

Information for Clinical Choice

Physiotherapy and Occupational Therapy Framework - Temperature Therapy Products

Executive Summary

This document supports clinicians in selecting appropriate temperature therapy products encompassing both heat and cold treatments is widely used in clinical and home settings to manage pain, inflammation, and recovery which are available through NHS Supply Chain. It outlines product features, clinical applications, cautions, contraindications, and procurement options, ensuring informed decisions that prioritise clinical efficacy and cost-efficiency.

1. Introduction

Information for Clinical Choice (ICC) has been developed to assist Clinicians in the decision-making process when assessing the suitability of a product by providing a clear illustration and description of the features of a range of similar products supplied through NHS Supply Chain. The criteria provided, in the form of a Product Matrix and Support Document, is the result of a product review, conducted by Clinical Specialists with support from clinical stakeholders from across the NHS as part of our assurance process.

The aim, alongside delivering savings back into NHS frontline services, is to ensure that clinical choice remains at the forefront of any product switching decision.

2. Temperature Therapy

2.1. Cold therapy

Works by vasoconstricting the blood vessels in the acute phase of injury of an affected area, various physiological benefits occur that:

- Reduces inflammation and oedema
- Reduces haematoma formation and pain
- Reduces muscle spasms
- Decrease tissue metabolism and enzymatic activity.

Common uses: sprains, strains, post-operative swelling, tendinopathy and migraines.

Note - despite clinical acceptance, there is a lack of high-quality research or national guidance to advocate any specific treatment methodology.

2.2. Heat therapy

Works by vasodilating blood vessels, increasing oxygen delivery and nutrients to the affected area which:

- Improves Circulation
- Relieves muscle stiffness by relaxing connective tissues and muscles
- Eases chronic pain in conditions like arthritis and fibromyalgia
- Accelerates healing.

Common uses: persistent back pain, muscle tension, menstrual cramps.

3. Product Categories

Within the remit of the Physiotherapy and Occupational Therapy Framework the products available include:

Product Type	Description
Ice Bags (Require Ice)	Empty bags of various designs that require ice to be available.
Ice/Cold Packs (Single Use or Re-usable)	Convenient for storage and use, snap the activation element to use. Various sizes and units of issue available.
Cool Sprays/Gels	Compact and quick to apply at localised sites.
Cold Compression Wraps	Consists of Ice Packs and Anatomically shaped wraps that apply compression at the same time as cold therapy
Cryotherapy Cooler and Associated Wraps	Consists of the cooler unit and various anatomically shaped wraps. See further information below
Heat Packs	Convenient for storage and use, snap the activation element to use. Various sizes and units of issue available.
Hot and Cold Packs	Re-usable products that either be placed into the microwave for heat or the freezer for cold therapy depending on treatment.
Hot/Cold Compression	Combines temperature with compression for dual-action relief

4. Clinical Considerations

4.1. Cautions

Monitor the use of with patients who:

- Are unresponsive, incapacitated, have altered mental status.
- Have an altered pain perception who may not be able perceive pain, burning, numbness and maybe susceptible to injury
 - Post-surgical patients under sedation, anaesthetics or on analgesics.
 - Patients taking hypnotics, anxiolytics, or antidepressants.

Please follow local Infection Prevention & Control (IPC) guidelines when using ICE machines.

4.2. Contraindications

Do not use for patients with:

- Raynaud's phenomenon or other vasospastic conditions.
 - Buerger's disease
 - Cold allergy or hypersensitivity
 - Cryoglobulinemia.
- Paroxysmal cold haemoglobinuria or other cold agglutinin disorders
 - Pheochromocytoma
 - Sick cell anaemia.
 - history of cold injury.

5. Cryotherapy Coolers and Associated Wraps.

The Cryotherapy Coolers all contain a storage tank which requires Ice and Water, this cold liquid is circulated in a closed system via a connected and replaceable hose to an anatomically shaped appropriate wrap.

Wraps should always be used in conjunction with a Moisture Barrier to prevent direct contact with the skin, this could be patients own clothing or generic material e.g. a pillowcase.

5.1. Cooler types:

- Gravity fed – non-powered.
- Powered circulation
- Gravity with additional powered compression
- Fully powered units (These offer enhanced customisation e.g., controlling pressure and frequencies of compression therapy).

5.2. Interoperability

Whilst some products have proprietary connections, several suppliers have informed us that, there is an interoperability option with the Gravity Fed devices.

- The hose connection on the Non-Powered Cooler Units are universal whilst the connector from Hose to Wrap are unique for the Enovis Wraps.
- It is possible to use the Eureka and Promedics Wraps with each other's coolers without any adaption.
- A replacement hose would be required for these alternative cuffs to interact with Enovis Coolers.

N.B. Suppliers will not guarantee products used on different devices

5.3. Lease Scheme

PhysioLab is offering a lease scheme with a minimum commitment period of one year with an agreed number of Coolers and Cuffs, additional units can be added ad-hoc or as usage increases. The supplier delivers the required cuffs for the following weeks planned orthopaedic procedures, at the same time collecting the previously used cuffs. These are then processed / cleaned and returned to operational stock reducing the volume of waste and maintaining the minimum stock levels held in departments. **(This lease option is excluded from the matrix / calculator – More information can be provided by the framework team)**

5.4. Product Matrix

We have developed a Product Matrix (see below) providing product information, an extended version which is available on the [Framework Page](#) which includes pricing and an additional inbuilt calculator to help analyse total costs and any switching opportunity.

6. Additional Switching / Saving Considerations

Aside from the Cryotherapy extended matrix available on the [Framework Page](#) there are a number of areas where you can review your clinical requirements and find opportunities to buy smarter.

- Ice Bags
 - If ice machines are available and suitable for the clinical environment and treatment planned, consider using ice bags.
 - They require less storage space, are the most cost-effective option, and once used, the warm water can be disposed of while the bag may be recyclable.
- Single Use Ice/Cold Packs or Heat Packs
 - Where appropriate consider switching single use to re-usable.
 - Review product size and Unit of Issue (UOI). Many products are bought as singles. Significant savings can be achieved by opting for larger UOIs or buying a small product.
- Cold Compression Wraps
 - These may serve as a suitable alternative in areas currently using Cryotherapy Coolers and associated wraps.

7. Contact Information

If you have any questions, would like further information, or have feedback to share, please contact:

Marc Naughton – Clinical Specialist – Physiotherapy
marc.naughton2@supplychain.nhs.uk

Jemma Spence – Category Buyer, Physiotherapy
jemma.spence@supplychain.nhs.uk

Bryony Allardice – Procurement Assistant
bryony.allardice@supplychain.nhs.uk

Type	Gravity Fed	Gravity Fed	Gravity Fed	Mains Powered Circulation	Mains Powered Compression	Mains Powered / Battery Compression	Mains Powered Compression
Cooling Method	Ice and Water	Ice and Water	Ice and Water	Ice and Water	Ice and Water	Ice and Water	Ice and Water
Powered Compression	No	No	No	Yes	Yes	Yes	Yes
Product	Cryo Cuff	Ice Storm	Promedics Cryo Cold Therapy System	IceMan CLEAR 3	CryoCuff IC	Dr Aktive	S1 Control Unit
Supplier	Enovis	Eureka Physiocare	Promedics	Enovis	Enovis	Medfac UK Ltd	Physiolab
Brand	Aircast	Ice Storm	Promedics	DonJoy	Aircast	Dr Aktive	Physiolab
MPC	2125	EIC100	CRYO/Cooler	11-1639	52A	DA03020001	N/A
NPC	ERE269	FPG85021	FBG85004	FPG019	FPG032	FPG85033	N/A
Picture							
Description	Cryo cuff gravity fed - compatible with all cryo cuff and artic flow pads includes tubing	Gravity - compatible with all Ice Storm Cryo Cuffs	Gravity - Includes Tube	IceMan CLEAR3 Motorised with loop recirculation system	Cryo/Cuff IC - Gravity and Motorised compression inc. Tubing	Cryo Pro Control Unit mains powered 9 settings for duration and compression	Control Unit is Not available via NHS Supply Chain however the consumables
Supplier Notes	Help speed recovery by combining cold therapy and focal compression. The Cryo/Cuff Gravity Cooler provides an integrated, clinically proven approach to deliver chilled water to anatomically specific cuffs.	Reduces cooling loss and prevents heat entering, staying colder longer	Easy to use device that uses gravity to circulate ice cold water providing cold therapy in the treatment of injuries. Using thermal insulation enhanced technology, it reduces cooling loss and prevents heat entering the system,	DonJoy's patented semi-closed loop recirculation system, which maintains more consistent and accurate temperatures	The Cryo/Cuff IC provides gravity and motorized, automated cold and compression therapy for flexibility of care. Featuring an integrated pneumatic pump within its lid	There are 9 different settings to choose between. There is Low, Medium and High compression with 3 different time choices, from 20 to 40 to 60 minutes. It will compress for 5 seconds and then release for 7 seconds and repeat this process throughout.	Pre-set programmes, alternative compression settings
Supply Route	eDirect	eDirect	eDirect	eDirect	eDirect	eDirect	N/A
UOI	1	1	1	1	1	1	N/A
UOI Description	Each	Each	Each	Each	Each	Each	N/A
Country of Manufacture	Mexico	China	China	Mexico	Mexico	China	UK / Taiwan
Patient	Single Patient at a Time	Single Patient at a Time	Single Patient at a Time	Single Patient at a Time	Single Patient at a Time	Single Patient at a Time	Single Patient at a Time
Campatability	Aircast/Arctic Flow Wraps.	IceStorm and Promedics Wraps Only	IceStorm and Promedics Wraps Only	DonJoy Wrap on Pads DonJoy Cool Pads Only	Aircast/Arctic Flow Wraps Only	DrAktive Cooler Only	Physiolab S1 Model
	Replacing the hose creates further interoperability opportunities.						
Wrap Options	Ankle / Back / Calf / ForeFoot / Hand / Knee / Shoulder / Thigh	Ankle / Back / Elbow / Hand / Head / Knee / Neck / Shoulder /	Ankle / Back / Elbow / Knee / Shoulder	Ankle / Forefoot / Hip / Knee / Shoulder / Universal	Ankle / Back / Calf / ForeFoot / Hand / Knee / Shoulder / Thigh	Ankle / Full Leg / Full Long Leg / Knee / Shoulder / Universal	Ankle / Hip / Shoulder / Universal