managing infections

Helicobacter pylori in dyspepsia: test and treat

Fungal skin and nail infections: diagnosis and laboratory investigation guide for primary care

Fungal infections

Shiga toxin-producing Escherichia coli: guidance, data and analysis

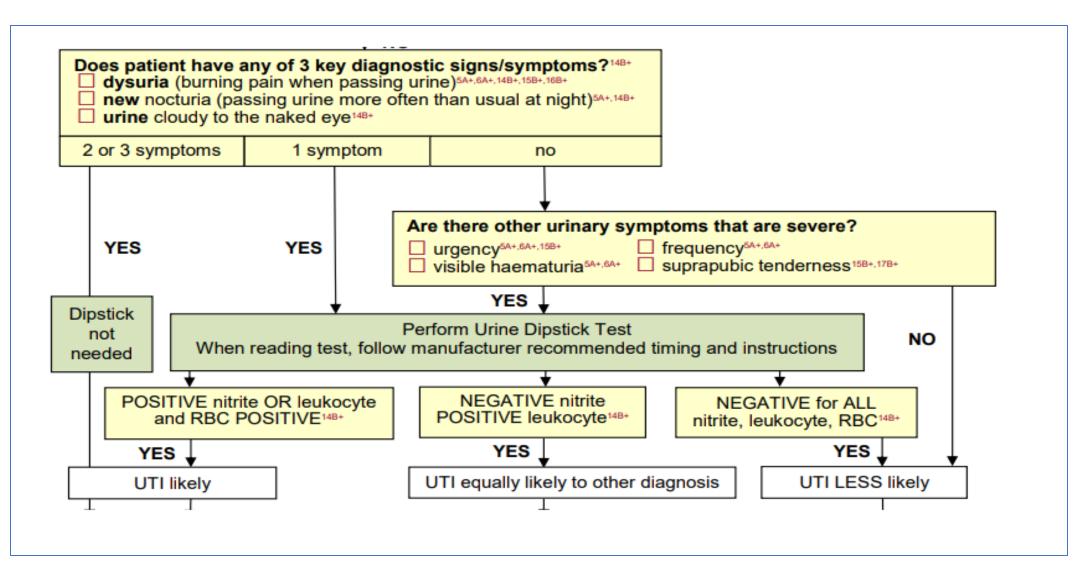
Collection

Escherichia coli (E. coli): guidance, data and analysis

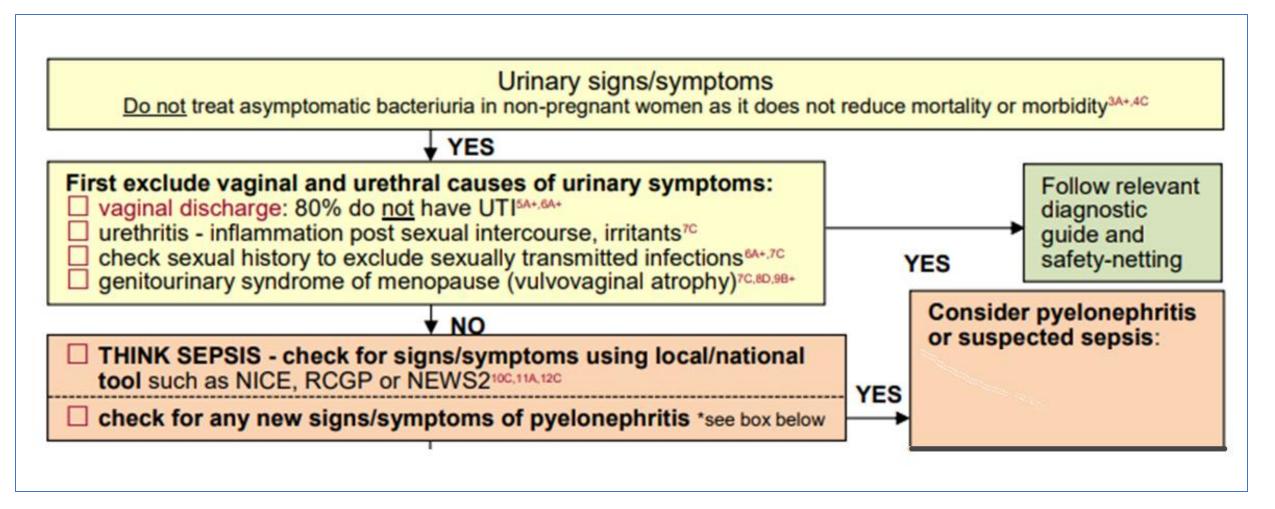
Primary care guidance: diagnosing and managing infections

...service.gov.uk/.../UTI_diagnostic_flowchart_NIC.

Inclusion



Exclusion



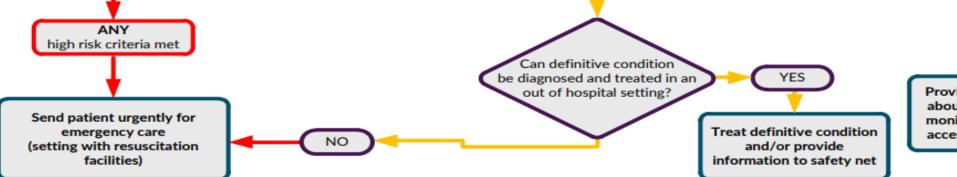
Sepsis risk stratification tool: people aged 18 years and over out of hospital

High risk criteria

- Behaviour:
 - objective evidence of altered behaviour or mental state
- Respiratory rate:
 - 25 breaths per minute or more OR
 - new need for 40% oxygen or more to maintain saturation more than 92% (or more than 88% in known chronic obstructive pulmonary disease)
- Heart rate:
 - more than 130 beats per minute
- Systolic blood pressure:
 - 90 mmHg or less OR
 - more than 40 mmHg below normal
- Not passed urine in previous 18 hours, or for catheterised patients passed less than 0.5 ml/kg of urine per hour
- Mottled or ashen appearance
- Cyanosis of skin, lips or tongue
- Non-blanching rash of skin

Moderate to high risk criteria

- Behaviour:
 - history from patient, friend or relative of new-onset altered behaviour or mental state
 - history of acute deterioration of functional ability
- Impaired immune system
- Trauma, surgery or invasive procedures in the last 6 weeks
- Respiratory rate:
 - 21–24 breaths per minute
- Heart rate:
 - 91–130 beats per minute
 - of or pregnant women: 100–130 beats per minute
- New-onset arrythmia
- Systolic blood pressure 91–100 mmHg
- Not passed urine in the past 12–18 hours, or for catheterised patients passed 0.5–1 ml/kg of urine per hour
- Tympanic temperature less than 36°C
- Signs of potential infection:
 - redness
 - swelling or discharge at surgical site
 - breakdown of wound



Low risk criteria

No high risk or moderate to

Normal behaviour

high risk criteria met

•



Suspected sepsis National Early Warning Score (NEWS)

- NEWS is based on a simple aggregate scoring system of 6 physiological parameters form the basis of the scoring system:
- Respiration rate
- Oxygen saturation
- Systolic blood pressure
- Pulse rate
- Level of consciousness or new confusion*
- Temperature

*The patient has *new-onset* confusion, disorientation and/or agitation, where previously their mental state was normal – this may be subtle.

Suspected sepsis - NEWS

Chart 2: NEWS thresholds and triggers			
NEW score	Clinical risk		
Aggregate score 0–4	Low		
Red score Score of 3 in any individual parameter	Low–medium		
Aggregate score 5–6	Medium		
Aggregate score 7 or more	High		

Suspected sepsis – Clinical Judgement

NO AMBER FLAGS : ROUTINE CARE AND GIVE SAFETY-NETTING ADVICE:

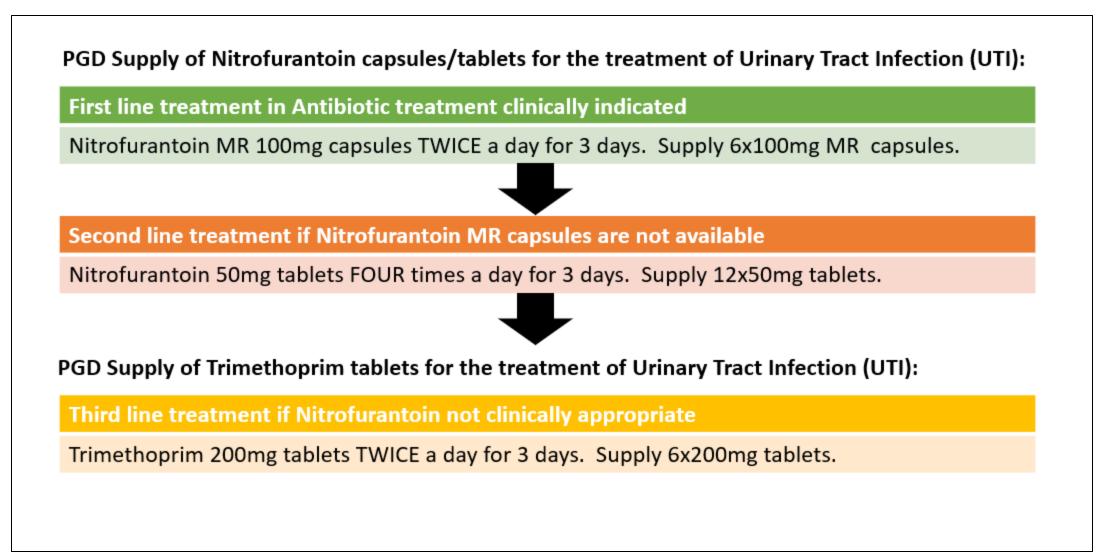
CALL 111 IF CONDITION CHANGES OR DETERIORATES. SIGNPOST TO AVAILABLE RESOURCES AS APPROPRIATE



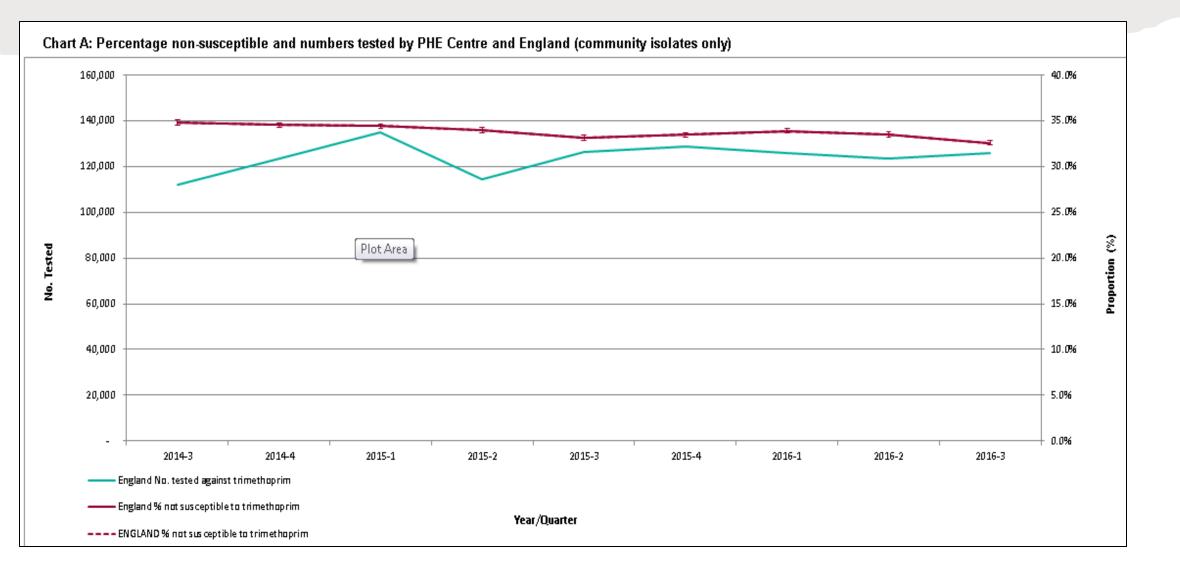
Slurred speech or confusion Extreme shivering or muscle pain Passing no urine (in a day) Severe breathlessness 'I feel I might die' Skin mottled, ashen, blue or very pale

Nitrofurantoin vs Trimethoprim

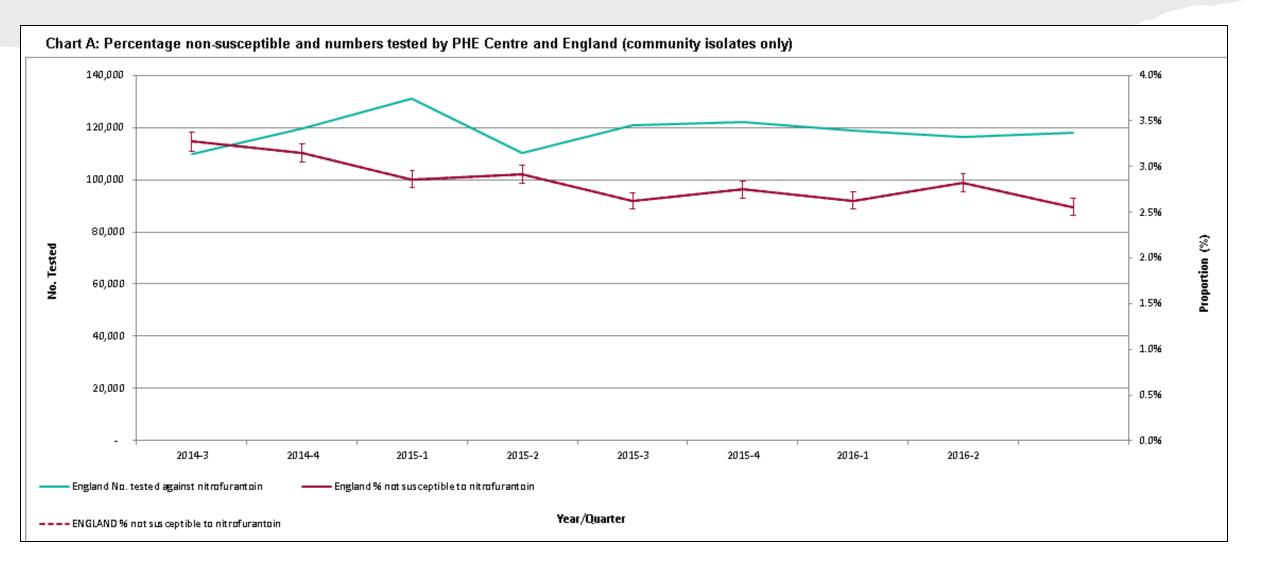
• Nitrofurantoin first line (E.coli resistance < 4% vs > 30% for trimethoprim)



Trimethoprim resistance > 30%

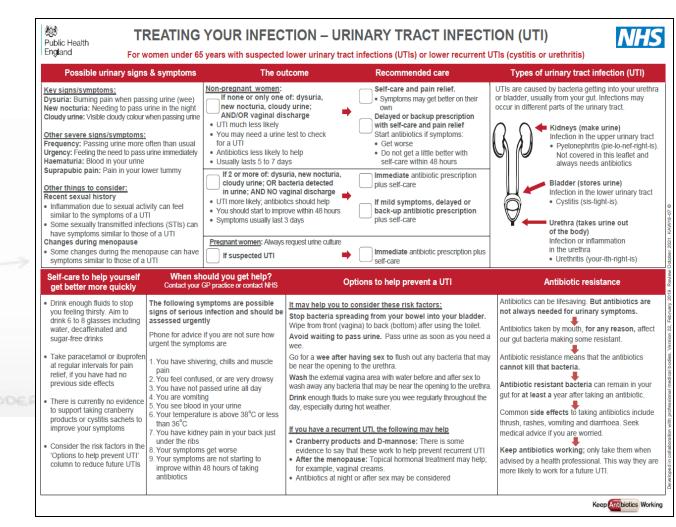


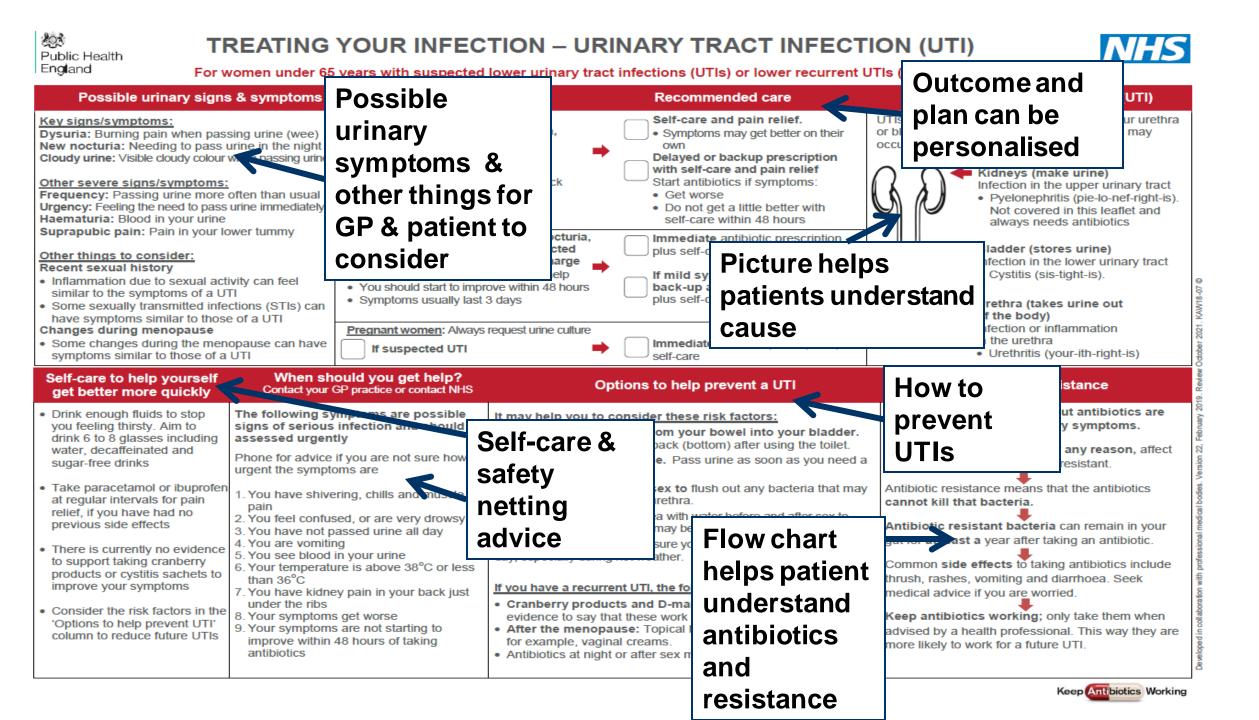
Nitrofurantoin resistance < 4%



Delayed abx therapy UTI

- Analysis of which 975 patients in primary care
- 50% of respondents were aware of the possible self-limiting course of UTIs and 70% would be willing to accept delayed antibiotic treatment, even if a certain diagnosis of UTI was established
- Uncomplicated lower UTIs can be selflimiting and deferring antibiotic treatment for 48 hours to see if symptoms resolve, may be an option.
- In the case of a deferred supply, contact should be made 5 days after supply





Summary

- THREE key diagnostic criteria for UTI
- Consider exclusion criteria Complex, other diagnosis, sepsis
- Sepsis is a medical emergency
- Nitrofurantoin first line relatively low resistance
- Antimicrobial stewardship Deferred treatment, TARGET leaflets

Chart 1: The NEWS scoring system

Physiological	Score						
parameter	3	2	1	0	1	2	3
Respiration rate (per minute)	≤8		9–11	12–20		21–24	≥25
SpO ₂ Scale 1 (%)	≤91	92–93	94–95	≥96			
SpO ₂ Scale 2 (%)	≤83	84–85	86–87	88–92 ≥93 on air	93–94 on oxygen	95–96 on oxygen	≥97 on oxygen
Air or oxygen?		Oxygen		Air			
Systolic blood pressure (mmHg)	≤90	91–100	101–110	111–219			≥220
Pulse (per minute)	≤40		41–50	<mark>51–90</mark>	91–110	111–130	≥131
Consciousness				Alert			CVPU
Temperature (°C)	≤35.0		35.1–36.0	36.1–38.0	38.1–39.0	≥39.1	



PGD Supply of Nitrofurantoin capsules/tablets for the treatment of Urinary Tract Infection (UTI)

OR

PGD Supply of Trimethoprim tablets for the treatment of Urinary Tract Infection (UTI)





Exclusions

- There are many, please refer to PGDs for complete list
- Some are common to both Nitrofurantoin and Trimethoprim e.g. outside age range, male at birth, pregnant or breastfeeding, immunocompromised, severe disease suspected, hypersensitivity, known resistance, on prophylactic antibiotics, failed treatment or this episode of UTI, recurrent UTI (>2 in 6m or > 3 in 12m)
- Excludes care home residents, catheter users, foreign hospital stay in last 3 months, greater than 7 day admission in UK hospital in last 6m
- Suspected malignancy (weight loss, unexplained bleeding, persistent or frequent abdominal pain, new lumps)



Cautions

Nitrofurantoin	Trimethoprim		
Nitrofurantoin should be used with caution in	Individuals concurrently taking warfarin and other		
individuals with pulmonary disease, hepatic	coumarins. Individual must be advised to contact		
dysfunction, neurological disorders, and allergic	the provider of their anticoagulant service to discuss		
conditions as these may be adverse effects of	the timing of their next monitoring.		
nitrofurantoin. Advise of relevant adverse effects and			
to seek medical advice if adverse reactions occur.			
Visible haematuria – treat for UTI but inform individual/their carer to see clinician if haematuria continues			
after treatment			

Nitrofurantoin: reminder of the risks of pulmonary and hepatic adverse drug reactions



To dip or not to dip

- Use of urine dip stick **IS NOT** routine, should only carried out if <u>considered</u> <u>clinically necessary</u> by the pharmacist
- Can help improve diagnostic certainty if
 - Only 1 diagnostic symptom

dysuria (burning pain when passing urine)

new nocturia (passing urine more often than usual at night)

 $\hfill\square$ urine cloudy to the naked eye

OR

- Absence of diagnostic symptoms + any <u>severe urinary symptom</u>
 - □ urgency
 - □ frequency
 - visible haematuria
 - □ suprapubic tenderness



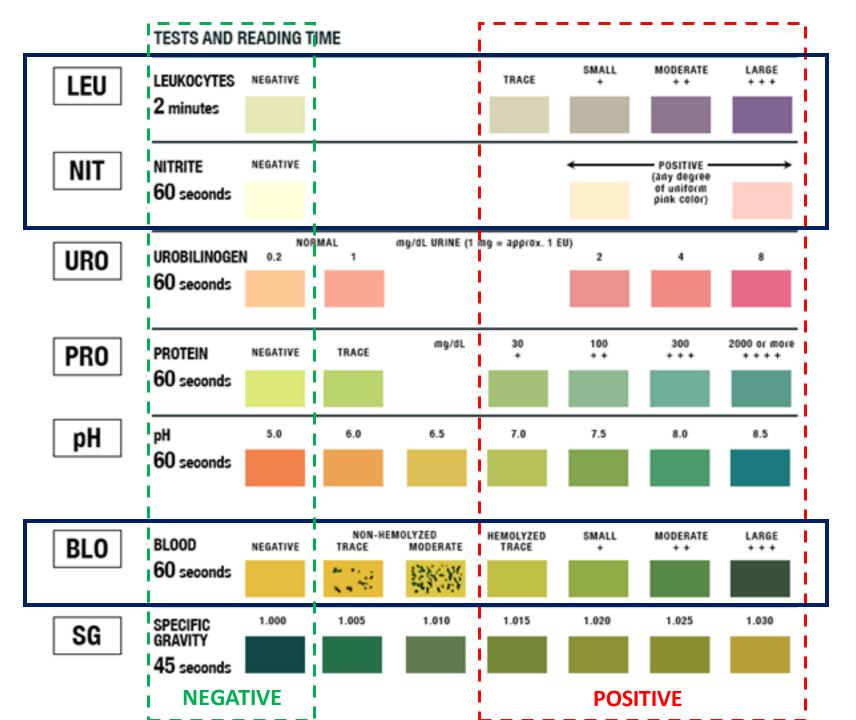
Performing a Urine Dipstick test



CLICK to watch Dipstick Training Video



Hertfordshire and West Essex Integrated Care System



- CHECK shelf life and expiry dates & visually inspect before using dipstick
- Always follow the manufacturers recommended <u>reading times</u> and instructions
- Format and parameters are consistent across manufacturers
- Dipstick Test will focus on Nitrates, Leukocytes and Blood
- Supply patients with a urine collection pot and ask them to return with sample (white top, no Boric Acid)
- Urine for urinalysis however can be collected at any time
- <u>NHS: How should I collect and</u> <u>store a urine sample</u>
- Consumables : urine sample pots, urine dip sticks, aprons, gloves, hand cleanser and paper towels

Deferred Antibiotic Treatment

- In agreement with the individual, the clinician can recommend deferring antibiotic treatment and agree a timescale for review
- Any patient excluded from the UTI PGD service should be advised to see their GP if they need treatment after waiting the agreed amount of time
- If after waiting the appropriate amount of time, usually 48 hours, the clinician can then make a supply under the PGD if clinically appropriate
- The clinician can refer to the original consultation but must fully REASSESS the individual for suitability for treatment and decision to supply
- The number of individuals returning for deferred treatment will be monitored



Urgent Referral

- Where a patient presents with symptoms requiring referral to their GP or other health care
 professional the pharmacist must escalate as per normal processes
- Refer urgently to GP practice or out of hours via NHS 111 as appropriate if:
 - ➤ individual immunocompromised
 - > fever present or systemically unwell and/or symptoms of upper UTI or pyelonephritis

All reasonable attempts should be made to contact the GP practice or 111 to arrange an appointment

- The patient must be made aware that:
 - referral does not guarantee an instant GP appointment
 - that they need to seek healthcare support as a priority
- If the GP practice is closed and/or symptoms are severe, advise the patient to contact 111 or attend A&E immediately e.g. sepsis suspected
- If symptoms appear life threatening call 999



5 Day Follow Up

- The pharmacist must complete one consultation & follow-up record for every patient **regardless** of whether a supply was made:
- Consent requires the patient to agree to 1) initial UTI PGD service with pharmacist and 2) short follow-up conversation at 5 days with a trained staff member (if deferred treatment, follow up will be 5 days after actual supply); preferred contact number and times to call should be recorded on the consultation record
- Must be 3 attempts at different times including evening, weekends depending on opening hours

 if an answer phone message is left asking patient to call back 2 attempts will be acceptable.
 However, it's unacceptable to ring 3 times within a very short period e.g. half an hour and
 record as "Lost to Follow Up" if no response obtained.
- Recording "Lost to follow up" will generate the follow up fee but this is expected to be the exception and volume of failed follow up will be audited



PGD documentation and retention

	Clinical Records	Staff Authorisation Records	Final Versions of PGD
ADULT	8 years after the last entry	Kept for 8 years after expiry of PGD	Kept for 8 years after expiry of PGD
CHILDREN	Kept until the child's 25th birthday (or 26th birthday if the child was 17 when treatment ended) or for eight years after a child's death.	Kept for 25 years after expiry of PGD	Kept for 25 years after expiry of PGD



Activity payments

Consultation & Consumables

- Referral via CPCS £6 (in addition to £14 CPCS consultation fee).
- Self-referral to community pharmacy will be paid at £20 for the initial consultation.
- The fee includes consumables, labelling medication, on-costs, sample bottles and UTI test strips.

Follow up

• Fee for follow up appointment at 5 days for each patient - £5.00

Medication

 Cost of the medicines at drug tariff cost price + VAT (where applicable) for the month that it was dispensed. No other expenses are chargeable - included in the consultation fee (e.g. broken bulk)

Annual payment for competency training and clinical waste

 Payment of £90 per contracted pharmacy per annum (£40 for clinical waste management and £50 for competency training) to be claimed via PharmOutcomes. This payment will be approved once the pharmacy has recorded and claimed for their first consultation.



Example payment schedule for supply of nitrofurantoin 100mg MR:

Consultation fee and payment for consumables = **£20** (£6 from ICB AND £14 CPCS referral fee)

PLUS

Medication cost reimbursement = Cost for 6 x nitrofurantoin MR 100mg capsules Nov 2023 Drug Tariff £4.07

PLUS

5-day follow up call payment = $\frac{25}{25}$

MINUS

Prescription levy charge = $\frac{\text{£9.35}}{\text{£9.35}}$ (if applicable)

<u>TOTAL</u>: <u>**£29.07**</u>, where payments are claimed for a prescription charge this amount is removed from the because it comes into the pharmacy via another payment method.



Incident Reporting, Complaints, Quality & Monitoring

- All incidents relating to the UTI PGD service should be recorded as part of the pharmacy's usual procedures and be reported to the commissioner
- Complaints should be managed using the pharmacy's normal complaints process in accordance with NHS policy, where issues arise in relation to a complaint these should be reported to the commissioner
- HWE ICB will undertake regular audits of the service e.g.:
 - Volume of people assessed under PGD
 - Volume of medication supplied
 - Volume of patients receiving TARGET UTI patient information
 - Volume of deferred treatment
 - Outcomes at day 5
- Antimicrobial usage will be reported to local and regional bodies to assure antimicrobial stewardship



PharmOutcomes[®]



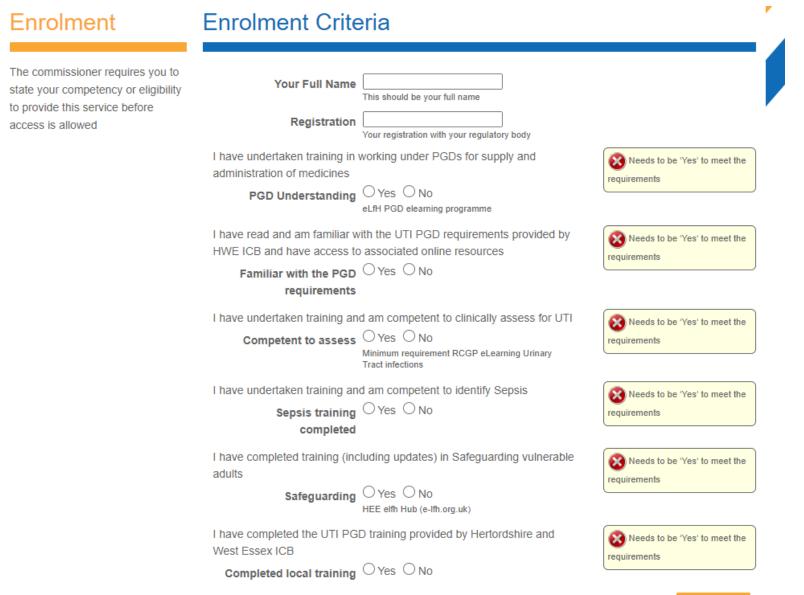


PharmOutcomes - Services

UTI PGD	Actions	Status
UTI PGD - Patient Registration	Edit • Preview • Accredit Add Funding	View Activity
UTI PGD 5-Day Follow-Up	Edit • Preview • Accredit Add Funding	No activity
UTI PGD Service Consultation Practitioner Enrolment is required in this service	Edit • Preview • Accredit Add Funding	View Enrolments No activity



PharmOutcomes® - Enrolment



Service Support

Documents

Service Specification and contract can be found here Nitrofurantoin PGD can be found here Trimethoprim PGD can be found here

Supporting Web Links + Public Health England Quick reference tool for diagnosis of urinary tract infections

+ TARGET UTI Patient leaflet including THINK SEPSIS

Thank you

- Round Up
- Any questions?



