Worcestershire Acute Hospitals NHS Trust

POLICY FOR THE PRESCRIBING AND ADMINISTRATION OF FLUID BY SUBCUTANEOUS INFUSION FOR ADULT INPATIENTS WITH PALLIATIVE CARE NEEDS

This guidance does not override the individual responsibility of health professionals to make appropriate decision according to the circumstances of the individual patient in consultation with the patient and /or carer. Health care professionals must be prepared to justify any deviation from this guidance.

Introduction

This document describes how subcutaneous fluids are to be prescribed and administered safely within Worcestershire Acute Hospitals NHS Trust in adult hospital inpatients who have palliative care needs.

This guideline is for use by the following staff groups:
All registered Healthcare Professionals (HCPs), students and any other staff who are authorised by the Trust to administer injectable medicines.

Lead team: Hospital Palliative Care Team
Lead Clinicians: Dr Mandeep Uppal, Dr Rachel Bullock and Dr Nicola Heron.

Additional thanks to Dr Tadg O'Connor and Dr Christina Radcliffe/SPAGG (Specialist Palliative Care Audit and Guidelines group)

Approved by Palliative Care Team Business Meeting on:	January 2026
Approved by Haematology/ Palliative Care Directorate on:	18th March 2026
Approved by Medicines Safety Committee on: *Where medicines are included in document.*	13th May 2026
Review Date: This is the most current document and should be used until a revised version is in place	18th March 2029

Key amendments to this guideline

Date	Amendment	Approved by:

POLICY FOR THE PRESCRIBING AND ADMINISTRATION OF FLUID BY SUBCUTANEOUS INFUSION FOR ADULT INPATIENTS WITH PALLIATIVE CARE NEEDS

CONTENTS

1. Introduction

1.1 This policy describes how subcutaneous fluids are to be prescribed and administered safely within Worcestershire Acute Hospitals NHS trust for adult hospital inpatients who have palliative care needs.

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1.2 Subcutaneous infusion of solutions intended for intravenous use is an unlicensed use of these solutions. However, there is an established body of evidence which supports the safety of subcutaneous fluid administration.

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1.3 This policy has been produced using current NICE guidance and West Midlands SPAGG (Specialist Palliative Care Audit and Guidelines group) guideline as its basis.

2. Scope of document

2.1 This policy has been produced to support the appropriate use and administration of clinically assisted hydration by subcutaneous infusion in adult hospital inpatients known to the Hospital Palliative Care Team and/or those inpatients where the Individualised Last Days of Life Care Plan for Adults has been initiated by the medical team with clinical responsibility for the patient.

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2.2 This policy is intended for use by:

- Doctors
- Registered Nurses / Midwives and Registered Nurse Associates
- Advanced Clinical Practitioners
- Students on clinical placements (under supervision by a registered health care professional)

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2.3 This policy must be used in conjunction with any other relevant Policies, Guidelines or Procedures which include injectable medicines, including:

- WAHT Medicines Policy (WHAT-CG-580)
- Policy and Procedures for the Prescribing and Administration of Injectable Medicines (WAHT-CG-516)
- Tastes for Pleasure SOP (WAHT-PAL-001)
- For Safe Use of Becton Dickinson Infusion Therapy Systems inc. (BD Saf-T-Intima Subcutaneous Cannulas) in Palliative and End of Life Patients. WHAT-MED-020

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Key points

- **Subcutaneous fluids at the end of life should be made on an individual patient basis and are primarily for control of symptoms of thirst, if they arise.**
- **Subcutaneous fluids at the end of life should be reviewed regularly and discontinued if burden is greater than benefit.**
- **Subcutaneous fluids should be administered via a SAF-T line and infused by gravity.**
- **Maximum subcutaneous fluid administration is 2L over 24 hours**

3. Background

3.1 Patients in their last days of life should be allowed to drink as they feel able to for pleasure. Good, regular mouth care should also continue Information supporting this can be found in the Tastes for Pleasure SOP (WAHT-PAL-001).

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3.2 Hydration status assessment in adults in the last days of life has been identified as part of a quality statement by NICE. A reduction in oral fluid intake is recognised to be a normal part of the dying process.

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3.3 Patients with reduced fluid intake may develop thirst, dry mouth, difficulty swallowing, nausea, muscle cramps and lethargy.

3.4 Clinically assisted hydration by subcutaneous infusion can allow for administration of greater volumes of fluid and electrolytes than may be tolerated orally.

3.5 In patients who are in their last days of life, hydration by subcutaneous infusion is primarily for the purpose of symptom control. There is currently no high quality evidence that suggests administration of subcutaneous fluids prolongs life. This policy would be subject to review in the event of any new relevant publications, guidance or research.

3.6 Decisions around the use of clinically assisted hydration in the last days of life should be individualised; where possible, the patient and/or their carer should be involved in discussion and decisions around its use.

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3.7 Hydration by subcutaneous infusion may improve renal function and reduce the risk of opioid toxicity. However, it is not intended as a therapy to reliably improve renal function or maintain hydration whilst patients are being treated for other reversible conditions. Patients requiring fluid resuscitation and treatment of electrolyte abnormalities should be given fluids intravenously.

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3.8 Whilst the implementation of clinically assisted hydration by subcutaneous infusion is not limited to the Hospital Palliative Care Team, it may be helpful to seek their input in situations where decision making about fluid administration is complex or there is a plan for a future place of care in a non-hospital setting.

4. Patient Selection

4.1 Indications for use

4.1.1 Patients reporting symptoms related to dehydration that are not responding to other treatment – dry mouth, thirst, nausea and vomiting, delirium.

4.1.2 A strong informed preference for clinically assisted hydration by patient or their carer in the absence of contraindications.

4.2 Patient and carer information

4.2.1 Patients and/or their carers should be given a clear explanation of the purpose of subcutaneous infusions. It should be clear that intended use is for symptom control and that an overall deterioration is likely to continue due to the underlying disease.

4.2.2 It should be explained that clinically assisted hydration is to be given as a time-limited trial to see whether it improves symptoms, as should the factors which will influence whether the medical team decide to continue this treatment.

4.2.3 Possible side effects of clinically assisted hydration should be explained, including the risks of localised oedema, systemic fluid overload, increased upper airway secretions and failure of therapy.

4.2.4 Clinically assisted hydration is a medical treatment. As such, patients and/or their carers should understand that it can be withheld or withdrawn if the responsible clinician believes it is not in the patient's best interests.

5. Prescribing

5.1 Prescription of infusion

5.1.1 Solutions to be infused require prescription by a doctor or licenced non-medical prescriber in accordance with the Trust Medicines Policy.

5.1.2 Choice of solution should be an isotonic solution such as sodium chloride 0.9% or dextrose 4%-saline 0.18%.

5.1.3 Volume and rate of solution: boluses of solution up to 500ml per 1 hour can be administered, but this may increase the risk of fluid pooling in the subcutaneous tissue. A typical prescription may be 1 litre of solution infused over 8 to 12 hours, with a maximum of 2 litres infused over 24 hours.

5.2 Cautions and contraindications

- Risk factors for fluid overload (heart failure, renal failure, hypoalbuminaemia)
- Presence or history of ascites or peripheral oedema
- Presence of history of significant lymphoedema
- Significant coagulation defects
- Refusal of treatment by patients with capacity, refusal in a valid advanced decision to refuse treatment, or lack of consent from lasting power of attorney for health and welfare

6. Administration

6.1 Subcutaneous infusions should be administered via a BD Saf-T intima subcutaneous cannula. The infusion can be prepared by any registered nurse or other staff member deemed competent by the Trust to insert a BD Saf-T intima subcutaneous cannula.

6.2 Preparation of medication, administration of medication, and documentation of administration should be as per procedures found in the Policy and Procedures for the Prescribing and Administration of Injectable Medicines (WAHT-CG-516).

6.3 A two person check should be exercised during preparation and administration. The checks should be performed independently and incorporate positive patient identification. The second checker must have been assessed as competent to administer subcutaneous or intravenous therapy.

6.4 Aseptic non-touch technique (ANTT) should be used during preparation and administration of subcutaneous infusions.

6.5 Subcutaneous infusions should be administered using a drip stand and giving set with infusion drip rate calculated. Infusion should be administered via gravity. Subcutaneous fluids should **not** be infused using a pump or other electronic delivery device, due to the increased risk of adverse events.

6.6 The below formula is used to calculate the infusion drip rate. Healthcare professionals will need to know the number of drops per ml for the giving set being used.

$$\text{Number of drops per minute} = \frac{\text{Volume of fluid (ml)} \times \text{Number of drops per ml}}{\text{Duration of Infusion (minutes)}}$$

6.7 Please see Safe Use of Becton Dickinson Infusion Therapy Systems inc. (BD Saf-T-intima Subcutaneous Cannulas) in Palliative and End of Life patients standard operating procedure WAHT-MED-020 for guidance on insertion of Saf-T-intima subcutaneous cannula.

6.8 When choosing the site of administration:

- Preferred sites are those with adequate subcutaneous tissue
- (i.e. abdomen, anterior/lateral chest wall, deltoid or upper thigh regions)

Where possible, avoid:

- Inflamed, infected or broken skin
- Placement near joints, bony prominences or flexures
- Previously irradiated areas of skin
- Areas where oedema/lymphoedema is already present
- Distal limbs

7. Monitoring and Adverse Effects

7.1 Infusions should be monitored to ensure safe administration. This should include monitoring of the patient, infusion site, administration set and flow rate.

7.2 Hydration status and symptom burden should be assessed on a daily basis by the medical team and other healthcare professionals involved in the patients' care.

7.3 If the following events occur, medical review should be sought to consider whether slowing infusion, changing infusion site or discontinuing infusion is necessary:

- Localised oedema and slow absorption
- Pain, bruising or signs of infection/inflammation at infusion site
- Breathlessness secondary to pulmonary oedema
- Worsening of upper airway secretions ('death rattle')
- Worsening of ascites or peripheral oedema

7.4 There is unlikely to be significant risk from fluid running through quicker than the prescribed infusion rate, but if this occurs the site should be assessed for swelling/local pooling, and timing of further infusions should be reviewed.

8. Implementation

8.1 This policy is to be implemented and disseminated via publication on the Trust intranet. There are no additional training requirements for healthcare professionals working within the Trust.

9. Monitoring

Page/ Section of Key Document	Key control:	Checks to be carried out to confirm compliance with the policy:	How often the check will be carried out:	Responsible for carrying out the check:	Results of check reported to: *(Responsible for also ensuring actions are developed to address any areas of non-compliance)*	Frequency of reporting:
	WHAT?	**HOW?**	**WHEN?**	**WHO?**	**WHERE?**	**WHEN?**
	Ensure staff who prescribe, prepare, administer and monitor subcutaneous infusions have received training and have the necessary competencies to undertake their duties safely	Healthcare professionals preparing and administering injectable medicines: Copy of training/competency assessment materials Dates of training sessions Evidence accessible through ESR	As per agreed process according to staff group and route of administration	Line manager	Directorate governance lead	As per agreed process according to staff group and route of administration
	Adherence to policy	Monitoring of medicines incidents via review of incident reports	Quarterly	Ward/department managers Medicines Safety Officer	Divisional governance and MSC	Quarterly
	Audit of use of Saf-T-intima subcutaneous cannulas	Completion of audit to review safe and effective use of Saf-T -intima cannulas	Yearly	HPCT	Directorate governance	Yearly

10. Bibliography

Davies A, Barry C, Barclay S (2023). *What is the role of clinically assisted hydration in the last days of life? BMJ,* 380:e072116. doi:10.1136/bmj-2022-072116

National Institute for Health and Care Excellence (2017). *Care of Dying Adults in the last days of life (NICE Quality Standard 144)*.
Available at: https://www.nice.org.uk/guidance/qs144 (Accessed 17 April 2023)

Specialist Palliative Audit and Guideline Group (2023). *Guideline for the use of subcutaneous hydration in palliative care.*
Available at: Subcutaneous hydration downloads – West Midlands Palliative Care
(Accessed: September 2025 and January 2026)

Worcestershire Acute Hospitals NHS Trust (2025). Policy and Procedures for the Prescribing and Administration of Injectable Medicines (WAHT-CG-516)

Worcestershire Acute Hospitals NHS Trust (2024) Medicines Policy (WHAT-CG-580)

Worcestershire Acute Hospitals NHS Trust (2022) Tastes for Pleasure SOP (WAHT-PAL-001)

Worcestershire Acute Hospitals NHS Trust (2024) For Safe Use of Becton Dickinson Infusion Therapy Systems inc. (BD Saf-T-Intima Subcutaneous Cannulas) in Palliative and End of Life Patients. WHAT-MED-020

Contribution List

This key document has been circulated to the following individuals for consultation;

Designation
Rachel Bullock, Consultant in Palliative Medicine - Jan 2026)
Sarah Pittaway, Lead Pharmacist for Palliative Care Jan 2026
Dr Nicola Heron, Consultant in Palliative Medicine - Jan 2026
Hospital Palliative Care CNS team – Nov 2025

This key document has been circulated to the chair(s) of the following committees / groups for comments:

Committee

Supporting Document 1 - Equality Impact Assessment

Equality and Health Inequalities Impact Assessment (EHIA) Tool

Herefordshire & Worcestershire STP - Equality and Health Inequalities Impact Assessment (HEIA) Form
Please read HEIA guidelines when completing this form

Section 1 - Name of Organisation (please tick)

Herefordshire & Worcestershire STP		Herefordshire Council		Herefordshire CCG	
Worcestershire Acute Hospitals NHS Trust		Worcestershire County Council		Worcestershire CCGs	
Worcestershire Health and Care NHS Trust	☒	Wye Valley NHS Trust		Other (please state)	

Name of Lead for Activity	**Dr Mandeep Uppal**

Details of individuals completing this assessment	**Name**	**Job title**	**e-mail contact**
	Dr Mandeep Uppal	**Consultant in Palliative Medicine**	**Mandeep.uppal@nhs.net**
Date assessment completed	**14/01/2026**		

Section 2

Activity being assessed (e.g. policy/procedure, document, service redesign, policy, strategy etc.)	**Title:** Policy for the prescribing and administration of fluid by subcutaneous infusion for adult inpatients with palliative care needs			
What is the aim, purpose and/or intended outcomes of this Activity?	This document describes how subcutaneous fluids are to be prescribed and administered safely within Worcestershire Acute Hospitals NHS Trust in adult hospital inpatients who have palliative care needs.			
Who will be affected by the development & implementation of this activity?	X❑ ❑ ❑	Service User Patient Carers Visitors	❑x ❑ ❑ ❑	Staff Communities Other _____
Is this:	❑ Review of an existing activity X❑ New activity ❑ Planning to withdraw or reduce a service, activity or presence?			

What information and evidence have you reviewed to help inform this assessment? (Please name sources, eg demographic information for patients / services / staff groups affected, complaints etc.	Specialist Palliative Audit and Guideline Group (2023). Literature review performed and key studies highlighted in bibliography.
Summary of engagement or consultation undertaken (e.g. who and how have you engaged with, or why do you believe this is not required)	Circulated to Palliative Care Team and reviewed by Palliative Care lead pharmacist. Guidance based on regional guidance from West Midlands Specialist Palliative Audit and Guideline
Summary of relevant findings	

Section 3

Please consider the potential impact of this activity (during development & implementation) on each of the equality groups outlined below. **Please tick one or more impact box below for each Equality Group and explain your rationale**. Please note it is possible for the potential impact to be both positive and negative within the same equality group and this should be recorded. Remember to consider the impact on e.g. staff, public, patients, carers etc. in these equality groups.

Equality Group	Potential positive impact	Potential neutral impact	Potential negative impact	Please explain your reasons for any potential positive, neutral or negative impact identified
Age		X		
Disability		X		
Gender Reassignment		X		
Marriage & Civil Partnerships		X		
Pregnancy & Maternity		X		
Race including Traveling Communities		X		
Religion & Belief		X		
Sex		X		
Sexual Orientation		X		
Other Vulnerable and Disadvantaged Groups (e.g. carers; care leavers; homeless; Social/Economic		X		

Equality Group	Potential positive impact	Potential neutral impact	Potential negative impact	Please explain your reasons for any potential positive, neutral or negative impact identified
deprivation, travelling communities etc.)				
Health Inequalities (any preventable, unfair & unjust differences in health status between groups, populations or individuals that arise from the unequal distribution of social, environmental & economic conditions within societies)		X		

Section 4

What actions will you take to mitigate any potential negative impacts?	Risk identified	Actions required to reduce / eliminate negative impact	Who will lead on the action?	Timeframe
	N/A	.		
How will you monitor these actions?	**N/A**			
When will you review this EIA? (e.g in a service redesign, this EIA should be revisited regularly throughout the design & implementation)	**At next document review date.**			

Section 5 - Please read and agree to the following Equality Statement

1. Equality Statement

1.1. All public bodies have a statutory duty under the Equality Act 2010 to set out arrangements to assess and consult on how their policies and functions impact on the 9 protected characteristics: Age; Disability; Gender Reassignment; Marriage & Civil Partnership; Pregnancy & Maternity; Race; Religion & Belief; Sex; Sexual Orientation

1.2. Our Organisations will challenge discrimination, promote equality, respect human rights, and aims to design and implement services, policies and measures that meet the diverse needs of our service, and population, ensuring that none are placed at a disadvantage over others.

1.3. All staff are expected to deliver services and provide services and care in a manner which respects the individuality of service users, patients, carer's etc, and as such treat them and members of the workforce respectfully, paying due regard to the 9 protected characteristics.

Signature of person completing EIA	Dr Mandeep Uppal
Date signed	16/01/26
Comments:	
Signature of the Lead Person for this activity	Dr Mandeep Uppal
Date signed	16/01/26
Comments:	

Supporting Document 2 – Financial Impact Assessment

To be completed by the key document author and attached to key document when submitted to the appropriate committee for consideration and approval.

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

If the response to any of the above is yes, please complete a business case and which is signed by your Finance Manager and Directorate Manager for consideration by the Accountable Director before progressing to the relevant committee for approval.