CLINICAL GUIDELINE

Wound Management Negative Pressure Wound Therapy Systems

A guideline is intended to assist healthcare professionals in the choice of disease-specific treatments.

Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate them to others involved in the care of the patient.

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Approval Group:	Acute Services Division Clinical Governance Forum

Important Note:

The Intranet version of this document is the only version that is maintained.
Any printed copies should therefore be viewed as 'Uncontrolled' and as such, may not necessarily contain the latest updates and amendments.

Introduction

This protocol outlines the requirements for all health care professionals (HCP) involved in negative pressure wound therapy (NPWT). NPWT is an advanced wound management technique to create sub atmospheric pressure in a wound. This is achieved by removal of air from a sealed wound by the use of an electrically powered suction pump designed specifically for this purpose.

1 Scope

This protocol applies to all HCP within NHS Greater Glasgow and Clyde (NHSGGC) who are involved in the patient assessment, prescription, application and monitoring of NPWT. It outlines the process to ensure the safe and clinically effective use of NPWT in the management of complex wounds and equipment, ordering and cancellation procedures.

2 Indications

NPWT is indicated for patients with chronic, acute traumatic, sub acute and dehisced wounds. A full holistic assessment of the patient and the wound must be carried out by the initiating HCP to establish suitability for use in line with specific supplier product guidance. All HCP must ensure that they have the necessary knowledge and competence (as per their professional code of conduct) relevant to their role in the provision of NPWT.

3 Contraindications and Precautions

There are a number of contraindications and precautions for use of NPWT treatment which are required to be considered for each individual case.

NPWT is contraindicated for the following wound types/conditions:

- necrotic tissue with eschar present on wound bed*
- malignancy in the wound
- untreated osteomyelitis
- non-enteric and unexplored fistulas
- direct placement over exposed vital structures (i.e. tendons, ligaments, blood vessels organs, anastomotic sites, nerves)

*Not recommended as an effective treatment when high percentage of devitalised tissue present on wound bed

Precautions should be taken for patients:

- with active bleeding
- with difficult wound haemostasis
- who are taking anti coagulation medication

Patient risk factors/wound characteristics to consider before NPWT use:

- high risk of bleeding and haemorrhage
- receiving anticoagulants or platelet aggregation inhibitors therapy
- patients with:
    - friable vessels and infected blood vessels
        - anastomotic sites
        - infected wounds
- osteomyelitis
- exposed organs, vessels, nerves, tendon and ligament
- exposed bone and sharp edges in wound
- spinal cord injury (stimulation of sympathetic nervous system)
- enteric fistula or risk of fistula formation
- patient size and weight
- use near vagus nerve (bradycardia)
- circumferential dressing application
- patients requiring:- MRI, Hyperbaric chamber, Defibrillation
- patients ability to manage daily living activities with NPWT in place

When contraindications/precautions or other considerations are present

It is the responsibility of the initiating HCP, where therapy is considered despite the presence of these factors to document:

- the rationale for treatment and detail the contra-indications/ precautions and risks involved
- any actions to be taken to minimise risk
- that informed consent has been obtained before commencement of treatment

4 Roles and Responsibilities

All HCPs who are involved in the patient assessment, prescription, application and monitoring of NPWT must ensure that they have the necessary knowledge and competence (as per their professional code of conduct relevant to their role) in

the provision of NPWT by undertaking the current supplier's competency programme which will include:

- the assessment process for suitability for treatment
- the application procedure for NPWT
- the on-going observation of NPWT wound management
- the ability to determine end point in treatment or when to refer on for this decision to be made

Prior to commencing NPWT

It is the responsibility of the initiating HCP to:

- Undertake a full holistic assessment of the patient and the wound, considering patient/carer opinions, choice, and quality of life.

- Consult the manufacturer's clinical guidelines for the NPWT system currently in use in NHSGGC.

- Identify and document if contraindications/precautions are present or not.

- Identify and document when a specific technique or NPWT system required such as in the case of an open abdomen or exposed structures in wound (bone, tendon and ligament).

- Document informed consent including any contraindications/ precautions noted and any alternative treatment options with the patient.

- Prior to commencing NPWT the initiating HCP must ensure that there is provision of competent staff to maintain therapy across all health care settings.

- Document the following:
    - that informed consent has been obtained for commencement of treatment
    - rationale for treatment and treatment objectives
    - discussion and agreement for commencement and discontinuation of treatment with senior medical staff

- system required, including pump and dressing type
- the required pressure and mode of therapy; intermittent versus continuous negative pressure
- time period for dressing change and any specific instructions

Ongoing management of NPWT

It is the responsibility of the initiating HCP to ensure processes are in place for ongoing evaluation and review no longer than two weeks. The initiating HCP must provide documented information as guidance to those responsible for the ongoing wound management, indicating:

- the desired outcome of treatment
- contact details if requirement to discuss treatment
- when further review is required by the initiating consultant or the alternative arrangements made for review to ensure the requirement for and effectiveness of treatment are monitored

The clinician responsible for the on-going management will continually assess the requirement for continuation of this therapy.

Variance from treatment plan

When discontinuation of the treatment is required due to clinical or patient related issues, it is the responsibility of the person discontinuing the treatment to ensure that she/he has informed the initiating HCP of this decision and that an updated treatment plan is documented in the case record.

5 Ordering, Transfer and Cancellation of Equipment

For specific guidance on ordering, transferring and cancellation of equipment, refer to Appendix 1.

6 Transfer of Patient with NPWT from Acute Sector Care to another Acute Sector area or Partnership area.

To ensure a safe and timely transfer, the transferring HCP must contact the HCP receiving the patient to discuss ongoing treatment plan and complete the transfer checklist. The optimum time to facilitate this is one week *prior* to transfer.

The transferring HCP must provide one week supply of dressings and canisters and an alternative dressing (in the case when NPWT cannot be

reapplied) provided by the discharging ward or department. Any follow on consumables will be prescribed through PECOS in Acute and Drug Tariff in Partnership Care.

7 Review

This document will be reviewed every three years by a SLWG commissioned by the North Sector Chief Nurse.

Current Rental company supplier: KCI Medical an Acelity Company.

Acute 1st Line Formulary Choice

DESCRIPTION	UNIT OF SUPPLY	PRODUCT CODE
Acti V.A.C. Pump	X1 Pump Hire	34001
Ulta Unit	X1 Pump hire	ULTDEV/01
NPWT Gauze Dressing	X5	413716/5
ActiV.A.C. 300ml Canister	X5 or X10	M8275058/5 M8275058/10
Ulta Canister 500ml	X5 or X10	M8275063/5 M8275063/10
Ulta Canister 1000ml	X5 or X10	M8275093/5 M8275093/10
Sensa T.R.A.C. Pad Only	X10	M8275057/10
V.A.C. Standard Drape	X10	M6275009/10
V.A.C. Y Connector	X10	M6275066/10
V.A.C. Tubing Cap	X5 or X10	M6275069/5 M6275069/10
V.A.C. Gel Hydrogel Strip	X10	M6275026/10
Granufoam VAC Bridge Dressing	X5 or X10	M8275042/5 M8275042/10
V.A.C. Simplace dressing (small) 7.7cm x 11.2cm x1.75 cm	X5	M8275046/5
V.A.C. Simplace dressing (medium) 4.7cm x 17.4cm x1.75cm	X5	M8275045/5

Acute 2nd Line Formulary Choice

V.A.C. Granu foam (medium) 18cm x12.5cm x 3.2cm	X5 or X10	M8275052/5 M8275052/10
V.A.C. Granu foam (large) 26cm x15cm x 3.2cm	X5 or X10	M8275053/5 M8275053/10

Appendix III Discharge/Transfer Checklist to be completed prior to EDD

Addressograph	Consultant	Device make
		Model
	Specialty	Pump ID number
		Prescribed pressure setting
	Discharging Ward	Frequency of dressing change
		Type of dressing
	Contact number	Type of liner (if used)

	Signature	**Print name**	**Designation**	**Date**
Patient has given verbal consent to continue NPWT after discharge/transfer				
Patient has given verbal consent to allow clinical supplier to provide treatment in patient's home				
Patient has given verbal consent to allow clinical supplier collect device on completion of treatment from home				
The treatment plan follows current NHSGGC NPWT Guideline				
Patient can undertake all activities of daily living with NPWT device in situ				
A falls risk has been undertaken with NPWT device in situ and the risk is low				
Minimum of four working days notice has been given to receiving team				
Receiving team are competent in caring for patient with NPWT, staff must be trained prior to receiving patient				
On discharge patient and/or carer understands pump alarms and knows how to troubleshoot and contact out of hours services. Record in clinical record.				
On discharge patient and/or carer can change pump canister. Record in clinical record.				
On discharge patient and/or carer can apply additional NPWT drape if seal is broken. Record in clinical record.				
On discharge patient and/or carer know what to do in the case of pump failure > 2 two hours. Record in clinical record.				
On discharge patient and/or carer has been provided with NPWT information leaflet. Record in clinical record.				
On discharge patient and/or carer has been provided with contact number for community nurse and community out of hours. Record name in clinical record.				
On discharge patient and/or carer has been provided with 24 helpline of clinical supplier. Record name in clinical record.				
On discharge patient and/or carer has been provided with contact number of ward discharging the patient.				
Discharging/transferring ward has provided a seven day supply of all dressings and canisters				
Discharging/transferring ward has provided an alternative dressing that can be used if pump failure > 2 hours				
Patient follow up and review by initiating clinician has been arranged				
Clinical supplier and procurement have been advised of the discharge/transfer				