

CP14

Nephrostomy Care Policy

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[Attachment 1 Troubleshooting chart](#)

[Attachment 2 Nephrostomy discharge checklist](#)

1.0 Policy Statement (Purpose / Objectives of the policy)

The Royal Wolverhampton NHS Trust is committed to preventing avoidable harm to patients. Medical devices carry a risk of infection and other harms which can be minimised with appropriate use. This policy defines the pathways and practices to ensure rational and safe use of percutaneous nephrostomy tubes. This policy must be read in conjunction with the following policies and protocols:

- [Standard Precautions Policy \(IP12\)](#),
- [Hand Hygiene Policy \(IP01\)](#),
- [Waste disposal Policy \(HS01\)](#),
- NCP- Gen 32 Changing a nephrostomy tube,
- NCP - Gen 33 Changing a nephrostomy dressing,
- NCP Gen 34 Flushing a nephrostomy tube using syringe technique (Adults),
- [CP36 Chaperoning of patients and clients](#), and
- Protocol for Nurse Led Nephrostomy Clinic.

Additional useful resources:

- Nephrostomy troubleshooting chart,
- Nephrostomy discharge checklist,
- Nephrostomy Care leaflet,
- Percutaneous Nephrostomy leaflet,
- Training and education videos, and
- PowerPoint presentations.

They can be found on the Trust Intranet under [Urology Department - Nephrostomy page](#).

Percutaneous nephrostomy tubes are sterile drainage devices. The most common reason for requiring a percutaneous nephrostomy tube is due to a blockage or damage between the kidneys, ureters and the bladder. A nephrostomy tube is a very useful device which diverts urine away from the ureter and bladder into an externalised drainage bag, but this device is also associated with serious risks. 1 in 100 patients are at risk of developing a serious infection and 2 in 1000 patients are at risk of death (Koukounaras and Lyon 2017). Therefore, all health care professionals must ensure appropriate measures are employed to minimise associated risks to the patient who require this device.

Percutaneous nephrostomy tubes are inserted in the Interventional Radiology Department by an Interventional Radiologist under direct vision using fluoroscopy, ultrasound or CT guidance usually under local anaesthetic or under sedation.

There must be a clear and concise documented account for the indication and review of nephrostomy tubes with good communication between health care teams, carers and the patient.

In adhering to this Policy, all applicable aspects of the Conflicts of Interest Policy must be considered and addressed. In the case of any inconsistency, the Conflicts of Interest Policy is to be considered the primary and overriding Policy.

2.0 Definitions

Percutaneous nephrostomy tube or nephrostomy: a soft, thin, hollow tube inserted through the skin of the back directly into the kidney.

Nephrostomy tube flush: the insertion of a sterile fluid into the percutaneous nephrostomy tube for the purpose of removal of blockages and debris, and for maintaining patency of the nephrostomy.

Infection: host response to a microorganism resulting in clinical illness

Nephrostomy associated urinary infection: an infection arising from the presence of a nephrostomy tube.

3.0 Accountabilities

3.1 The Interventional Radiology Service

- Taking referrals, consenting and co-ordinating the procedural process of insertion of percutaneous nephrostomy tubes.
- Undertaking the insertion of a nephrostomy tube under imaging guidance.
- The management and care of the patient during and immediately after of the insertion of a percutaneous nephrostomy tube.
- Ensuring patient's insertion and exchange of a percutaneous nephrostomy tube is tracked and safely co-ordinated using a robust database.
- To provide relevant care plans, documents and post procedural advice to health care professionals involved with the patient's care on return to the ward.

3.2 The Urology Clinical Nurse Specialist (CNS's)

- Being a point of contact for patients and health care professionals for nephrostomy care, advice and guidance (point of contact working hours of Monday to Friday 08.00-16.00). Outside of these hours patients are directed to the Surgical Emergency Unit (SEU).
- The assessment and evaluation of the nephrostomy issues over the telephone with the health care professional or the patient.
- Triage patients appropriately offering verbal advice, a face-to-face appointment, or direct admission to SEU.
- Providing education and training for nephrostomy care to prevent and reduce associated risks with device related infections.
- Review of relevant clinical practices to minimise device related urinary tract infection in conjunction with radiology and emergency services.
- Maintenance of this policy.

3.3 Surgical Emergency Unit (SEU)

- Being a point of contact for patients and health care professionals for nephrostomy care, intervention, advice and guidance.
- Triage patients appropriately offering verbal advice or arranging direct admission to SEU (outside urology CNS working hours and weekends).
- Prompt referral to appropriate clinical staff for assessment and appropriate management of patients with a nephrostomy tube as clinically indicated.
- Co-ordinating any appropriate care with interventional radiology.
- Ensuring safe discharge of patient following any intervention and that all care and discharge requirements are met.

3.4 The Adult Community Services and Practice Nurses

- Receiving referrals for nephrostomy care in the community.
- Providing education and training to carers and patients in the community in relation to the safe handling and management of nephrostomy care.
- Troubleshooting any nephrostomy issues before referral back to Urology services or SEU.
- Ensuring the patient has appropriate equipment and dressings.
- Changing nephrostomy bags and dressings at least once weekly.

3.5 The Emergency Department

- The assessment of any patient who presents to them with complications relating to their percutaneous nephrostomy tube.
- Providing patients and health care professionals with nephrostomy care advice and guidance in an emergency setting.
- Prompt referral to appropriate clinical staff and, or Interventional Radiology for assessment and intervention needed for nephrostomy care and intervention.

3.6 The Infection Prevention Team

- The development of a robust process for the identification and surveillance of device related infections.
- Review of relevant clinical practices to minimise device related urinary tract infection in conjunction with Radiology, Urology and Emergency Services.
- Provide education and training on the reduction of infection risk associated with indwelling devices across the Wolverhampton Health Economy.

3.7 Consultants and General Practitioners

- Informing the Radiology Department if a patient is discharged with a nephrostomy requiring exchanges.
- Facilitating the education of junior medical staff in nephrostomy care.
- Prompt recognition and treatment of urinary tract infection and other associated infections.
- Prompt referral to appropriate clinical staff for assessment and intervention needed for nephrostomy care.
- Ensuring that written and verbal communication between inpatient areas, community providers and transferring hospitals are consistently of a high standard.
- Discuss with Microbiology any concerning infection risk.

3.8 All Nurses

- Following and implementing nephrostomy care plans post insertion of nephrostomy tube.

- Ensuring all patients discharged from hospital with a nephrostomy tube have been referred to District Nurses via the Care-Coordination Hub or Practice Nurses for weekly dressing and nephrostomy bag changes.
- Ensuring all patients have been referred to a Healthcare Supplier for Delivery of ongoing supplies of nephrostomy bags.
- That the management of the nephrostomy tube is clearly documented, and the patient is aware of the estimated removal date or exchange date (post-operative care plan utilised where appropriate).
- Ensuring patients discharged with a nephrostomy tube have relevant discharge information and have been educated on caring for their nephrostomy tube.
- Ensuring there is suitable provision of dressings and nephrostomy bags given to the patient on discharge.
- Ensuring that written and verbal communication between inpatient areas, community providers, transferring hospitals, and community nurses is consistently of a high standard.
- Discuss with Microbiology any concerning infection risk.

3.9 All Senior Nurses and Ward Managers

- Facilitating training sessions supported by the Urology CNS team to ensure there is a high standard of training of clinical staff.
- Ensuring that there is adequate supervision of staff undertaking nephrostomy care.
- Ensuring staff in the clinical area are aware of this policy and its associated pathways and protocols.
- Ensuring that written and verbal communication between in-patient areas, community providers, transferring hospitals, and community nurses is consistently of a high standard.
- Maintaining competence in nephrostomy care.
- Discuss with Microbiology any concerning infection risk.

4.0. Policy Detail

4.1 Use of Nephrostomies

The need and decision made for the insertion of nephrostomy tube for a patient must be clearly indicated by a senior member of the medical team and co-ordinated by the medical professional and Interventional Radiology.

4.2 Insertion

Percutaneous nephrostomy tubes should only ever be inserted by, or under the supervision of, a Consultant Interventional Radiologist.

All relative information should be documented in the relevant medical and nursing notes, care plan and Vital Pac. Information documented must include:

- Reason for insertion,

- Date and time of insertion,
- Name and position of person inserting nephrostomy, and
- Any associated complications with insertion.

4.3 Treatment to prevent urinary tract infection

- Antibiotics treatment must be clinically indicated.
- Microbiology specimen to be sent if possible.
- Nephrostomy tubes must not be flushed if a urinary tract infection is suspected (case to be discussed with medical team).

4.3.1 Before prescribing antibiotic prophylaxis for urinary tract infection

- If considering prophylactic antibiotics for patient with a history of symptomatic urinary tract infections after nephrostomy exchange **or** experience trauma during nephrostomy insertion, this must be discussed with Microbiology and the medical team.
- Suitable antibiotic regimens must be approved by a microbiologist and clearly documented in patients notes.

4.3.2 Ensure that the need for on-going antibiotic prophylaxis in all people is regularly reviewed

(This recommendation is from [Infection: prevention and control of healthcare-associated infections in primary and community care](#) (NICE clinical guideline 139)) <https://www.nice.org.uk/guidance/CG139>

4.4 Care

The nephrostomy care plan and Vital Pac are utilised to ensure appropriate care is provided for patients with a nephrostomy tube in situ. The troubleshooting chart is to be used by health care professionals to assist with any issues with the nephrostomy tube. The nephrostomy clinical procedures on the intranet page, for changing dressings, changing bags and flushing the nephrostomy must be followed to ensure safe management and to minimise risk of infection and complications. All care given must be clearly documented to a high standard.

4.5 Review

For any complications encountered with percutaneous nephrostomy tube the health care professional must:

- Refer to the Nephrostomy troubleshooting chart found on the Trust Intranet under Departments & Services > Urology> Nephrostomy,
- Contact the Urology CNS, medical team or SEU or interventional radiology for further advice, and
- Discuss with medical team.

5.0 Financial Risk Assessment

1	Does the implementation of this policy require any additional Capital resources	No
2	Does the implementation of this policy require additional revenue resources	No
3	Does the implementation of this policy require additional manpower	No
4	Does the implementation of this policy release any manpower costs through a change in practice	No
5	Are there additional staff training costs associated with implementing this policy which cannot be delivered through current training programmes or allocated training times for staff.	No
	Other comments	

6.0 Equality Impact Assessment

It is not anticipated that this policy will have any impact on race equality and equality or diversity.

7.0 Maintenance

The Urology CNS, in association with the Intervention Radiology, SEU and Infection prevention are responsible for advising on update, amendments and review of this policy. Any changes to this policy must be agreed by the Urology CNS team.

8.0 Communication and Training

Nephrostomy care training is linked to a competency assessment. Which can be found on the nephrostomy clinical procedures. Training for medical staff is available on all induction programmes. These policies are available on the Trust intranet.

9.0 Audit Process

Criterion	Lead	Monitoring method	Frequency	Committee/ Group
Nephrostomy Prevalence	Nurse Manager Infection Prevention/ Interventional Radiology	ICNet surveillance system	Annually	IPCG

10.0 References:

EAUN (2020) Pigtail Nephrostomy Catheter e-course www.eaun.uroweb.org The European Association of Urology Nurses (EAUN), European School of Urology accessed 12.11.2020 educationonline@uroweb.org

Koukounaras, J and Lyon, S (2017) Nephrostomy: Inside Radiology

Infection Prevention Society and NHS Improvement; 2017; High Impact Interventions: care processes to prevent infections 4th Edition London

Loveday, H.P. et al (2014) epic3: National Evidenced based Guidelines for Preventing Healthcare Associated Infections in NHS Hospitals in England. Journal of Hospital Infection. 8651 (2014), s1 – s70

National Clinical Guideline Centre. *Infection: prevention and control of healthcare-associated infections in primary and community care: partial update of NICE Clinical Guideline 2. NICE Clinical Guidelines, No. 139.* London: Royal College of Physicians; 2012.

Martin R, Baker H (2019) Nursing care and management of patients with a nephrostomy. Nursing Times [online]; 115: 11, 40-43

Royal Wolverhampton NHS Trust; [IP01 Hand Hygiene Policy](#)

Royal Wolverhampton NHS Trust; [IP12 Standard Precautions Policy](#)

Royal Wolverhampton NHS Trust; [HS10 Waste Policy](#)

Royal Wolverhampton NHS Trust Intranet Page; [Urology Outpatients Department – Nephrostomy](#)

Part A - Document Control

<p>Policy number and Policy version:</p> <p>CP14</p> <p>Version 1.0</p>	<p>Policy Title</p> <p>Nephrostomy Care Policy</p>	<p>Status:</p> <p>Final</p>		<p>Author:</p> <p>Jenny Akins – Urology Advanced Nurse Practitioner – Urology Department</p> <p>Director Sponsor: Chief Medical Officer - BM</p>
<p>Version / Amendment History</p>	<p>Version</p>	<p>Date</p>	<p>Author</p>	<p>Reason</p>
	<p>1.0</p>	<p>September 2022</p>	<p>Urology ANP</p>	<p>Introduction of policy</p>
<p>Intended Recipients: All Consultants All Nursing Staff All Wards and Departments All Community Teams</p>				
<p>Consultation Group / Role Titles and Date:</p> <p>The following services were part of the original current and future state process maps held in December 2020 and March 2021.</p> <p>Urology Services - Advanced Nurse Practitioner, Matron & Catheter and Nephrostomy Outpatient Service (CANOS) Interventional Radiology Advanced Surgical Nurse Practitioner - Surgical Emergency Unit (SEU) Senior Matron & Nurse Practitioner - Care Coordination Community Team Sister - Oncology Team Sister - Renal Services Continuous Quality Improvement (CQI) Team</p> <p>Representation from the above teams was present at the fortnightly project team meetings to review progress and update actions.</p>				
<p>Name and date of Trust level group where reviewed</p>		<p>Trust Policy Group – September 2022</p>		
<p>Name and date of final approval committee</p>		<p>Trust Management Committee – September 2022</p>		
<p>Date of Policy issue</p>		<p>October 2022</p>		

Review Date and Frequency (standard review frequency is 3 yearly unless otherwise indicated)	October 2025 – and 3 years thereafter.
Training and Dissemination: Communication plan in place to promote resources and awareness. Policy will be uploaded onto the Intranet site – located in both the Strategies & Policies - Clinical Policy Section and as part of the Departments & Services – Urology page.	
To be read in conjunction with: Royal Wolverhampton NHS Trust; IP01 Hand Hygiene Policy Royal Wolverhampton NHS Trust; IP12 Standard Precautions Policy Royal Wolverhampton NHS Trust; HS10 Waste Policy	
Initial Equality Impact Assessment (all policies): Completed Yes / No Full Equality Impact assessment (as required): Completed Yes / No / NA If you require this document in an alternative format e.g., larger print please contact Policy Administrator8904	
Monitoring arrangements and Committee	
Document summary/key issues covered. The Royal Wolverhampton NHS Trust is committed to preventing avoidable harm to patients. Medical devices carry a risk of infection and other harms which can be minimised with appropriate use. This policy outlines the pathways and practices to ensure rational and safe use of percutaneous nephrostomy tubes.	
Key words for intranet searching purposes	Nephrostomy
High Risk Policy? Definition: <ul style="list-style-type: none"> Contains information in the public domain that may present additional risk to the public e.g. contains detailed images of means of strangulation. References to individually identifiable cases. References to commercially sensitive or confidential systems. If a policy is considered to be high risk it will be the responsibility of the author and director sponsor to ensure it is redacted to the requestee.	No

Part B

Ratification Assurance Statement

Name of document: **Nephrostomy Care Policy**

Name of author: **Jenny Akins**

Job Title: **Urology Advanced Nurse Practitioner**

I, _____ the above named author confirm that:

- The Strategy/Policy/Procedure/Guidelines (please delete) presented for ratification meet all legislative, best practice and other guidance issued and known to me at the time of development of the said document.
- I am not aware of any omissions to the said document, and I will bring to the attention of the Executive Director any information which may affect the validity of the document presented as soon as this becomes known.
- The document meets the requirements as outlined in the document entitled Governance of Trust- wide Strategy/Policy/Procedure/Guidelines and Local Procedure and Guidelines(OP01).
- The document meets the requirements of the NHSLA Risk Management Standards to achieve as a minimum level 2 compliance, where applicable.
- I have undertaken appropriate and thorough consultation on this document and I have detailed the names of those individuals who responded as part of the consultation within the document. I have also fed back to responders to the consultation on the changes made to the document following consultation.
- I will send the document and signed ratification checklist to the Policy Administrator for publication at my earliest opportunity following ratification.
- I will keep this document under review and ensure that it is reviewed prior to the review date.

Signature of Author:

Date:

Name of Person Ratifying this document (Director or Nominee):

Job Title:

Signature:

- I, the named Director (or their nominee) am responsible for the overall good governance and management of this document including its timely review and updates and confirming a new author should the current post-holder/author change.

To the person approving this document:

Please ensure this page has been completed correctly, then print, sign and email this page only to: The Policy Administrator

IMPLEMENTATION PLAN

To be completed when submitted to the appropriate committee for consideration/approval

Policy number and policy version	Nephrostomy Care Policy	
Reviewing Group	Urology Departmental Team	Date reviewed: 04.08.22
Implementation lead: Print name and contact details		
Implementation Issue to be considered (add additional issues where necessary)	Action Summary	Action lead / s (Timescale for completion)
Strategy; Consider (if appropriate) 1. Development of a pocket guide of strategy aims for staff 2. Include responsibilities of staff in relation to strategy in pocket guide.	Not Required.	
Training; Consider 1. Mandatory training approval process 2. Completion of mandatory training form	Not Required.	
Development of Forms, leaflets etc; Consider 1. Any forms developed for use and retention within the clinical record MUST be approved by Health Records Group prior to roll out. 2. Type, quantity required, where they will be kept / accessed/stored when completed	Not Applicable.	Posters available on INTRANET page,
Strategy / Policy / Procedure communication; Consider 1. Key communication messages from the policy / procedure, who to and how?	Complete.	Key messages about Nephrostomy Care and location of additional resources shared via Trust Screensaver. To be repeated once the policy is ratified.
Financial cost implementation Consider Business case development	Not Applicable.	
Other specific Policy issues / actions as required e.g. Risks of failure to implement, gaps or barriers to implementation	Not Applicable	

Nephrostomy Troubleshooting Chart

Problem	Possible Cause	Action
Blood in the urine	<ul style="list-style-type: none"> Blocked nephrostomy tube Kidney infection 	<ul style="list-style-type: none"> If appropriate, encourage the patient to increase fluid intake Monitor input and output from nephrostomy tube and bladder Ensure clinical procedures following ANTT are used when changing dressings and bags Ensure drainage bag is supported and correct dressing is intact Send urine for C&S Consult with medical team if infection suspected, as patient may require antibiotics Consider flushing the tube only if no evidence of infection (must be trained staff only following clinical procedure)
Pain over site where nephrostomy tube enters skin	<ul style="list-style-type: none"> Urine or site infection Bag not supported correctly so pulling tube Is patient undertaking too much exercise or manual labour? 	<ul style="list-style-type: none"> If patient is symptomatic (shivering / temperature) consult with medical team as patient may need to be prescribed antibiotics Ensure drainage bag is supported and correct dressing is intact Advise patient to rest and light exercise only
Nephrostomy tube falls out	<ul style="list-style-type: none"> Has nephrostomy tube or drainage bag been pulled? 	<ul style="list-style-type: none"> Inform urology CNS or Surgical Emergency Unit (SEU) who will inform urology Consultant and arrange admission to SEU as appropriate
Patient is feeling unwell or symptoms of an infection	<ul style="list-style-type: none"> Infection of kidney or bladder? 	<ul style="list-style-type: none"> Ensure clinical procedures following ANTT is used when changing dressings and bags If appropriate, encourage the patient to increase fluid intake Monitor input and output from nephrostomy tube and bladder Send urine for C&S Consult with medical team if infection suspected as patient may require antibiotics Discuss with medical team as patient may need admitting
Urine leaking from around nephrostomy tube	<ul style="list-style-type: none"> Bypassing due to kinked tube or blocked tube 	<ul style="list-style-type: none"> Check for any kinking, dislodgment or blockage of the nephrostomy tube. Reposition tube as appropriate Ensure drainage bag is supported and correct dressing is intact Check sutures are still intact Monitor input and output from nephrostomy tube and bladder If appears blocked consider flushing the tube only if no evidence of infection (must be trained staff only following clinical procedure)
Skin around site is nodular, red and sore. Sometimes bleeds	<ul style="list-style-type: none"> Over granulation 	<ul style="list-style-type: none"> If required request medical illustration to take photo of area with patients consent. Contact Tissue Viability (TV) team for advice. Consider silver nitrate treatment under guidance of urology Consultant and TV team
Reduced / No urine output	<ul style="list-style-type: none"> Nephrostomy bag tap left open / nephrostomy tube kinked Is the patient drinking enough? Has urine output from bladder increased? Is the nephrostomy tube blocked? 	<ul style="list-style-type: none"> Check for any kinking of the tube. Ensure the nephrostomy tap has not been left open If appropriate encourage fluid intake Monitor input and output from nephrostomy tube and bladder If appears blocked consider flushing the tube only if no evidence of infection (must be trained staff only following clinical procedure) Consider checking U+E's
Nephrostomy insertion site and surrounding area is red, swollen, signs of oozing and warm to touch	<ul style="list-style-type: none"> Infection at the site of the nephrostomy tube 	<ul style="list-style-type: none"> Swab site If required request medical illustration to take photo of area with patients consent. If required contact Tissue Viability (TV) team for advice. Ensure clinical procedure following ANTT are used when changing dressings and bags If patient is symptomatic (shivering / temperature) consult with medical team as patient will need to be prescribed antibiotics

This chart is to be used to support health care professionals with managing nephrostomy problems.

This flow chart is for guidance only and each episode of care must be managed on the patients individual circumstance, your own assessment, clinical skills and knowledge. You must be aware of your own limitations and refer for further advice and support wherever necessary.

Contacts: Urology CNS – 01902 694048 or 01902 694467 (office hours 8:00am–4:00pm Monday–Friday)
SEU (outside office hours) – 01902 694004

Adapted from 'My Nephrostomy Passport - How to look after your nephrostomy tube' Manfred Sauer UK Limited.

Nephrostomy discharge form

Referring ward / department:

Patients Consultant: _____

Speciality: _____

Surname	Unit No
Forename	NHS No
Address	DOB
Postcode	(or affix patient label)

Reason for insertion of nephrostomy: _____

Date of removal or exchange if known: _____

Has the patient got capacity: Yes No

Does the patient speak English: Yes No

Actions before discharge	Yes	No	Variance / reason:	Initials
Nephrostomy care leaflet given to patient.				
Bullen delivery service referral made (emailed).				
Referral made to district nurse or practice nurse for weekly bag and dressing changes. (Please state which team or practice)				
Nephrostomy care explained to patient.				
Appropriate nephrostomy equipment / dressings given to patient.				
Inform patient of appropriate contact details for specialist teams to contact for advice. Contact details documented on last page of nephrostomy leaflet.				
This form scanned into Clinical Web Portal and emailed to 'out of area' district nurse / practice nurse team once completed with any appropriate care plans.				

Other comments: _____

Signature: _____ Designation: _____

Date: _____ Stamp: _____

Contact details:

- Urology Clinical Nurse Specialist ext: 84048 or 84467
- A9 surgical assessment unit ext 84004
- Interventional radiology ext: 86344