

MED4 ELITE™

FOUR INTEGRATED THERAPEUTIC MODALITIES
ONE REVOLUTIONARY RECOVERY SYSTEM



RECOVERY RE-ENGINEERED

GAME  READY®

**GET PEOPLE BACK TO BEING THEIR BEST WITH
THE BREAKTHROUGH, MULTI-MODALITY INJURY AND
SURGERY RECOVERY SYSTEM FROM GAME READY®**



MED4ELITE™

A REVOLUTIONARY MULTI-MODALITY REHABILITATION SYSTEM FROM THE LEADERS IN RECOVERY TECHNOLOGY

Introducing the Med4 Elite™, a breakthrough multi-modality recovery device from Game Ready®. The innovative design integrates Iceless Cold, Heat, Rapid Contrast, and Active Compression therapies like never before – delivering comprehensive, flexible, convenient, and proven treatment options for different users, injuries, surgeries, and diverse stages of rehabilitation. With the Med4 Elite, healthcare professionals and athletic trainers now have an unprecedented, powerful tool for accelerating healing – and getting people back to being their best. Once again, Game Ready has re-engineered recovery, supporting human endeavor with innovative technology.



THE MED4 ELITE SYSTEM ADVANCES YOUR TREATMENT CAPABILITY

- Improve outcomes effectively and safely with the most advanced, integrated multi-modality recovery technology available.
- Enhance recovery with an efficient and targeted combination of Iceless Cold, Controllable Heat, Rapid Contrast, and Active Compression therapies.
- Use flexible therapeutic combinations to reduce pain without narcotics, accelerate the body's natural healing mechanisms, and increase range of motion and muscle strength.
- Streamline workflow by simultaneously treating multiple patients and athletes with diverse injuries.
- Easily alternate between modalities and adjust time, temperature, and pressure levels with an intuitive, touchscreen interface.
- Compatible with the majority of Game Ready's line of anatomically designed, low-profile, circumferential wraps to treat major body parts effectively and comfortably.

MED4 ELITE™ FROM GAME READY®

FOUR THERAPIES IN ONE RECOVERY SYSTEM



ICELESS COLD [down to 38°F/3°C]

Creates its own deep-penetrating, longer-lasting cold to promote vasoconstriction, safely relieve pain without narcotics following acute injury or surgery, and reduce metabolic demand, muscle spasms, and inflammation.



CONTROLLABLE HEAT [up to 113°F/45°C]

Generates its own controllable heat to promote vasodilation and increase circulation to the injured area, support the lymphatic system, reduce pain and stiffness, and stimulate natural healing after injury or surgery.



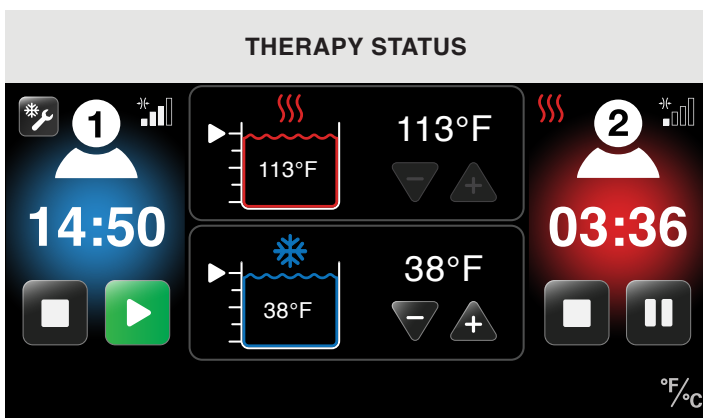
RAPID CONTRAST [<1 minute changeover]

Rapid Contrast Therapy delivery alternately opens and constricts the vascular system in a targeted injury area to relieve pain and increase blood flow without causing additional edema – efficiently, compactly, and cleanly.



ACTIVE COMPRESSION [4 levels, 5-75 mm Hg]

Patented intermittent pneumatic compression mimics natural muscle contractions to “pump” edema away from the injury area, and helps conform the wraps to the body for better surface contact and more effective cold/heat therapy.



Control, monitor, and adjust multiple therapeutic modalities for two patients with touchscreen convenience.

1

2

2

3

4



1

Simple touchscreen interface makes operation intuitive and efficient.

2

Two hoses for simultaneously treating multiple injuries or dual users.

3

Multi-modality therapies allow for the treatment of diverse injuries.

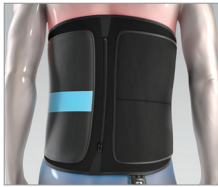
4

Compact footprint and lockable caster wheels ensure easy positioning.

FOR USE WITH MED4 ELITE AND GRPRO 2.1 SYSTEMS



ANKLE WRAP



BACK WRAP



ELBOW WRAP – FLEXED



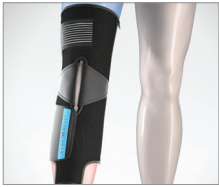
ELBOW WRAP – STRAIGHT



HALF-LEG BOOT WRAP



HAND/WRIST WRAP



KNEE WRAP – ARTICULATED



KNEE WRAP – STRAIGHT



HIP/GROIN WRAP



SHOULDER WRAP

FOR USE WITH GRPRO 2.1 SYSTEM ONLY



GRPRO 2.1 CONTROL UNIT

C-T SPINE WRAP
CRYO CAP
COOLING VEST
AMPUTEE WRAPS

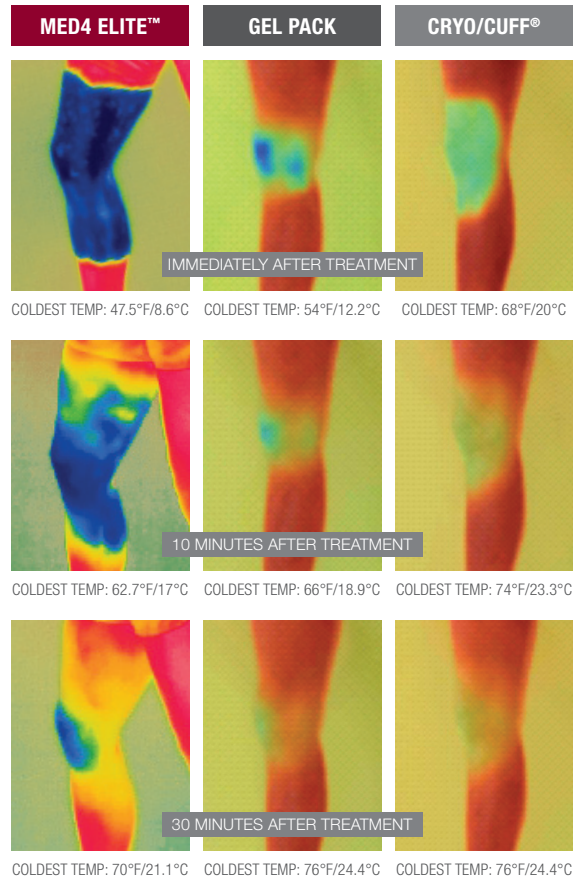
GAME READY WRAPS FOR BETTER FIT, COVERAGE, AND RESULTS

The Med4 Elite is compatible with the majority of Game Ready's existing line of ATX® Wraps (Active Temperature Exchange), featuring patented NASA technology. Anatomically designed for better fit and comfort, the low-profile wraps provide circumferential coverage and – aided by pneumatic compression – ensure greater surface contact to optimize therapeutic Cold, Heat, and Rapid Contrast treatment of major body parts. All of which improves outcomes and increases satisfaction with the recovery process.

MED4 ELITE THERAPY WORKS FASTER, PENETRATES DEEPER, AND LASTS LONGER

Game Ready's active compression squeezes greater benefits out of cold therapy alone. Using patented spacesuit technology, Game Ready's circumferential wraps envelope the injury or surgery site. Pneumatic compression works to conform the wrap to the contours of the body, assuring better surface contact and thus more effective cooling. Head-to-head infrared thermal imagery shows that the Med4 Elite by Game Ready provides faster, deeper, and longer-lasting therapy than other products.

Side views shown. Skin temperature taken immediately after treatment, subsequent images taken at 10 and 30 minutes post treatment. All devices applied per manufacturer's instructions and all measurements taken from uniform distance. Med4 Elite coldest point measurements based on 30-minute treatment time and high pressure (up to 75 mm Hg).



**CALL 888.426.3732 OR VISIT GAMEREADY.COM
FOR MORE INFORMATION OR TO REQUEST A DEMO**

MED4 ELITE™

HUMAN INSPIRED TECHNOLOGY DRIVEN

Game Ready® is the number one recovery technology for thousands of patients, elite athletes, athletic trainers, professional teams in every sport, special military forces, and the world's foremost orthopedic surgeons, sports medicine doctors, and physical therapists. Inspired by human endeavor and driven by technological expertise, we are dedicated to developing the most innovative and effective products for helping people get back to being their best after injury or surgery. We are here to re-engineer recovery.



MED4 ELITE™

The revolutionary multi-modality injury and surgery recovery system.



GRPRO® 2.1

The most advanced portable cold and compression recovery system.

G A M E  R E A D Y®

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Game Ready has invested heavily in its technology and has been awarded multiple patents. For a list of Game Ready products protected by patents, please visit gameready.com/patents.



CLINICAL PROTOCOLS



The dual-user, multi-modality Med4 Elite™ by Game Ready® combines Iceless Cold, Heat, Rapid Contrast, and Active Compression therapies in one revolutionary recovery system that advances injury and post-op treatment capabilities.

Cold Therapy (cryotherapy), Heat Therapy (thermotherapy), Rapid Contrast Therapy (RCT), and Intermittent Pneumatic Compression Therapy (IPC) have been shown to provide symptomatic relief of conditions, diseases, and disorders. Potential indications for use vary by treatment modality and stage of recovery.

Generally accepted information is provided as an overview to understanding the four phases of healing and therapeutic modalities in injury and post-surgery recovery.

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HUMAN INSPIRED. TECHNOLOGY DRIVEN.™

THERAPEUTIC MODALITIES IN INJURY TREATMENT



CRYOTHERAPY: Reduces blood flow and decreases metabolic demand, while also reducing pain and inflammation. Cold therapy is used immediately following acute injury or surgery, and on-going, on an as-needed basis.



RAPID CONTRAST THERAPY (RCT): Increases blood flow to an injured area without causing the accumulation of additional edema (swelling). Helps decrease nerve sensitivity to reduce pain.



THERMOTHERAPY: Increases circulation to the injured area to promote healing, while reducing pain and stiffness. Heat therapy is used after the initial inflammatory response caused by an injury begins to diminish.



INTERMITTENT PNEUMATIC COMPRESSION THERAPY (IPC): The addition of active compression to cold and heat therapy delivery works to improve body surface contact and assure more effective treatment.

POTENTIAL TREATMENT SCENARIOS

4 PHASES OF HEALING

DEVELOPED IN COLLABORATION WITH JASON MCWILLIAMS, AT, MS, ATC.

ALL PROTOCOLS SUBJECT TO PROVIDER/PATIENT ACCESS TO THE DEVICE AND PROVIDER DISCRETION.

1

INITIAL
ACUTE

INJURY – DAY 2

CLINICAL PICTURE

Swelling, pain to touch and with motion, decreased ROM at affected joint.

GOAL

Reduce swelling and pain, improve ROM and muscle activation.

MODALITY



EXAMPLE PROTOCOL

Cryotherapy with compression as tolerated. 30-minute treatment times.

2

INFLAMMATORY
RESPONSE

AS EARLY AS DAY 1 – DAY 6

CLINICAL PICTURE

Swelling subsiding, pain to touch and with motion, decreased ROM at affected joint, warmth to touch.

GOAL

Reduce swelling and pain, improve ROM and muscle activation.

MODALITY



EXAMPLE PROTOCOL

Cryotherapy with compression as tolerated. 30-minute treatment times.

3

FIBROBLASTIC
REPAIR

AS EARLY AS DAY 3 – SEVERAL WEEKS

CLINICAL PICTURE

Swelling subsiding, pain to touch and with motion, increased ROM at affected joint and improved muscle activation.

GOAL

Reduce pain, normalize ROM, increase muscle activation, mildly increase circulation and facilitate lymphatic flow.

MODALITY



EXAMPLE PROTOCOL

Cryotherapy with high compression as tolerated, with 30-minute treatment times. Thermotherapy prior to exercise or workout for 15 minutes with compression at low as tolerated. Rapid Contrast Therapy starting with 4 minutes of thermotherapy with low compression as tolerated, followed by 1 minute of cryotherapy with compression as tolerated, for total duration of 30 minutes.

4

MATURATION

AS EARLY AS DAY 7 – RECOVERY

CLINICAL PICTURE

Swelling, decreased or no pain to touch or with motion.

GOAL

Return to normal activity.

MODALITY



EXAMPLE PROTOCOL

Cryotherapy with compression as tolerated for pain and inflammation control as needed. Thermotherapy as needed prior to workout or exercise. Rapid Contrast Therapy as needed starting with 4 minutes of thermotherapy with low compression as tolerated, followed by 1 minute of cryotherapy with compression as tolerated, for total duration of 30 minutes.

Patient treatment protocols for use of the Med4 Elite system are the decision of the individual healthcare practitioner. The protocols herein are provided for information purposes only and neither CoolSystems, Inc. nor Jason McWilliams, AT accepts any responsibility for any adverse effects specifically as a result of these protocols. Refer to Contraindications and General Warnings and Cautions in the Med4 Elite User Manual and the Wrap Use Guides for further information.



POSITIVE CLINICAL OUTCOMES

COLD, HEAT, RAPID CONTRAST & ACTIVE COMPRESSION THERAPIES



A breakthrough multi-modality recovery system, the all-new Med4 Elite™ from Game Ready® integrates Iceless Cold, Heat, Rapid Contrast, and Active Compression therapies like never before. Now, athletic trainers, physical therapists, and sports medicine physicians have comprehensive, flexible, and clinically proven treatment options for diverse users, injuries, surgeries, and different stages of rehabilitation.

SUMMARY OF COMPREHENSIVE LITERATURE SEARCH FOR POSITIVE CLINICAL OUTCOMES AND SYMPTOMATIC RELIEF OF MANY CONDITIONS, DISEASES, AND DISORDERS WITH COLD, HEAT, RAPID CONTRAST AND INTERMITTENT PNEUMATIC COMPRESSION THERAPIES.

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COLD AND COMPRESSION THERAPY

Cold therapy (cryotherapy) is used to promote vasoconstriction, controlling hemorrhage and edema – and to reduce tissue temperature in an injured area by reducing the metabolic rate and the production of metabolites and metabolic heat, thus decreasing pain.

Decreases local tissue temperature.^{1,2}
Decreases blood flow.^{3,4,5,6}
Induces vasoconstriction of arterioles and capillaries.⁵
Improves pain relief.^{7,8,9,10}
Decreases muscle spasm and spasticity.^{2,11}
Reduces narcotic consumption.^{7,10,12,13,14,15}
Enables earlier discontinuation of narcotic pain medication.⁹
Decreases nerve conduction velocity.^{6,16}

Improves knee function.^{7,17}
Improves range of motion.^{7,8,15}
Improves gait.¹⁴
Decreases swelling.^{7,10,13,18}
Decreases lymphatic and venous drainage.^{3,4,6}
Decreases formation and accumulation of edema.^{5,19,20}
Decreases inflammatory reaction.^{5,6,19,20}
Decreases delivery of leukocytes, enterocytes, and phagocytes.^{5,20}

Decreases metabolism.^{5,6,20,21}
Promotes oxygen tissue saturation at deep tissue level.^{3,4,6}
Reduces postoperative blood loss.^{10,12}
Reduces likelihood for blood transfusion.^{10,12}
Reduces risk of infection.¹⁰
Promotes less wound discharge.¹⁰
Shortens hospital admission time.^{10,22}
Increases usage/compliance.^{8,13}
Improves patient satisfaction.^{10,14}



HEAT THERAPY

Heat therapy (thermotherapy) is used to promote vasodilation and increase blood flow, assisting the body's natural healing. Heat is also beneficial in increasing elasticity of connective tissue, resulting in reduced stiffness and increased flexibility.

Improves pain relief.^{23,24,25,26,27,28,29}
Reduces pain intensity.²⁵
Significantly increases arterial blood flow.³⁰

Improves flexibility.^{23,24}
Reduces muscle stiffness.^{23,24,27}
Increases ligament elasticity.³¹

Decreases ligament thickness.³¹
Increases median nerve conduction velocity.³¹
Improves disability outcomes.^{23,24,25}



RAPID CONTRAST THERAPY

Rapid Contrast Therapy is used to alternately open and constrict the vascular system, increase blood flow, and receive the additional benefits of heat therapy in the injured area, without causing the accumulation of additional edema (swelling).

Increases arterial peripheral blood flow.^{30,32,33,34}
Induces vasodilation and vasoconstriction.^{30,32,33}

Decreases pain.^{17,35,36}
Decreases edema.³⁷

Produces significant fluctuations in subcutaneous tissue temperature.^{32,33}
Improves knee function.¹⁷



INTERMITTENT PNEUMATIC COMPRESSION THERAPY

Intermittent Pneumatic Compression Therapy (IPC) is used to provide even pressure around an injured area, mechanically reducing the amount of space available for swelling to accumulate, increasing lymphatic flow, decreasing swelling, and enhancing tissue healing. IPC has been shown to be most effective when combined with cryotherapy.

Increases lymph flow/accelerated lymph flow (optimizes lymph drainage).^{38,39,40}
Increases arterial blood flow.^{41,42,43}

Decreases venous pressure and reduces venous stasis.^{41,44}
Enhances tissue healing.^{41,42,43}

Decreases post-traumatic edema.⁴⁵
Decreases acute and subacute swelling due to trauma or surgery.^{7,10,13,18,46}

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