SESLHD PROCEDURE COVER SHEET

NAME OF DOCUMENT	Palliative Care: administration of Adult Subcutaneous Fluid
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EXECUTIVE SPONSOR or EXECUTIVE CLINICAL SPONSOR	SESLHD Clinical Stream Director, Cancer Services
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FUNCTIONAL GROUP(S)	Cancer and Palliative Care Medicine Pharmaceutical
KEY TERMS	Palliative care, subcutaneous fluid
SUMMARY	The purpose of this policy is to provide clinical guidance and a framework to ensure the safe administration of subcutaneous fluids to adult patients with life limiting illness in the acute hospital and ambulatory setting.

Palliative Care: administration of Adult Subcutaneous Fluid

SESLHDPR/422

1. POLICY STATEMENT

Continuous subcutaneous infusion (CSCI), also called hypodermoclysis, is the administration of fluids into the subcutaneous layer of the skin where there is an extensive lymphatic and blood vessel system through which fluids can be absorbed.

Widely used in the 1940s and 1950s, this method of parenteral subcutaneous hydration had a diminished uptake following several reports of adverse reactions, likely related to the use of hypertonic and electrolyte-free solutions. CSCI has been seen to be used most in the palliative and geriatric populations.

For patients with a life limiting illness in the last phases of life, allowing them to drink oral fluids and have access to good mouth care is critical, irrespective of the need for artificial hydration.

The decision to commence CSCI of subcutaneous fluids for artificial hydration should be individualised on patient assessment with consideration of the risks and benefits (See Appendix A) and in line with the goals of care established with the patient and carer.

There may be social, cultural and ethical implications of using CSCI of subcutaneous fluids for artificial hydration. Where this involves complex decision making, the patient and family may benefit from referral to the specialist palliative care service.

The purpose of this policy is to provide clinical guidance and a framework to ensure the safe administration of subcutaneous fluids to adult patient in the acute hospital and ambulatory setting.

2. BACKGROUND

2.1 Indications for subcutaneous fluids:

- IV hydration will be used if fluids are of therapeutic benefit to the patient.
- Subcutaneous fluids not often required but sometimes initiated for family distress and cultural reasons.

2.2 Subcutaneous fluids are contraindicated:

- Poor skin integrity (e.g. scar tissue, infection, recent radiation)
- Extremely emaciated
- Cardiovascular shock
- Fluid overload
- Cardiac failure
- Pulmonary oedema
- Hyperosmolarity

3. RESPONSIBILITIES

3.1 Nursing staff will:

- Be familiar with the policies and procedures outlined in this document prior to providing subcutaneous treatments to patients.
- Document all actions and conversations in the patient's medical record.

3.2 Medical staff will:

- Document the order for fluids to be administered on eMeds/eFluids.
- Liaise with nursing staff in the hydration management of the patient.

4. PROCEDURE

4.1 Administration of adult subcutaneous fluid

For site selection and care, subcutaneous cannula insertions and care refer to SESLHD procedure SESLHDPR/19 - Subcutaneous Needle Insertion and Management.

4.2 Equipment

- 0.9% Sodium Chloride (Normal Saline) as per medical treatment order
- Sharps container
- 2% Chlorhexidine Gluconate v/v 70% Isopropyl Alcohol swabs
- Appropriate infusion pump and stand
- Intravenous giving set #
- Brown subcutaneous line label to attach to giving set.

In the community setting

- Gravity infusion giving set #
- Drip stand or coat hanger.

4.3 Procedure

- Explain the procedure and obtain verbal consent as per NSW Health Policy Directive PD2017_032 - Clinical Procedure Safety.
- This procedure requires the use of aseptic technique, as per NSW Health Policy Directive PD2017_013 - Infection Prevention and Control Policy.
- Check infusion fluid as per NSW Health Policy Directive PD2022_032 - Medication Handling.
- If required insert subcutaneous cannula as per SESLHDPR/175 - Administration of subcutaneous medications in Palliative Care.
- If using an existing cannula check date of insertion and site prior to administration of any fluid or medication.
- Intima line needs to be changed every 7 days as per SESLHDPR/19 - Subcutaneous Needle Insertion and Management.
- Prime the infusion giving set using 0.9% Sodium Chloride (normal saline). Clamp line.

- Wipe subcutaneous port with 2% Chlorhexidine Gluconate v/v 70% Isopropyl Alcohol swab.
- Attach infusion giving set to the subcutaneous cannula using no touch technique.
- Secure line using the appropriate tape.
- Set infusion rate as per medical treatment order, Usually 500 -1000 mL over 24 hours
- Complete documentation as per NSW Health Policy Directive PD2012_069 - Health Care Records - Documentation and Management.

4.4 Ongoing Management

- Fluid bag must have a brown subcutaneous line label attached to the giving set.
- Due to the nature of subcutaneous fluid administration and the slow infusion time, it is recommended that fluids be administered via gravity flow administration sets. In clinical settings where infusion pumps are the preferred method infusion rates should not exceed maximum rate of 1 Litre over 24 hours.
- Monitor the infusion site for signs of infiltration or infection. For example, pain, swelling, redness and abdominal distension.

Symptom		Treatment
Swelling, abdominal distension	**Assess patient if it is appropriate to continue with subcutaneous fluid replacement**	Reduce infusion rate by half If the reduced flow rate does not improve symptoms, change the subcutaneous cannula site
If Swelling persists		Cease subcutaneous fluids
Redness, pain, discharge		Resite subcutaneous needle as per SESLHNPD/19 Subcutaneous Needle Insertion and Management
If patient develops audible chest secretions		Cease subcutaneous fluids

4.5. Removal of subcutaneous needle

Refer to SESLHDPR/19 - Subcutaneous Needle Insertion and Management.

5. DOCUMENTATION

eFluids, Clinical notes (eMR)

6. AUDIT

As required by clinical staff

7. REFERENCES:

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- NSW Health Policy Directive PD2022_032 - Medication Handling
- NSW Health Policy Directive PD2012_069 - Health Care Records - Documentation and Management
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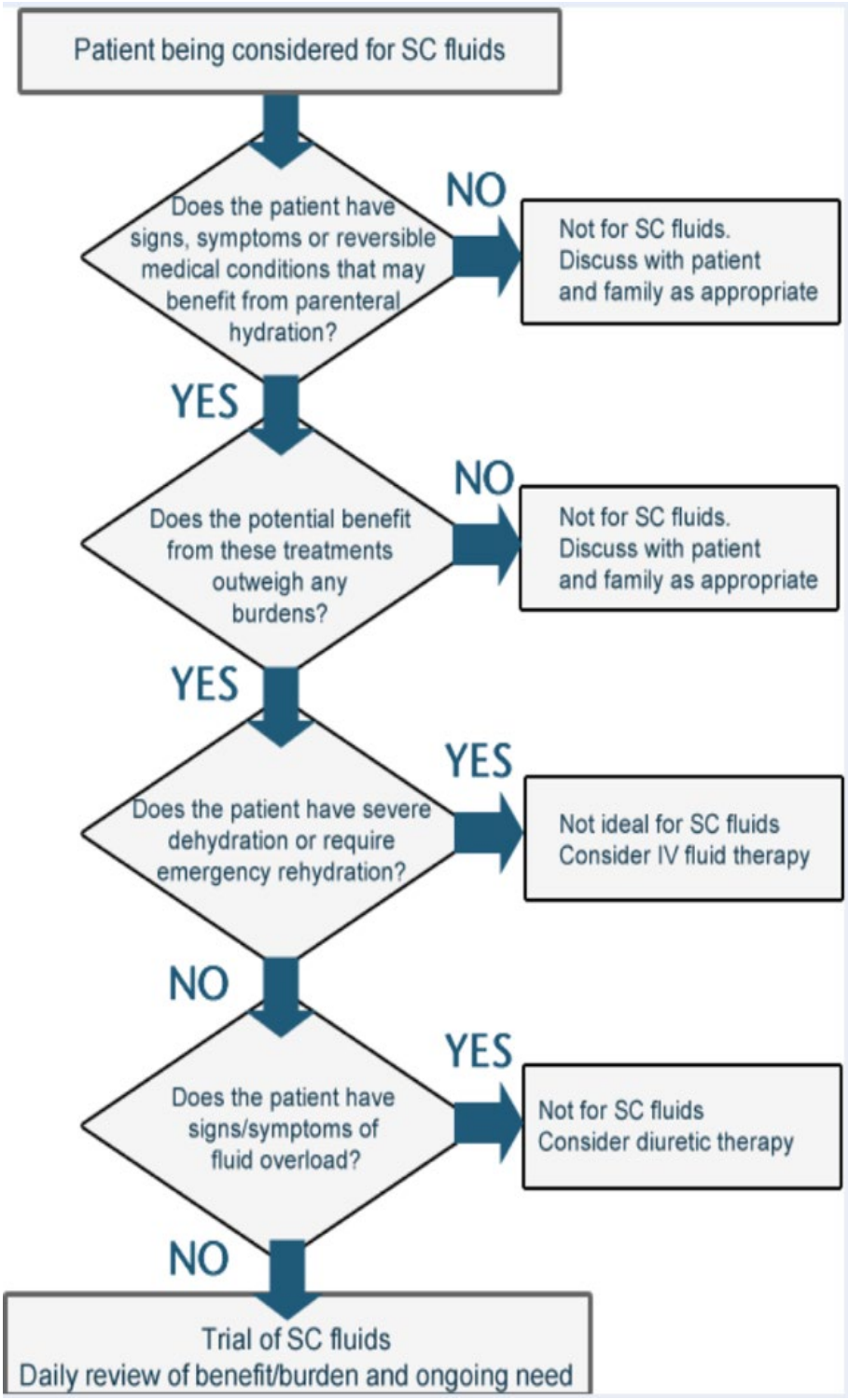
8. REVISION AND APPROVAL HISTORY

Date	Revision No.	Author and Approval
May 2009	DRAFT	Caroline Belfanti, Palliative Care, Calvary Health Care, Sydney
June 2009	DRAFT	Approved by Area Palliative care Working Party
February 2010	DRAFT	Approved at Palliative Care Directors Meeting
May 2010	DRAFT	Draft for comment- Area Policy and Procedure webpage
November 2010	DRAFT	Area Drug Committee
February 2011	0	Approved by Combined Clinical Council
May 2014	1	Northern Palliative Care Working Group
May 2015	2	SESLHD Palliative Care Working Group

July 2015	2	Changes endorsed by Executive Sponsor
July 2018	3	Minor review – endorsed by Executive Sponsor
August 2018	3	Endorsed by QUM
August 2022	4	Minor review - Updated links, references and appendix. Approved by Executive Sponsor.
October 2022	5	Approved by Quality Use of Medicines Committee with minor amendments.

Appendix A



https://www.palliativecareguidelines.scot.nhs.uk/media/71354/20-2019-subcutaneous-fluids.pdf