For Safe Use of Becton Dickinson Infusion Therapy Systems inc. (BD Saf-T-Intima Subcutaneous Cannulas) in Palliative and End of Life Patients.

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

Introduction

The BD Saf-T-Intima safety system is designed to allow subcutaneous infusion and administration of medications in situations where intravenous access if not required, possible or practical. It incorporates advanced safety features that help minimise the risk of needlestick injury and blood exposure.
Subcutaneous injection is a useful way of administering medication, in patients with palliative care needs, when the oral route cannot be used or when patients require anticipatory medications in the last hours to days of life.

This guideline is for use by the following staff groups:
All appropriately trained clinical staff.

Lead Clinician(s)

Rachel Henson	Clinical Nurse Specialist Palliative Care
Nicola Futers	Palliative Care Support Nurse.
Avril Adams	Lead Palliative Care Nurse

Approved by Safer Sharpes Committee	13th February 2023
Approved by Device Committee	29th March 2023

Approved by SCSD Directorate Governance	17th July 2024
Approved by Divisional Quality Governance	28th August 2024
Review Date: This is the most current document and should be used until a revised version is in place	28th August 2027

Key amendments to this guideline

Date	Amendment	Approved by:

Table of contents

1.1. Aim and scope of Standard Operating Procedure

The aim of this SOP is to outline the safe process and procedure for the short term use of a single patient use BD Saf-T-Intima subcutaneous cannula. This device will be used to administer continuous subcutaneous infusions via a T34/BD BGT syringe pump and/or Pro Re Nata (PRN) medications in patients with palliative and end of life care needs in Worcestershire Acute Hospitals (WAHT).

1.2. Training

1.2.1 It is required that all staff administering subcutaneous medications are trained and deemed competent via medicine management training.

1.2.2 All staff must also complete specific training to use the BD-Saf-T-Intima subcutaneous cannula, either by a fellow colleague who has received train the trainer training from Beckton Dickson and is competent in using the device or receive training from Beckton Dickinson.

1.3. Indications for use

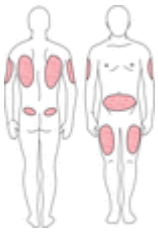
1.3.1 The use of a BD Saf-T-Intima subcutaneous cannula may be indicated in patients with palliative care needs requiring symptom management, that may include:

- Persistent nausea/vomiting
- Difficulty in swallowing
- Unconscious or semi-conscious
- Intestinal obstruction
- Malabsorption of medication
- Unreliable oral route

1.4. Subcutaneous site location

1.4.1 Recommended sites for insertion of a BD Saf-T-Intima subcutaneous cannula are:

- the abdomen,
- the upper part of the arm,
- the thighs and the buttocks.
- the scapula – if there is a high risk of the BD Saf-T-Intima subcutaneous cannula becoming dislodged or being removed.



1.4.2 The skin at the selected access site should be intact and located away from

- bony prominences.
- areas of infection or bruising.
- inflamed or broken skin.
- previously irradiated skin.
- at the site of an abscess.
- joints, lymphoedematous limbs and birthmarks.

1.5. Guidance for insertion, management and removal of the BD Saf-T-Intima subcutaneous cannula:

1.5.1 Explain procedure to patient and gain informed consent.

NB* Where it is established that the patient lacks capacity to make a particular decision, the decision made or action taken on their behalf must be in their best interests, and they should still be involved as far as possible in that decision, in keeping with the Mental Capacity Act Legislation.

- The BD Saf-T-Intima cannula has a dead space of 0.2ml. As the cannula only has one port, this should NOT be flushed before insertion.

1.5.2 Process of insertion as per completed training

Action
Perform full hand wash as per Trust policy. Standard Infection Control Precautions Policy. WAHT-INF-047.
Decontaminate your hands with alcohol gel, before entering bed space or touching the patient.
Inform the patient you are there to insert the BD Saf-T-Intima cannula, explaining the reason for insertion and checking patient understanding.*
Check patient position and comfort making sure the patient consents to receiving the BD Saf-T-intima cannula.*
With patient consent, check the injection site (abdomen umbilical region, lower upper arm – lateral/posterior region, the thighs (under the great trochanter rather than mid thighs, buttocks) observing site for issues (no infection, skin lesions, birth marks, bony prominences, and underlying muscles or nerves, swelling, injury or blood vessels) maintaining privacy and dignity.*
Inform the patient you need to collect the equipment and to use the call bell if they need you whilst you are away.*
Decontaminate hands with alcohol gel.
Collect equipment: BD Saf-T-intima cannula 24G x0.75 and check the expiry date. 2 sterile wipes (2% chlorhexidine/ 70% alcohol – skin prep), 5ml pre filled Sodium Chloride 0.9% syringe. non-sterile gloves, apron, alcohol hand gel. Additional equipment required; apron, gauze, sharps bin, plastic medication tray +-dressing trolley.
Decontaminate hands with alcohol gel.
Apply Apron and gloves.
If available, clean and dressing trolley using disinfectant wipe (detergent clean of trolley every 24 hours). Clean the plastic tray with 70% alcohol disinfectant wipe for 30 seconds and allow to dry for 30 seconds.
Remove apron and non sterile gloves.
Decontaminate hands with alcohol gel.
Reapply clean apron and non sterile gloves.

Open BD Saf-T-Intima cannula
Prepare the BD Saf-T-Intima cannula to loosen the needle by rotating the white safety shield 360 degrees.
Ensure the bevel is up.
Ensure the catheter is not extended over the needle tip.
Pinch the yellow wings together, texture side down.
Hold the wings and remove the needle sheath.
Using the thumb and index finger gently pinch the skin around the selected site to identify the subcutaneous tissue.
Grasp the textured sides of the wings and bring them together pinching firmly.
Insert the full length of the catheter and needle through the skin at 30º- 45º angle.
If blood is seen within the safety system, assess to ensure correct subcutaneous placement. If required discard cannula in a sharps container and re commence the insertion process.
Lay the wings flat on the skin surface and apply pressure to each wing. With your other hand, grasp the textured end of the safety shield and pull in a straight, continuous motion until the safety shield separates from the safety system. Note; if the safety shield does not lock over the needle tip, grasp the textured end of the safety shield with the needle tip pointed down and gently push the telescoping shield downward until the needle is covered.
Discard of shielded or unshielded needle/wire stylet immediately in a sharps container and in adherence with **Waste Management Policy. WAHT-CG-481.**
Apply clear film dressing IV3000 as per ward top up with the date of subcutaneous cannula insertion clearly documented on it. Make sure the insertion site is visible.
Remove the access port on the end of the BD Saf-T-Intima cannula. Place in medical tray.
Clean access port with 2% chlorhexidine/ 70% alcohol – skin prep.
Attach the prefilled Sodium Chloride 0.9% 5ml syringe to the access port- Unclamp and administer 0.3ml of Sodium Chloride 0.9%.
Clamp the BD Saf-T-Intima Cannula.
Remove the pre filled Sodium Chloride 0.9% syringe.
Re attach the access port.
Document BD Saf-T-Intima cannula insertion on Sunrise in line with **WAHY-CRK-009**

- Clinical record keeping and records management policy.
Document BD Saf-T-Intima cannula observations every 8 hours on BD Saf-T-Intima Subcutaneous Cannula Observation Chart **PF WR5936.**
Re-site device if site shows any sign of inflammation or irritation, or every seven days unless the is a specific rationale for leaving the cannula in-situ (for example poor access or erythema elsewhere on prior attempts). Document
Before each drug administration disinfect access port as per Infection Prevention **Procedure and Practice Guidelines for Intravenous Access Devices (IVAD) Policy WAHT-INF-050**.

1.5.3 Subcutaneous administration of bolus medications PRN

Perform full hand wash as per Trust policy. Standard Infection Control Precautions Policy. WAHT-INF-047.
Decontaminate your hands with alcohol gel, before entering bed space or touching the patient.
Inform the patient you are there to administer the subcutaneous injection explaining the reason for administrating and checking patient understanding of medication.*
Ask patient to verbalise name, date of birth, address, and allergies. Check these details against the patient's name band (allergy appropriate name band) and prescription chart. Checks hospital number on name band against prescription chart.*
Inform the patient you need to collect the equipment and to use the call bell if they need you whilst you are away.*
Collect equipment and check expiry date and integrity of equipment, appropriately sized syringe 18G Blunt needle for drawing up. 2 sterile wipes (2% chlorhexidine/ 70% alcohol – skin prep) non-sterile gloves, apron, medication, gauze, alcohol hand gel. Additional equipment required; apron, gauze, sharps bin, plastic medication tray +-dressing trolley.
Check medication against prescription chart to ensure correct drug prescribed including dose, route, appropriate time for administration and legible prescriber. Also check integrity and expiry date of drugs and diluent if necessary (check drug leaflet and Medusa Injectable Medicines Guide for administration advice and compatibility

guidance). **Medicines Policy – Policy on the Purchasing, Prescribing, Supply, Storage, Administration and Control of Medicines. WAHT-CG-580**
Prior to administering medication consider contraindications and clinical exemptions for not administering.
Decontaminate hands with alcohol gel.
Apply aprons and gloves.
If available, clean dressing trolley using disinfectant wipe (discuss detergent clean of trolley every 24 hours). Clean the plastic tray with 70% alcohol disinfectant wipe for 30 seconds and allow to dry for 30 seconds *
Remove apron and non-sterile gloves.
Decontaminate hands with alcohol gel.
Reapply clean apron and non-sterile gloves.
Open syringe and blunt drawing up 18G needle using tabs and protecting key parts (keep in packaging).
Clean top of medicine vial with sterile medical device wipe (2% chlorhexidine/ 70% alcohol) for 30 seconds and allow to air dry for 30 seconds.
Open top of vial away from you and dispose in sharps Container. Place the vial upright in the plastic tray.
Apply drawing up needle (blunt 18G) to syringe, protecting needle hub using ANTT.
Use syringe to draw up required amount of medication checking for particles or contamination (add diluent if necessary) avoid touching syringe plunger.
Remove drawing up needle using sharps container's needle remover (ensure key parts are not contaminated).
Remove any air bubbles and prime to exact amount to be administered explicitly stating so avoiding touching the syringe plunger.
Recheck ID, name, date of birth, address, allergies. Recheck patient comfort and that they are happy to proceed.*
Decontaminate hands with alcohol gel.
Apply clean apron and gloves.

Expose BD Saf -T-Intima cannula site respecting privacy and dignity. Remove access port and place in medical tray.
Use sterile wipe (2% chlorhexidine/ 70% alcohol) clean BD Saf-T-Intima cannula access port for 30 seconds from inner to outer area and allow to air dry for 30 seconds. **Practice Guidelines for Intravenous Access Devices (IVAD) Policy WAHT-INF-050**.
Attach pre filled Sodium Chloride 0.9% 5ml syringe to access port and unclamp.
Flush BD Saf-T-Intima cannula with 0.3ml of Sodium Chloride 0.9%. Re clamp Remove syringe, placing in medical tray.
Attach the syringe containing drug for administration to the BD Saf-T-Intima cannula port. Unclamp.
Administer the drug slowly through subcutaneous cannula. Do not give any more than 2ml volume as a bolus, as this can compromise the site and cause discomfort. Clamp.
Re attach the pre filled Sodium Chloride 0.9% syringe and unclamp.
Flush BD Saf-T-Intima cannula with 0.3ml of Sodium Chloride 0.9%. Re clamp, Remove syringe.
Re attach BD Saf-T-Intima access port.
Ensure patient comfort.
Discard of waste in adherence with **Waste Management Policy. WAHT-CG-481.**
If numerous medications are being administered flush the access port as above in between each administration, and after the final medication. Total volume administered should not exceed 2mls at anyone time. Never disconnect a syringe driver to administer a PRN bolus medication.
When BD Saf-T-Intima subcutaneous cannula is no longer required or the subcutaneous cannula needs to be re sited, dispose of the used device as per section 1.6

1.6 Process of removal:

- If appropriate explain to the patient the reason for removal and the process that this involves.*
- Carefully remove IV3000 dressing.
- Slowly pull BD Saf-T-Intima cannula towards you.
- Ensure the device is intact.
    - Remove and dispose of device in sharps bin in adherence with **Waste Management Policy. WAHT-CG-481.**
    - Once device is removed cover site with small plaster, if any leakage appears.
    - Document removal of device in the care plan on electronic patient record. **WAHY-CRK-009 Clinical record keeping and records management policy**

1.7. Continuous Subcutaneous Infusion (CSCI) with BD Saf-T-Intima subcutaneous line:

1.7.1 Indications for using a CSCI

- Persistent nausea and /or vomiting
- Difficulty swallowing
- Poor alimentary absorption
- Intestinal obstruction
- Profound weakness/cachexia
- Patients with reduced conscious level
- Administration of drugs that cannot be given via non-parenteral routes

1.7.2 Benefits of using a CSCI

- Provision of constant level of medication – avoids serum level peaks and troughs which occur with other routes of administration or giving PRN doses.
- May avoid the necessity of multiple/repeated injections of the same drug for a particular symptom.
- A combination of drugs may be administered (compatibility dependent).
- The device is lightweight and compact, minimising the impact on mobility and independence.

1.7.3 Administration via CSCI

- Ensure prescription is complete and in adherence to **Medicines Policy – Policy on the Purchasing, Prescribing, Supply, Storage, Administration and Control of Medicines. WAHT-CG-580**
- Assemble equipment required.
- Use PPE in adherence with the **Standard Infection Control Precautions Policy**. **WAHT-INF-047**
- Prepare syringe with prescribed drugs (ensuring compatibility) and in adherence with **Guideline for the Continuous Subcutaneous Infusion of Medicine via a Syringe Pump in Adults (Acute Trust) WAHT-NUR-100**
- Connect Wescoft sae-flo MD Multi-drug-compatible anti-syphon set (Ref WEPCA150AS) to the luer lock syringe containing the drug(s) as per the prescription and prime the line.
- Disinfect access port as per **Infection Prevention Procedure and Practice Guidelines for Intravenous Access Devices (IVAD) Policy WHAT-INF-050**
- Connect the Wescoft sae-flo MD Multi-drug-compatible anti-syphon set (Ref WEPCA150AS) extension set to BD Saf-T-Intima subcutaneous cannula. As inserted above.
- Commence syringe driver and complete syringe pump monitoring chart located on the prescription chart (**WR5287)** in adherence with **Guideline for the Continuous Subcutaneous Infusion of Medicine via a Syringe Pump in Adults (Acute Trust) WAHT-NUR-100**
- Ensure administration section of the prescription is signed, dated and times are completed.
- When the BD Saf-T-Intima subcutaneous cannula is no longer required or the subcutaneous cannula needs to be re sited, **dispose of the used device as per section 1.6**

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?**
	These are the 'key' parts of the process that we are relying on to manage risk. We may not be able to monitor every part of the process, but we MUST monitor the key elements, otherwise we won't know whether we are keeping patients, visitors and/or staff safe.	What are we going to do to make sure the key parts of the process we have identified are being followed? (Some techniques to consider are; audits, spot-checks, analysis of incident trends, monitoring of attendance at training.)	Be realistic. Set achievable frequencies. Use terms such as '10 times a year' instead of 'monthly'.	Who is responsible for the check? Is it listed in the 'duties' section of the Policy? Is it in the job description?	Who will receive the monitoring results? Where this is a committee the committee's specific responsibility for monitoring the process must be described within its terms of reference.	Use terms such as '10 times a year' instead of 'monthly'.
	Correct use and monitoring of BD Saf-T-Intima subcutaneous cannulas	Yearly audit of the correct use and monitoring of the BD Saf-T-Intima subcutaneous cannulas.	Annually	Lead Palliative care nurse / EOL facilitators	Hospital Palliative Care Business Meeting Hospital Palliative Care Team annual report Directorate Governance Meeting	

References

[You should include external source documents and other Trust documents that are related to this Policy]

Contribution List

Contribution List

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

Designation
Dr Mandeep Uppal – Consultant in Palliative Medicine
Dr Nicola Heron – Consultant in Palliative Medicine
Dr Rachel Bullock – Consultant in Palliative Medicine

This key document has been circulated to the chair(s) of the following committee's / groups for comments;

Committee
Sharps Committee
Devices Committee
Divisional Governance

Supporting Document 1 - Equality Impact Assessment Tool

To be completed by the key document author and included as an appendix to key document when submitted to the appropriate committee for consideration and approval.

Please complete assessment form on next page;

NHS Worcestershire Acute Hospitals NHS Trust

Herefordshire & Worcestershire STP - Equality Impact Assessment (EIA) Form
Please read EIA guidelines when completing this form

Section 1 - Name of Organisation (please tick)

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

Name of Lead for Activity	**Rachel Henson – Palliative Care Clinical Nurse specialist** **Avril Adams – Lead Palliative Care Nurse**

Details of individuals completing this assessment	**Name**	**Job title**	**e-mail contact**
	Dr Mandeep Uppal	**Consultant in Palliative Medicine**	**Mandeep.uppal@nhs.net**
	Rachel Henson	**Palliative Care Clinical Nurse specialist**	**rhenson@nhs.net**
Date assessment completed	**30/05/24**		

Section 2

Activity being assessed (e.g. policy/procedure, document, service redesign, policy, strategy etc.)	**Title:** SOP
What is the aim, purpose and/or intended outcomes of this Activity?	The aim of this SOP is to outline the safe process and procedure for the short term use of a single patient use BD Saf-T-Intima subcutaneous cannula. This device will be used to administer continuous subcutaneous infusions via a T34/BD BGT syringe pump and/or PRN medications in patients with palliative and end of life care needs in Worcestershire Acute Hospitals (WAHT).

Who will be affected by the development & implementation of this activity?	x❑ 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.	Safer sharps guidance			
Summary of engagement or consultation undertaken (e.g. who and how have you engaged with, or why do you believe this is not required)	Approved by Safer Sharps Committee and Medicines Safety Committee. Engagement with the Hospital Palliative care team and End of Life care team.			
Summary of relevant findings				
	Approved by Medicines Safety Committee			

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		

Equality Group	Potential positive impact	Potential neutral impact	Potential negative impact	Please explain your reasons for any potential positive, neutral or negative impact identified
Sexual Orientation		X		
Other Vulnerable and Disadvantaged Groups (e.g. carers; care leavers; homeless; Social/Economic deprivation, travelling communities etc.)		X		
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?				
When will you review this EIA? (e.g in a service redesign, this EIA should be revisited regularly throughout the design & implementation)	**At next review date of this SOP**			

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	Avril Adams, Rachel Henson, Dr Mandeep Uppal
Date signed	30/05/24
Comments:	
Signature of person the Leader Person for this activity	
Date signed	
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	Yes
2.	Does the implementation of this document require additional revenue	Yes
3.	Does the implementation of this document require additional manpower	Training
4.	Does the implementation of this document release any manpower costs through a change in practice	Aims to reduce sharps injury risk.
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.