Royal Cornwall Hospitals
NHS Trust

Pre-Operative Urine Testing In Patients Undergoing Urological Surgery at RCHT Standard Operating Procedure

V2.0

April 2026

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The Trust has a duty under the Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 to ensure that there is a valid legal basis to process personal and sensitive data. The legal basis for processing must be identified and documented before the processing begins. In many cases we may need consent; this must be explicit, informed, and documented. We cannot rely on opt out, it must be opt in.

Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 is applicable to all staff; this includes those working as contractors and providers of services.

For more information about your obligations under the Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 please see the Information Use Framework Policy or contact the Information Governance Team

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1. Introduction

There is evidence that pre-operative positive urine cultures increase the risk of post-operative morbidity in patients undergoing surgery to the urinary tract. However, other than in upper tract stone surgery (Ureteroscopy / PCNL), there is no good evidence to suggest whether pre-operative treatment with antibiotics is superior to 'on the day of surgery' antibiotics.

2. Purpose of this Standard Operating Procedure

2.1. This Standard Operating Procedure (SOP) is to act as a guide on pre-operative urine testing for patients undergoing urological surgery that involves the urinary tract.

2.2. To ensure all relevant patients have the correct urine tests and guide those responsible for the patients in dealing appropriately with the results, to reduce the risk of intra-operative infections/sepsis, as well as reduce the chance of cancellations on the day of surgery.

3. Ownership and Responsibilities

This Standard Operating Procedure has been written by Mathew Hotston, Governance Lead for Urology. It has been presented and discussed at departmental governance meeting and agreed by all Urology Consultants.

3.1. Role of the Managers

Line managers are responsible for:

- Ensuring that there is staff in place to ensure all relevant patients undergo a pre-operative Mid Stream Urine (MSU).

3.2. Role of Individual Staff

All staff members are responsible for:

- Checking the MSU results and acting upon them, using this SOP as a guide to aid their decision making.

4. Standards and Practice

4.1. All patients that are due a procedure in theatre that involves the urinary tract should have a pre-operative MSU, and a urine dipstick on the day of surgery. This therefore excludes inguino-scrotal surgery (eg hydrocoele repair, orchidectomy, orchidopexy, vasectomy, excision of epididymal cyst).

4.2. All patients undergoing surgery involving the urinary tract should be offered antibiotics to be given at the time of surgery.

4.3. All patients should also receive notification in their TCI letter that a **urine sample is required 7-10 days prior to their procedure.**

4.4. Any recent MSUs should be reviewed by the operating surgeon.

4.5. **Standard induction antibiotics to be used at RCHT are:**

- Gentamicin 3mg/kg for lower urinary tract / uncatheterised patients.
- Gentamicin + amoxycillin for upper tract surgery / catheterised patients.

(Unless pre-op MSU demonstrates resistance to these antibiotics; then tailor the antibiotic to their sensitivities).

4.5. **For positive pre-operative MSU's:**

4.5.1. All patients undergoing **upper tract surgery** (eg ureteroscopy /PCNL) should be treated with a course of antibiotics prior to surgery, and should not be considered for surgery if untreated / still nitrate +ve of the day of surgery.

4.5.2. Any positive MSUs/ positive nitrate results should be passed on to the patient's named consultant, or the surgeon that will operating on them. The context of the patient should be taken into account, including comorbidities, immune status, catheterised vs non catheterised, symptomatic status.

4.5.2.1. **Catheterised patients**: suggest pre-operative course of antibiotics (minimum 3 days). If nitrate positive on day of surgery: if well/asymptomatic/no other risk factors for sepsis- continue with procedure.

4.5.2.2. **Uncatheterised patients**: consider antibiotic course prior to surgery (minimum 3 days), postpone if untreated. If nitrate positive on day of surgery: operating surgeon's decision whether to proceed.

5. Dissemination and Implementation

5.1. This document will be sent to all urology consultants and middle grades and be available on the urology clinical shelf on the intranet.

5.2. It will also be sent to line managers / those responsible for booking patients and organising pre-operative MSU's.

6. Monitoring compliance and effectiveness

Information Category	Detail of process and methodology for monitoring compliance
Element to be monitored	Pre-operative MSU testing for urology patients undergoing surgery involving the urinary tract.
Lead	Mathew Hotston.

Information Category	Detail of process and methodology for monitoring compliance
Tool	Perform a snapshot check of patients undergoing surgery, checking MSU's performed pre-operatively, checked and managed pre-operatively, and review on the day surgery cancellations due to untreated MSU's.
Frequency	Quarterly.
Reporting arrangements	Report to urology clinical governance.
Acting on recommendations and Lead(s)	Discussed at clinical governance, and line managers, governance lead, clinical lead will act on recommendations.
Change in practice and lessons to be shared	Required changes to practice will be identified and actioned following discussion at governance. A lead member of the team will be identified to take each change forward where appropriate. Lessons will be shared with all the relevant clinical and admin staff within urology.

7. Updating and Review

This SOP is to be review every 3 years; the next review will be April 2029.

8. Equality and Diversity

8.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the Equality Diversity And Inclusion Policy or the Equality and Diversity website.

8.2. Equality Impact Assessment

The Initial Equality Impact Assessment Screening Form is at Appendix 2.

Appendix 1. Governance Information

Information Category	Detailed Information
Document Title:	Pre-Operative Urine Testing In Patients Undergoing Urological Surgery at RCHT Standard Operating Procedure V2.0
This document replaces (exact title of previous version):	Pre-Operative Urine Testing In Patients Undergoing Urological Surgery at RCHT Standard Operating Procedure V1.0
Date Issued/Approved:	March 2026
Date Valid From:	April 2026
Date Valid To:	April 2029
Directorate / Department responsible (author/owner):	Mathew Hotston, Consultant Urologist
Contact details:	01872 253069
Brief summary of contents:	Standard Operating Procedure for organising and managing pre-operative MSU tests for patients undergoing urological surgery.
Suggested Keywords:	Urology, Mid Stream Urine, MSU, pre-operative.
Target Audience:	**RCHT**: Yes **CFT**: No **CIOS ICB**: No
Executive Director responsible for Policy:	Chief Medical Officer
Approval route for consultation and ratification:	Urology Speciality Governance Meeting
General Manager confirming approval processes:	Ian McGowan
Name of Governance Lead confirming approval by specialty and care group management meetings:	Suzanne Atkinson
Links to key external standards:	None required
Related Documents:	None required
Training Need Identified?	No

Information Category	Detailed Information
Publication Location (refer to Policy on Policies – Approvals and Ratification):	Internet and Intranet
Document Library Folder/Sub Folder:	Clinical / Urology

Version Control Table

Date	Version Number	Summary of Changes	Changes Made by
December 2022	V1.0	Initial issue.	Mathew Hotston, Consultant Urologist
March 2026	V2.0	No changes, updated to latest Trust template.	Mathew Hotston, Consultant Urologist

All or part of this document can be released under the Freedom of Information Act 2000.

All Policies, Strategies and Operating Procedures, including Business Plans, are to be kept for the lifetime of the organisation plus six years.

This document is only valid on the day of printing.

Controlled Document.

This document has been created following the Royal Cornwall Hospitals NHS Trust The Policy on Policies (Development and Management of Knowledge Procedural and Web Documents Policy). It should not be altered in any way without the express permission of the author or their Line Manager.

Appendix 2. Quality and Equality Impact Assessment (QEIA) Form

The QEIA process allows RCHT to monitor the impact of changes to its policies and services, ensuring that nobody is unduly disadvantaged.

Please ensure you have completed a Quality and Equality Impact Assessment (QEIA) using this link to complete the form:

E11 QEIA Policy.

For guidance, please see the QEIA Essentials – Quick Reference Guide or contact as required below:

Equality, Diversity and Inclusion guidance, please contact: rcht.inclusion@nhs.net.

Quality Governance guidance, please contact Jillian Tozer: jillian.tozer3@nhs.net