



**Patient Group Direction For The Supply Of  
Nitrofurantoin MR Capsules 100mg / Tablets 50mg  
By Community Pharmacists Under The 'Pharmacy  
First' Service**

**Version – 1**

**Effective from August 2022**

NoS/PGD/Nitrofurantoin/MGPG1309

This Patient Group Direction (PGD) has been adopted from the PGD template produced  
by NHS 24 in August 2022

The purpose of the PGD is to allow management of acute uncomplicated urinary tract infection (UTI) in non-pregnant females aged 16 years and over, by registered pharmacists within Community Pharmacies.

This PGD authorises pharmacists delivering the NHS Pharmacy First Service Level Agreement to supply nitrofurantoin to non-pregnant females aged 16 years and over presenting with symptoms of an acute uncomplicated urinary tract infection (UTI) who meet the criteria for inclusion under the terms of the document.

## **Change History – see table at end of document for more details**

### **Change to eligibility**

- Eligible age range – extended to 16 years and over
- Haematuria – can now be considered for treatment in community pharmacy under certain circumstances (some exclusions still apply)
- Diabetes – patients with diabetes can now be considered for treatment in community pharmacy
- Symptoms of UTI lasting longer than 7 days – can now be considered for treatment in community pharmacy with guidance to report to GP practice
- Breastfeeding – patients who are breastfeeding can now be considered for treatment in community pharmacy
- Presence of vaginal discharge or itch – can now be considered for treatment in community pharmacy unless “presence of new, unexplained vaginal discharge or itch suggestive of other pathology”

### **Clarification for community pharmacy network**

- Renal impairment – clarified as known “moderate to severe”
- Folate deficiency – clarified as known folate deficiency “which has not been corrected”
- Hepatic insufficiency – clarified as “severe known liver fibrosis/encephalopathy”
- Immunosuppressed – clarified as “current immunosuppression e.g. chemotherapy, long term oral corticosteroids, other immunosuppressant therapies”

If this PGD is past the review date, the content shall remain valid until such time that the review is complete and a new version has been published. **It is the responsibility of the person using the PGD to ensure they are using the most recent issue.**

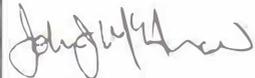
## Patient Group Direction For The Supply Of Nitrofurantoin Capsules or Tablets By Community Pharmacists Under The 'Pharmacy First' Service

### Authorisation

This specimen Patient Group Direction (PGD) has been produced by the Scottish Antimicrobial Prescribing Group and the Primary Care Community Pharmacy Group to assist NHS Boards provide uniform services under the 'NHS Pharmacy First' banner across NHS Scotland. NHS boards should ensure that the final PGD is considered and approved in line with local clinical governance arrangements for PGDs.

The qualified health professionals who may supply nitrofurantoin capsules or tablets under this PGD can only do so as named individuals. It is the responsibility of each professional to practice within the bounds of their own competence and in accordance with their own Code of Professional Conduct, and to ensure familiarity with the marketing authorisation holder's summary of product characteristics (SPC) for all medicines supplied in accordance with this PGD.

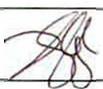
NHS board governance arrangements will indicate how records of staff authorised to operate this PGD will be maintained. Under PGD legislation there can be no delegation. Supply of the medicine has to be by the same practitioner who has assessed the patient under the PGD.

This specimen PGD has been approved on behalf of NHS Scotland by NHS 24 by:			
Doctor	Dr Laura Ryan	Signature	
Pharmacist	Dr John McAnaw	Signature	
NHS Scotland Representative	Mr Jim Miller	Signature	

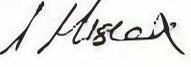
This PGD template has been adopted by NoS for use across all 6 NoS Health Boards.

Approved on behalf of NoS by:					
Doctor:	Dr Boyd Peters	Signature		Date Signed	21/09/2022
Pharmacist	Sarah Buchan	Signature		Date Signed	18/08/2022
Community Pharmacist	Jackie Agnew	Signature		Date Signed	18/08/2022

Approved for use within NoS Boards by;

North of Scotland (NoS) PGD Group Chair	Signature	Date Signed
Lesley Coyle		21/09/2022

**Authorised and executively signed for use within NoS Boards by;**

<b>NHS Grampian Chief Executive</b>	<b>Signature</b>	<b>Date Signed</b>
Professor Caroline Hiscox		22/09/2022

**Version 1 effective from August 2022 review date August 2024**

## Clinical Situation

Indication	Acute uncomplicated urinary tract infection (UTI) in non-pregnant females aged 16 years and over.
Inclusion Criteria	<p>Non-pregnant females, assigned as female at birth who have not had any reassignment procedures, aged 16 years and over.</p> <p>Older women should be fit, ambulatory and self-caring.</p> <p>If no dipstick testing available or over 65 years of age, patient must present with three or more of the following symptoms:</p> <ul style="list-style-type: none"> <li>• Dysuria</li> <li>• Frequency</li> <li>• Urgency</li> <li>• Suprapubic tenderness</li> <li>• or <b>BOTH</b> dysuria and frequency are present.</li> </ul> <p>Otherwise:</p> <p>Diagnose a UTI in the presence of two or more urinary symptoms (dysuria, frequency, urgency, visible haematuria or nocturia) and a positive dipstick test result for nitrite.</p> <p><b>Note: A positive dip stick in women over 65 is not an indication of UTI as asymptomatic bacteriuria is common in older women.</b></p>
Exclusion Criteria	<ul style="list-style-type: none"> <li>• Patients assigned as male at birth</li> <li>• Females under 16 years</li> <li>• Patients living in long term care facilities</li> <li>• Allergy or serious adverse effect from nitrofurantoin or to any other components of the preparation</li> <li>• If <b>upper</b> urinary tract infection is more likely i.e. flank pain radiating towards the groin, feel systemically unwell (fever and chills, rigors, nausea, vomiting), as well as with other symptoms of lower UTI. (Patients presenting with such symptoms should be urgently referred to GP/OOH)</li> <li>• Patients over 45 years with unexplained visible haematuria without symptoms of UTI</li> <li>• Visible haematuria which persists or recurs after successful treatment of UTI</li> <li>• Unexplained non-visible haematuria if found on urine dipstick if no UTI symptoms present</li> <li>• Patients over 40 years who present with recurrent UTI with any haematuria</li> <li>• Risk of treatment failure due to one or more of the following: Received antibiotic treatment for UTI within 1 month; 2 or more UTI episodes in the last 6 months or 3 or more episodes in the last 12 months; taking antibiotic prophylaxis for recurrent UTI</li> <li>• Presence of new unexplained vaginal discharge or itch suggestive of other pathology</li> <li>• Confused</li> </ul>

	<ul style="list-style-type: none"> <li>• Patient utilises urethral or suprapubic catheters (either indwelling or intermittently)</li> <li>• Pregnancy – known or suspected</li> <li>• Known moderate to severe renal impairment (where pharmacists are able to independently access relevant patient records/blood results e.g. via Clinical Portal to establish levels of renal impairment when required, a supply of treatment can be considered. If this is not possible, patient should be referred to GP/OOH)</li> <li>• History of renal stones / renal colic, abnormal urinary tract e.g. vesicoureteric reflux, reflux nephropathy, neurogenic bladder, urinary obstruction, stent, recent instrumentation.</li> <li>• Known severe liver fibrosis/encephalopathy (where pharmacists are able to independently access relevant patient records/blood results e.g. via Clinical Portal to establish levels of hepatic impairment when required, a supply of treatment can be considered. If this is not possible, patient should be referred to GP/OOH).</li> <li>• Known haematological abnormalities, blood dyscrasias, known porphyria, vitamin B (particularly folate) deficiency known folate which has not been corrected, G6PD deficiency, electrolyte imbalance</li> <li>• Known or susceptibility to peripheral neuropathy, or known neurological disorder</li> <li>• Current immunosuppression e.g. chemotherapy, long term oral corticosteroids, other immunosuppressant therapies</li> <li>• Known interstitial lung disease or poorly controlled respiratory disease</li> <li>• Taking any medication which interacts with nitrofurantoin– refer to BNF for full list of interactions.</li> <li>• Decline to provide consent or non-capacity to consent.</li> </ul>
<p>Cautions /Need for further advice/ Circumstances when further advice should be sought from a doctor</p>	<p>Any doubt as to inclusion/exclusion criteria being met.</p> <ul style="list-style-type: none"> <li>• Recent hospital in-patient stay (in the previous three months) - consider the reason for this admission.</li> <li>• Known previous nitrofurantoin-resistant isolates or multi-drug-resistant isolates or recent travel to a country with known increased incidence of antimicrobial resistance</li> </ul> <p>Patient over 65 years</p> <ul style="list-style-type: none"> <li>• Manage suspected UTI in ambulant women aged 65 years and over who are able to look after themselves independently with no comorbidities as in those aged under 65 years, taking into account the increasing background incidence of asymptomatic bacteriuria.</li> </ul> <p>Diabetes</p> <ul style="list-style-type: none"> <li>• Patients with known diabetes are not excluded from treatment from community pharmacy. If concerned about recurrent UTIs or that this may be a side effect of medication e.g. SGLT2 inhibitors, please consider signposting for GP practice follow up.</li> </ul>

	<p>Symptoms of UTI lasting longer than 7 days</p> <ul style="list-style-type: none"> <li>• Prolonged symptoms suggestive of a UTI may be considered for treatment, but clinical judgement may be required regarding onward referral.</li> </ul> <p>Breastfeeding</p> <ul style="list-style-type: none"> <li>• Patients who are breastfeeding and displaying symptoms of UTI can be considered for treatment in community pharmacy</li> <li>• As a general rule, if a medication is licensed for use in paediatrics (neonatal age onward) then it should be safe for use in breastfeeding as the dose the infant/child receives via the breastmilk will be significantly less than therapeutic doses.</li> <li>• National Institute for Health and Care Excellence. British National Formulary for Children. Available at: <a href="#">NITROFURANTOIN   Drug   BNFC content published by NICE</a> (Accessed 23rd February 2022)</li> <li>• UK Drugs in Lactation Service states the following: <ul style="list-style-type: none"> <li>○ Nitrofurantoin can be used with caution.</li> <li>○ Small amounts in breast milk, moderate level of evidence of use in breastfeeding</li> <li>○ Avoid in known G6PD deficiency, hyperbilirubinaemia, and in jaundiced premature infants because of risk of kernicterus</li> <li>○ Available at: <a href="#">Nitrofurantoin – Medicines – SPS - Specialist Pharmacy Service – The first stop for professional medicines advice</a> (Accessed 23rd February 2022)</li> </ul> </li> </ul>
Action if Excluded	Refer to GP Practice/Out-of-hours service and document in Patient Medication Record (PMR)
Action if Patient Declines	<p>Note that self-care should be considered as an option depending on symptom severity.</p> <p>If patient declines treatment, advise on self-care to relieve symptoms and advise to return to pharmacy if symptoms fail to resolve within 3 days or if symptoms worsen.</p> <p>Patients can be directed to NHS Inform for guidance on self-care at: <a href="#">Urinary tract infection (UTI) - Illnesses &amp; conditions   NHS inform</a> (accessed 20<sup>th</sup> January 2022)</p> <p>The reason for declining treatment and advice given must be documented.</p> <p>Ensure patient is aware of risks and consequences of declining treatment.</p> <p>Record outcome in Patient Medication Record (PMR) if appropriate.</p>

**Depending on availability either of the 2 treatment choices can be used**

**Description of Treatment**

Name of Medicine	Nitrofurantoin
Form/Strength	100 mg MR capsules
Route of administrati	Oral
Dosage	100 mg
Frequency	Twice a day (12 hourly) (with or just after food)
Duration of treatment	3 days
Quantity to supply/administ	6 x 100 mg MR capsules
▼ additional	No
Legal Category	POM (Prescription Only Medicine)
Is the use outwith the SPC	No
Storage requirements	As per manufacturer's instructions Store below 25°C in a cool dry place
Additional information	None

**Description of Treatment**

Name of Medicine	Nitrofurantoin
Form/Strength	50 mg tablets
Route of administrati	Oral
Dosage	50 mg
Frequency	Four times a day (with or just after food)
Duration of treatment	3 days
Quantity to supply/administ	12 x 50 mg tablets
▼ additional	No
Legal Category	POM (Prescription Only Medicine)
Is the use outwith the SPC	No
Storage requirements	As per manufacturer's instructions Store below 25°C in a cool dry place
Additional information	None

Warnings including possible adverse reactions and management of	For a full list of side effects – refer to the marketing authorisation holder’s Summary of Product Characteristics (SPC). A copy of the SPC must be available to the health professional administering medication under this Patient Group Direction. This can be accessed on <a href="http://www.medicines.org.uk">www.medicines.org.uk</a>
Reporting procedure for adverse reactions	Pharmacists should document and report all adverse incidents through their own internal governance systems. All adverse reactions (actual and suspected) should be reported to the appropriate medical practitioner and recorded in the patient’s medical record. Pharmacists should record in their PMR and inform the patient’s GP as appropriate. Where appropriate, use the Yellow Card System to report adverse drug reactions. Yellow Cards and guidance on its use are available at the back of the BNF or online at <a href="http://yellowcard.mhra.gov.uk/">http://yellowcard.mhra.gov.uk/</a>
Advice to Patient/carer including written information	<ul style="list-style-type: none"> <li>• Advise patient about the importance of hydration in relieving symptoms.</li> <li>• Offensive smelling urine/cloudy – may be suggestive of dehydration</li> <li>• Increasing fluid intake to around 2.5 L per day (6-8 mugs containing approximately 350 ml) is thought to reduce UTI by dilution and flushing of bacteriuria. (While no evidence was identified for benefit, increasing fluid intake with water in women with urinary symptoms is a low-cost intervention without evidence of harm that may provide symptomatic relief) Provide a cystitis/UTI patient information leaflet and discuss contents with patients. <a href="#">Cystitis- Patient Leaflet   BMJ Best Practice</a> (accessed 2nd May 2022) The patient information leaflet contained in the medicine should be made accessible to the patient. Where this is unsuitable, sufficient information should be given to the patient in a language that they can understand.</li> <li>• Inform patient of possible side effects and their management and who to contact should they become troublesome.</li> <li>• Explain the benefits and risks of taking antibiotics for this condition.</li> <li>• Urinary alkalinising agents should be avoided with nitrofurantoin as these reduce the antibacterial activity of nitrofurantoin</li> <li>• Avoid concomitant administration of magnesium trisilicate as this may reduce nitrofurantoin absorption.</li> <li>• Nitrofurantoin may colour the urine yellow or brown. This is harmless.</li> <li>• If on combined oral contraception, no additional contraceptive precautions are required unless vomiting or diarrhoea occur. (See reference section for Faculty of Reproductive and Sexual Healthcare Guidance)</li> <li>• Advise patient of self-management strategies including maintaining a good fluid intake, wearing loose fitting underwear/clothing, wearing cotton underwear and avoidance of vaginal deodorants.</li> <li>• Advise patient on ways to prevent re-infection – e.g. double voiding, voiding after sexual intercourse.</li> </ul>

	<ul style="list-style-type: none"> <li>• Paracetamol and ibuprofen may relieve dysuric pain and discomfort.</li> <li>• Ensure patient is aware that if symptoms worsen, they experience significant flank pain, become systemically unwell, or develop a fever, they should seek medical advice that day.</li> <li>• Advise patient to seek further medical advice, if symptoms do not resolve after 3 days, if symptoms return or drug side effects are severe.</li> <li>• Advise patient with haematuria which persists or recurs after successful treatment of UTI to contact their GP for follow up.</li> <li>• Advise patient to discontinue treatment if rash develops and seek medical advice.</li> <li>• Advise patient to stop taking immediately and seek medical advice if develops pulmonary, hepatic, haematological or neurological reactions e.g. breathing difficulties, abdominal pain discomfort, bruising and bleeding and seek advice from GP, OOH or NHS 24.</li> <li>• Advise patient that their GP will be informed the next working day that antibiotics have been supplied or appropriate referral has been made.</li> <li>• Advise patient that if they require to seek further advice from the Out-of-hours service they should make staff aware of their nitrofurantoin treatment.</li> </ul> <p>Information on medicines can be found at <a href="https://www.medicines.org.uk/emc/browse-medicines">https://www.medicines.org.uk/emc/browse-medicines</a> or <a href="https://www.gov.uk/pil-spc">https://www.gov.uk/pil-spc</a></p>
Monitoring	Not applicable
Follow-up	Not applicable
Additional Facilities	<p>The following should be available where the medication is supplied:</p> <ul style="list-style-type: none"> <li>• An acceptable level of privacy to respect patient's right to confidentiality and safety.</li> <li>• Access to medical support (this may be via the telephone).</li> <li>• Approved equipment for the disposal of used materials.</li> <li>• Clean and tidy work areas, including access to hand washing facilities.</li> <li>• Access to current BNF (online version preferred).</li> </ul>

### Characteristics of staff authorised under the PGD

Professional qualifications	Registered pharmacist with current General Pharmaceutical Council (GPhC) registration. <b>Under PGD legislation there can be no delegation. Supply of the medication has to be by the same practitioner who has assessed the patient under this PGD.</b>
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Specialist competencies or qualifications	<p>Has successfully completed NES Pharmacy e-learning module on “Urinary Tract Infections for NHS Pharmacy First Scotland”.  <a href="https://learn.nes.nhs.scot/33556/pharmacy/cpd-resources/urinary-tract-infections-uti-for-nhs-pharmacy-first-scotland">https://learn.nes.nhs.scot/33556/pharmacy/cpd-resources/urinary-tract-infections-uti-for-nhs-pharmacy-first-scotland</a></p> <p>Able to assess the person’s capacity to understand the nature and purpose of the medication in order to give or refuse consent.</p> <p>Must be familiar with the relevant nitrofurantoin Summary of Product Characteristics (SPC).</p>
Continuing education and training	<p>Has read current guidance on the management of urinary tract infections e.g. PHE/NICE, SIGN, SAPG</p> <p>Health Improvement Scotland. <i>SIGN 160: Management of suspected bacterial lower urinary tract infection in adult women. A national clinical guideline.</i> September 2020. Available at <a href="#">sign-160-uti-0-1_web-version.pdf</a> (accessed 20<sup>th</sup> January 2022)</p> <p>Health Improvement Scotland: Scottish Antimicrobial Prescribing Group (SAPG). <i>Urinary Tract Infections.</i> Available at: <a href="#">Urinary tract infections (sapg.scot)</a> (accessed 20<sup>th</sup> January 2022)</p> <p>Aware of local treatment recommendations.</p> <p>Attends approved training and training updates as appropriate. Undertakes CPD when PGD or NES Pharmacy module updates.</p>

### Audit Trail

Record/Audit Trail	<p>All records must be clear, legible and in an easily retrieval format. Pharmacists must record in Patient Medication Record (PMR).</p> <p>The following records should be kept (paper or computer based) and are included in the patient assessment form:</p> <ul style="list-style-type: none"> <li>• Patient’s name/parent/guardian/person with parental responsibility, address, date of birth and consent given</li> <li>• Patient’s CHI number</li> <li>• Contact details of GP (if registered)</li> <li>• Presenting complaint and diagnosis</li> <li>• Details of medicine supplied</li> <li>• The signature and printed name of the healthcare professional who supplied the medicine.</li> <li>• Advice given to patient (including side effects)</li> <li>• The patient group direction title and/or number</li> <li>• Whether the patient met the inclusion criteria and whether the exclusion criteria were assessed</li> <li>• Details of any adverse drug reaction and actions taken including documentation in the patient’s medical record</li> <li>• Referral arrangements (including self-care)</li> </ul>
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	<p><b>The patient's GP, where known, should be provided with a copy of the client assessment form for the supply of nitrofurantoin or appropriate referral on the same, or next available working day.</b></p> <p>These records should be retained in accordance with national guidance<sup>1</sup> (see page 56 for standard retention periods summary table). Where local arrangements differ, clarification should be obtained through your Health Board Information Governance Lead.</p> <p>All records of the drug(s) specified in this PGD will be filed with the normal records of medicines in each service. A designated person within each service will be responsible for auditing completion of drug forms and collation of data.</p> <p>1. Scottish Government. <i>Scottish Government Records Management</i>. Edinburgh 2020. Available at <a href="#">SG-HSC-Scotland-Records-Management-Code-of-Practice-2020-v20200602.pdf</a> (Accessed on 29<sup>th</sup> November 2021)</p>
Additional references	<p>British National Formulary (BNF) current edition</p> <p>Electronic Medicines Compendium. <i>Nitrofurantoin SPC</i>. Available at <a href="#">Home - electronic medicines compendium (emc)</a> (Accessed 24<sup>th</sup> February 2022)</p> <p>Public Health England. <i>Summary of antimicrobial prescribing guidance</i>. May 2021. Available at: <a href="#">Summary of antimicrobial prescribing guidance (publishing.service.gov.uk)</a> (Accessed 24<sup>th</sup> February 2022)</p> <p>National Institute for Clinical Excellence / Public Health England. <i>Summary of antimicrobial prescribing guidance – managing common infections</i>. Jan 2022. Available at: <a href="#">Antimicrobial prescribing table (bnf.org)</a> (accessed 24<sup>th</sup> February 2022)</p> <p>Public Health England. <i>Diagnosis of urinary tract infections</i>. October 2021. Available at: <a href="#">Diagnosis of urinary tract infections - quick reference tool for primary care (publishing.service.gov.uk)</a> (accessed 24<sup>th</sup> February 2022)</p> <p>Royal College of General Practitioners. <i>TARGET Urinary tract infection resource suite</i>. Available at: <a href="#">Urinary tract infection resource suite: Patient facing materials (rcgp.org.uk)</a> (Accessed 24<sup>th</sup> February 2022)</p> <p>Health Protection Scotland. Scottish Urinary Tract Infection Network. Available at: <a href="#">HPS Website - Scottish Urinary Tract Infection Network</a> (accessed 24<sup>th</sup> February 2022)</p> <p>Faculty of Sexual and Reproductive Health. <i>Clinical Guidance – Drug Interactions with Hormonal Contraception</i>. Jan 2019. Available at: <a href="https://www.fsrh.org/standards-and-guidance/documents/ceu-clinical-guidance-drug-interactions-with-hormonal/fsrh-guidance-drug-interactions-hormonal-contraception-jan-2019.pdf">https://www.fsrh.org/standards-and-guidance/documents/ceu-clinical-guidance-drug-interactions-with-hormonal/fsrh-guidance-drug-interactions-hormonal-contraception-jan-2019.pdf</a> (Accessed on 23rd February 2022)</p>

Version	Date	Summary of Changes
1.0	March 2020	Version 1.0 Original PGD
2.0	August 2022	<p>The following sections have been updated:</p> <ul style="list-style-type: none"> <li>• Addition of covering statement regarding validity of PGD when approaching date for review of content</li> <li>• Indication <ul style="list-style-type: none"> <li>○ Removal of upper age limit</li> </ul> </li> <li>• Inclusion criteria <ul style="list-style-type: none"> <li>○ Clarification that “older women should be fit, ambulatory and self-caring” and that “a positive dip stick in women over 65 is not an indication of UTI as asymptomatic bacteriuria is common in older women.”</li> <li>○ Inclusion of visible haematuria in list of symptoms when testing urine with dipstick</li> </ul> </li> <li>• Exclusion criteria <ul style="list-style-type: none"> <li>○ Upper age limit removed</li> <li>○ Clarification that patients living in long term care facilities are excluded</li> <li>○ Clarification of definition of “upper” UTI</li> <li>○ Haematuria – specific criteria now apply</li> <li>○ Clarification of definition of vaginal discharge/itch</li> <li>○ Clarification of catheter use</li> <li>○ Clarification of definition and associated actions required for patients with renal or hepatic impairment</li> <li>○ Clarification of definition of immunosuppression</li> </ul> </li> <li>• Cautions/further advice <ul style="list-style-type: none"> <li>○ Removal from exclusion, insertion into cautions/further advice with provision of additional information for patients over 65 years, with diabetes, symptoms lasting more than 7 days, breastfeeding</li> </ul> </li> <li>• Advice to patient <ul style="list-style-type: none"> <li>○ Update to information for patients</li> </ul> </li> <li>• Action if patient is excluded <ul style="list-style-type: none"> <li>○ Removal of requirement to record in Pharmacy Care Record (PCR)</li> </ul> </li> <li>• Action if patient declines <ul style="list-style-type: none"> <li>○ Inclusion of link to NHS Inform for guidance on self-care</li> <li>○ Removal of requirement to record in PCR</li> </ul> </li> <li>• Specialist competencies or qualifications <ul style="list-style-type: none"> <li>○ Updated link to training module</li> </ul> </li> <li>• Record/audit trail <ul style="list-style-type: none"> <li>○ Removal of requirement to record in PCR</li> <li>○ Clarification that notification form should be sent to GP for patients being referred as well as those being treated by community pharmacy.</li> <li>○ Update to information on retention of records</li> <li>○ Update to additional references</li> </ul> </li> </ul>

# Appendix 1 - Patient Group Direction For The Supply Of Nitrofurantoin By Community Pharmacists Under The 'Pharmacy First' Service

## Individual Authorisation

***PGD does not remove inherent professional obligations or accountability***

**It is the responsibility of each professional to practice only within the bounds of their own competence and in accordance with the General Pharmaceutical Council Standards for Pharmacy Professionals.**

**Note to Authorising Authority:** authorised staff should be provided with access to the clinical content of the PGD and a copy of the document showing their authorisation.

I have read and understood the Patient Group Direction authorised by each of the individual NHS Boards that I wish to operate in and agree to provide Nitrofurantoin MR capsules or tablets

Name of Pharmacist \_\_\_\_\_  
GPhC Registration Number \_\_\_\_\_

### Normal Pharmacy Location

**(Only one Pharmacy name and contractor code is required for each Health Board (HB) area where appropriate. If you work in more than 3 HB areas please use additional forms.)**

Name & Contractor code HB (1) \_\_\_\_\_  
Name & Contractor code HB (2) \_\_\_\_\_  
Name & Contractor code HB (3) \_\_\_\_\_

Please indicate your position within the pharmacy by ticking one of the following:

Locum  Employee  Manager  Owner

Signature \_\_\_\_\_ Date \_\_\_\_\_

Please tick and send to each Health Board you work in. Fax numbers, email and postal addresses are given overleaf.

Ayrshire & Arran	<input type="checkbox"/>		<input type="checkbox"/>	Orkney	<input type="checkbox"/>
Borders	<input type="checkbox"/>	Gr Glasgow & Clyde	<input type="checkbox"/>	Shetland	<input type="checkbox"/>
Dumfries & Galloway	<input type="checkbox"/>	Highland	<input type="checkbox"/>	Tayside	<input type="checkbox"/>
Fife	<input type="checkbox"/>	Lanarkshire	<input type="checkbox"/>	Western Isles	<input type="checkbox"/>
Forth Valley	<input type="checkbox"/>	Lothian	<input type="checkbox"/>		

## Appendix 2 – Health Boards

NHS Board	Address	Fax Number
Ayrshire & Arran	Iain Fulton, NHS Ayrshire & Arran, Eglington House, Ailsa Hospital, Dalmellington Road, Ayr, KA6 6AB <a href="mailto:margaret.scott3@aapct.scot.nhs.uk">margaret.scott3@aapct.scot.nhs.uk</a>	Please email or post
Borders	Adrian Mackenzie, Lead Pharmacist Pharmacy Department, Borders General Hospital, Melrose, TD6 9BS <a href="mailto:communitypharmacy.team@borders.scot.nhs.uk">communitypharmacy.team@borders.scot.nhs.uk</a>	Please email or post
Dumfries & Galloway	NHS Dumfries & Galloway, Primary Care Development, Ground Floor North, Mountainhall Treatment Centre, Bankend Rd, Dumfries, DG1 4TG <a href="mailto:Dg.pcd@nhs.scot">Dg.pcd@nhs.scot</a>	Please email or post
Fife	PGD Administrator, Pharmacy Services, NHS Fife, Pentland House, Lynebank Hospital, Halbeath Road, Dunfermline, KY11 4UW <a href="mailto:Fife.pgd@nhs.scot">Fife.pgd@nhs.scot</a>	Please email or post
Forth Valley	Community Pharmacy Development Team, Forth Valley Royal Hospital, Stirling Road, Larbert, FK5 4WR <a href="mailto:fv.communitypharmacysupport@nhs.scot">fv.communitypharmacysupport@nhs.scot</a>	Please email or post
Greater Glasgow & Clyde	Janine Glen, Contracts Manager, Community Pharmacy, NHS Greater Glasgow & Clyde, Clarkston Court, 56 Busby Road, Glasgow G76 7AT <a href="mailto:ggc.cpdevteam@nhs.scot">ggc.cpdevteam@nhs.scot</a>	0141 201 6044 Or email
Highland	Community Pharmaceutical Services, NHS Highland, Assynt House, Beechwood Park, Inverness. IV2 3BW <a href="mailto:nhsh.cpsoffice@nhs.scot">nhsh.cpsoffice@nhs.scot</a>	Please email or post
Lanarkshire	Pharmacy/Prescribing Admin Team, NHS Lanarkshire Headquarters, Kirklands, Fallside Road, Bothwell, G71 8BB <a href="mailto:Pharmacy.AdminTeam@lanarkshire.scot.nhs.uk">Pharmacy.AdminTeam@lanarkshire.scot.nhs.uk</a>	Please email or post
Lothian	Primary Care Contractor Organisation, 2 <sup>ND</sup> Floor, Waverley Gate, 2-4 Waterloo Place, Edinburgh, EH1 3EG <a href="mailto:CommunityPharmacy.Contract@nhslothian.scot.nhs.uk">CommunityPharmacy.Contract@nhslothian.scot.nhs.uk</a>	Please email or post
Orkney	Lyndsay Steel, Lead General Practice Pharmacist. The Balfour, Foreland Road, Kirkwall, KW15 1NZ Phone: 01856 888 911 <a href="mailto:ork.primarycarepharmacy@nhs.scot">ork.primarycarepharmacy@nhs.scot</a>	Please email or post
Shetland	Mary McFarlane, Principal Pharmacist, NHS Shetland, Gilbert Bain Hospital, Lerwick, Shetland, ZE1 0TB	Please email or post
Tayside	Diane Robertson Pharmacy Department, East Day Home, Kings Cross Hospital, Clepington Road, Dundee, DD3 8AE <a href="mailto:Diane.Robertson9@nhs.scot">Diane.Robertson9@nhs.scot</a>	Please email or post
Western Isles	Michelle Taylor, Primary Care Dept, The Health Centre, Springfield Road, Stornoway, Isle of Lewis, HS1 2PS	Please post

## Appendix 3 - Patient Group Direction for antibiotic treatment of acute Urinary Tract Infection (UTI) in non-pregnant female patients over 16 years of age

### Patient assessment form

<b>Patient Name:</b>	Click or tap here to enter text.	<b>Date of Birth /CHI:</b>	Click or tap here to enter text.
<b>Date of assessment:</b>	Click or tap to enter a date.	<b>Patient is aware that GP will be informed:</b>	Yes <input type="checkbox"/> No <input type="checkbox"/>

### Patient clinical picture and related appropriate actions

Symptom assessment	Yes	No	Actions
Symptom of dysuria (pain or burning when passing urine)	<input type="checkbox"/>	<input type="checkbox"/>	Consider treatment if <b>three or more</b> of the following symptoms present: <ul style="list-style-type: none"> <li>• Dysuria</li> <li>• Frequency</li> <li>• Urgency</li> <li>• Suprapubic tenderness</li> <li>• Or if <b>BOTH</b> dysuria and frequency present.</li> </ul> Support the diagnostic process with dipstick testing if available
Symptom of frequency (needing to pass urine more often than usual)	<input type="checkbox"/>	<input type="checkbox"/>	
Symptom of urgency (little warning of the need to pass urine)	<input type="checkbox"/>	<input type="checkbox"/>	
Symptom of suprapubic tenderness (pain/tenderness in lower abdomen)	<input type="checkbox"/>	<input type="checkbox"/>	
Frank haematuria (blood in urine)	<input type="checkbox"/>	<input type="checkbox"/>	If unexplained or specific exclusion criteria apply – do not treat and <b>REFER</b> to GP/OOH If likely to be related to UTI – treatment may be provided
Vaginal discharge or irritation	<input type="checkbox"/>	<input type="checkbox"/>	If new/unexplained – do not treat and <b>REFER</b> for STI assessment
Clinical features	Yes	No	Actions
Do symptoms suggest <b>upper</b> UTI (these may include loin pain, fever $\geq 38^{\circ}\text{C}$ , rigors or systemically very unwell)?	<input type="checkbox"/>	<input type="checkbox"/>	If YES, do not treat and <b>REFER</b> urgently (same day) due to risk of upper UTI or sepsis
Duration of symptoms > 7 days?	<input type="checkbox"/>	<input type="checkbox"/>	If YES, treatment may be provided Ensure GP is notified that follow up may be required

### Appendix 3 - Patient Group Direction for antibiotic treatment of acute Urinary Tract Infection (UTI) in non-pregnant female patients over 16 years of age

Has the patient had a UTI requiring an antibiotic within the last 28 days?	<input type="checkbox"/>	<input type="checkbox"/>	If YES, do not treat and <b>REFER</b> due to risk of resistant organisms
Does the patient have recurrent UTI? ( $\geq 2$ episodes in last 6 months or $\geq 3$ episodes in last year?)	<input type="checkbox"/>	<input type="checkbox"/>	If YES, do not treat and <b>REFER</b> due to need for urine culture
Does patient take prophylactic antibiotics for treatment of UTI?	<input type="checkbox"/>	<input type="checkbox"/>	If YES, do not treat and <b>REFER</b>
Urinary catheter in situ or use of intermittent self-catheterisation?	<input type="checkbox"/>	<input type="checkbox"/>	If YES, do not treat and <b>REFER</b>
Is the patient currently immunosuppressed? E.g. autoimmune disease, chemotherapy, long term corticosteroids or other immunosuppressant medication?	<input type="checkbox"/>	<input type="checkbox"/>	If YES, do not treat and <b>REFER</b>
Pregnant – known or suspected? Planning to become pregnant in next 3 months if treating with trimethoprim?	<input type="checkbox"/>	<input type="checkbox"/>	If YES, do not treat and <b>REFER</b>
Breastfeeding?	<input type="checkbox"/>	<input type="checkbox"/>	If YES, treatment may be provided
Diabetes?	<input type="checkbox"/>	<input type="checkbox"/>	If YES, treatment may be provided. Refer to GP if concern over recurrent UTI or if UTI is potentially caused by side effect of medication
Confused or dehydrated?	<input type="checkbox"/>	<input type="checkbox"/>	If YES, do not treat and <b>REFER</b>
Known moderate to severe renal impairment or abnormality of the urinary tract or ureteric stent?	<input type="checkbox"/>	<input type="checkbox"/>	If YES, do not treat and <b>REFER</b>
Is the patient on any interacting medications (e.g. warfarin/trimethoprim). See current BNF/SPC for details	<input type="checkbox"/>	<input type="checkbox"/>	If YES, do not treat and <b>REFER</b>
Known haematological abnormalities, porphyria, folate deficiency which is uncorrected, glucose-6-phosphate deficiency?	<input type="checkbox"/>	<input type="checkbox"/>	If YES, do not treat and <b>REFER</b>
Known electrolyte imbalance?	<input type="checkbox"/>	<input type="checkbox"/>	If YES, do not treat and <b>REFER</b>
Known severe liver fibrosis / encephalopathy?	<input type="checkbox"/>	<input type="checkbox"/>	If YES, do not treat and <b>REFER</b>

### Appendix 3 - Patient Group Direction for antibiotic treatment of acute Urinary Tract Infection (UTI) in non-pregnant female patients over 16 years of age

Patient has known blood disorders such as leucopenia, megaloblastic anaemia, thrombocytopenia, agranulocytosis, or methaemoglobinaemia?	<input type="checkbox"/>	<input type="checkbox"/>	If YES, do not treat and <b>REFER</b>
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#### Treatment options

Follow NHS board's first line formulary choice – this is trimethoprim in most boards. Ideally nitrofurantoin should only be used if you have access to information about current renal function. However, if no recent eGFR is available but the patient has no history of renal problems, nitrofurantoin may be used (See Appendix 1).

Clinical features affecting therapeutic choice	Trimethoprim	Nitrofurantoin
Clinically significant drug interactions with existing medication	AVOID if significant interaction exists with current medication	
Known interstitial lung disease or poorly controlled respiratory disease	SUITABLE	AVOID due to difficulty in recognising pulmonary fibrosis secondary to nitrofurantoin
Current use of alkalinising agents	SUITABLE	AVOID or advise to stop alkalinising agent
Allergy or adverse effect to trimethoprim	AVOID	SUITABLE
Allergy or adverse effect to nitrofurantoin	SUITABLE	AVOID

#### Preparation options and supply method

Medicine and strength	Regimen - Health Board specific	Supply method
Nitrofurantoin 50 mg tablets	ONE tablet FOUR times daily x 12	PGD via UCF
Nitrofurantoin MR 100 mg capsules	ONE capsule TWICE daily x 6	
Trimethoprim 100 mg tablets	TWO tablets TWICE daily x 12	
Trimethoprim 200 mg tablets	ONE tablet TWICE daily x 6	
Symptomatic management only	Appropriate analgesia	UCF or OTC or existing supply

#### Patient advice checklist

Advice	Provided (tick as appropriate)
How to take medication	<input type="checkbox"/>
Expected duration of symptoms - to seek medical assistance if symptoms worsen or are not resolving within 3 days	<input type="checkbox"/>
Nitrofurantoin only – stop taking immediately and seek medical assistance if symptoms of pulmonary reaction develop (e.g. cough, dyspnoea, fever, chills)	<input type="checkbox"/>
Ensure adequate fluid intake (approx. 2.5L per day but avoid very large amounts due to risk of inadequate bladder contact with antibiotic). Fluid intake should result in urine being a pale straw colour.	<input type="checkbox"/>
Symptomatic (use of analgesia)	<input type="checkbox"/>

### Appendix 3 - Patient Group Direction for antibiotic treatment of acute Urinary Tract Infection (UTI) in non-pregnant female patients over 16 years of age

Advice	Provided (tick as appropriate)
Prevention of UTI - Hygiene / toilet habits (do not 'hold on' – go to the toilet when you need to)	<input type="checkbox"/>
If patient has haematuria – seek medical assistance if haematuria persists or returns after successful treatment of UTI	<input type="checkbox"/>
Patient information leaflet relating to medication is given to patient	<input type="checkbox"/>

#### Communication

Contact made with	Details (include time and method of communication)
Patient's regular General Practice (details)	Click or tap here to enter text.
Other	

#### Details of medication supplied and pharmacist supplying under the PGD

Medication supplied	Click or tap here to enter text.
Batch number and expiry	Click or tap here to enter text.
Print name of pharmacist	Click or tap here to enter text.
Signature of pharmacist	Click or tap here to enter text.
GPhC registration number	Click or tap here to enter text.

## Appendix 4 - Notification of Supply From Community Pharmacy

### CONFIDENTIAL WHEN COMPLETED

Data protection confidentiality note: this message is intended only for the use of the individual or entity to whom it is addressed and may contain information that is privileged, confidential and exempt from disclosure under law. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited.

GP name	<a href="#">Click or tap here to enter text.</a>	<b>Pharmacy Stamp</b>
GP practice address	<a href="#">Click or tap here to enter text.</a>	
	<a href="#">Click or tap here to enter text.</a>	
The following patient has attended this pharmacy for assessment and potential treatment of UTI:		
Patient name	<a href="#">Click or tap here to enter text.</a>	
Date of birth/CHI	<a href="#">Click or tap here to enter text.</a>	
Patient address	<a href="#">Click or tap here to enter text.</a>	
	<a href="#">Click or tap here to enter text.</a>	
Postcode	<a href="#">Click or tap here to enter text.</a>	
		Pharmacist name <a href="#">Click or tap here to enter text.</a>
		GPhC number <a href="#">Click or tap here to enter text.</a>
		Date <a href="#">Click or tap to enter a date.</a>

### Following assessment (Tick as appropriate)

<b>Presenting symptoms</b>			
Dysuria <input type="checkbox"/>	Urgency <input type="checkbox"/>	Haematuria <input type="checkbox"/>	
Frequency <input type="checkbox"/>	Polyuria <input type="checkbox"/>	Suprapubic tenderness <input type="checkbox"/>	
<b>Urine dipstick results (optional)</b>			
Nitrite '+ve' <input type="checkbox"/>	Leucocyte '+ve' <input type="checkbox"/>	Blood '+ve' <input type="checkbox"/>	Not taken <input type="checkbox"/>
Your patient has been given a 3 day course of:	Trimethoprim 200 mg tablets		<input type="checkbox"/>
	Nitrofurantoin 100 mg MR capsules		<input type="checkbox"/>
	Nitrofurantoin 50 mg tablets		<input type="checkbox"/>
Your patient is unsuitable for treatment via PGD for the following reasons and has been referred: <a href="#">Click or tap here to enter text.</a>			<input type="checkbox"/>
<b>Follow up by GP practice required for the following reasons:</b> <a href="#">Click or tap here to enter text.</a>			<input type="checkbox"/>

Your patient has been advised to contact the practice if symptoms fail to resolve following treatment. You may wish to include this information in your patient records.

**Patient consent:** I can confirm that the information is a true reflection of my individual circumstances and I give my consent to allow a pharmacist working under the terms of NHS Pharmacy First Scotland to provide the most appropriate advice and/or treatment for me. I also give my permission to allow the pharmacist to pass, to my own GP, details of this consultation and any advice given or treatment provided. I have been advised that some of the information may be used to assess the uptake of the service but this will be totally anonymous and not be attributable to any individual patient.

Patient signature	Date
<a href="#">Click or tap to enter a date.</a>	<a href="#">Click or tap to enter a date.</a>

This form should now be sent to the patient's GP and a copy retained in the pharmacy.

## Appendix 5

For boards using nitrofurantoin, a renal function assessment is required.

\*eGFR must be >60ml/min for use of the nitrofurantoin PGD

\*\*If eGFR is not available on Clinical Portal or ICE or other clinical system available because such a test appears never to have been performed, it can be assumed there has been no history or suspicion of renal problems and supply can be made if clinically appropriate.

