

**440innovations**  
HEALTHCARE SOLUTIONS

Offered by 440innovations, llc  
a Verified Veteran Owned Small Business

## **Breakthrough Technology:**

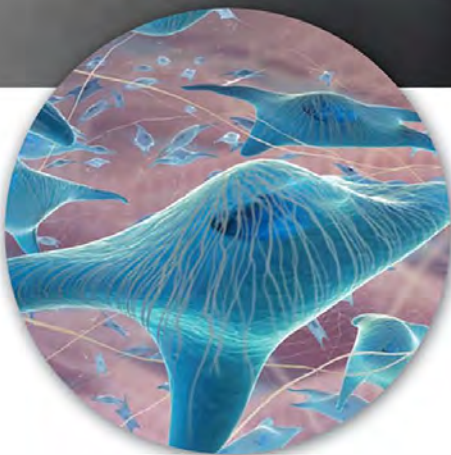
CLINICALLY PROVEN, WEARABLE HOME TREATMENT  
FOR SOFT TISSUE HEALING AND PAIN REDUCTION



Promotes  
Native Tissue  
Regeneration



Up-regulation  
of TGF- $\beta$



Enhancing  
Cellular  
Proliferation



Type-I and Type-III  
Collagen  
Deposition



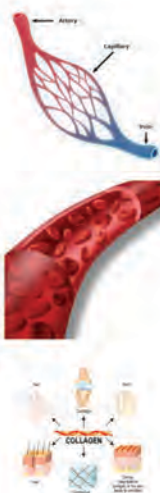
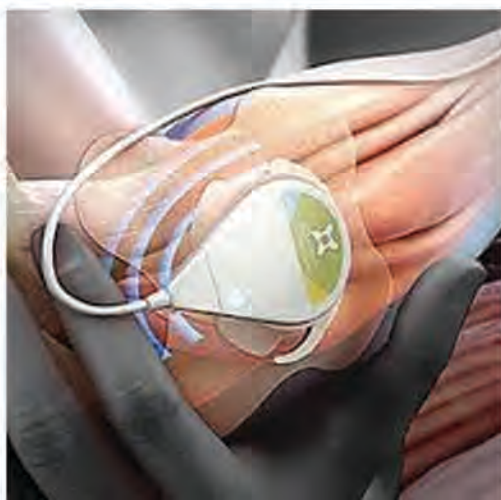
Patented medical technology  
proudly manufactured in the USA



# WHAT IS **sam**<sup>®</sup> AND HOW DOES IT WORK

**WHAT IS sam<sup>®</sup>** – sam<sup>®</sup> is the only FDA cleared wearable Ultrasound Device for remote & home treatments that is clinically proven to “significantly” reduce pain and accelerate the rate of soft-tissue healing by up to 50%!

Studies show a two-point decline in pain and a 505 point increase in function within six weeks of treatment without the use of Opioid-based pain medications. Clinical evidence also shows sam<sup>®</sup> accelerates the healing rates of musculoskeletal injuries by up to 50%. sam<sup>®</sup> is a stand-alone solution, or an adjunct therapy which can be used in conjunction with current treatment protocols and post-op recovery. Most patients will experience noticeable results after the first few days of use.



## **Mechanisms of Actions “Mechanobiological Device”**

**Sustained Acoustic Medicine** is proven to “supercharge” the bodies natural healing process. We all heal naturally, but it can be slow due to poor underlying circumstances ...

- **It amplifies our bodies healing process by:**
  - Increasing Collagen Laydown
  - Building new capillaries
  - Cytokine Enzyme and Cellular waste Removal
  - Increased Oxygenated Hemoglobin in Tissue
  - Increased Blood-flow (multi-hour)

**... Accelerated Tissue Healing also =  
Significant Pain Reduction!**

**HOW DOES IT WORK** – Essentially, sam<sup>®</sup> “supercharges” the body’s natural healing cascade.

sam<sup>®</sup>, treats the source of the pain by accelerating Collagen Lay-down which helps to re-align and repair any adhesion (tear) in the Muscles, Tendons, or Ligaments. In addition, sam<sup>®</sup> promotes accelerated Angiogenesis effect for new blood vessel development and provides improved multi-hour blood flow. Sam is not a TENS, E-Stim, or a pain blocking device. They function much like an electronic aspirin. Sam heals the source of the pain (tissue), offering significant pain reduction as a result of the nutrient transfer and tissue healing.



*“ Words cannot express how thankful I am for being able to have relief from pain without meds. Last year I incurred a partial tear of one of my tendons in my rotator cuff. I went through the typical process of physical therapy, pain pills and steroidal injections without much benefit. I was recommended sam<sup>®</sup> by my orthopedic doctor as a new treatment option. I used the device for 12 days straight and had nearly an 80% reduction in pain.”*

– Mr. Glenn Yawn, Veteran, U.S. Airforce Special Operations



HOW



sam<sup>®</sup> HELPS CLINICIANS

- sam<sup>®</sup>, is the FIRST NEW soft-tissue treatment intervention to reduce healing time “at home”, complementing the widely used RICE method
- Reduces, puts off, or eliminates many costly and more risky surgical procedures
- Overwhelming clinical evidence supports the clinicians position to prescribe sam as a conservative treatment
- sam<sup>®</sup> is FDA cleared for home (remote) use, reducing the threat of COVID-19 and other contaminations
- sam<sup>®</sup> speeds healing and reduces pain without the use of opioid-based drug prescriptions offering the clinician a safer treatment option
- sam<sup>®</sup> can be prescribed by clinicians remotely, over the phone or by email
- sam<sup>®</sup> can be shipped directly to the patient reducing unnecessary in-office visits and exposure
- sam<sup>®</sup> is FDA cleared to be self-administered by the patient
- Clinician and patients are trained on the use of sam<sup>®</sup> remotely

### Most commonly treated Chronic Pain and Musculoskeletal Injuries treated with sam<sup>®</sup>

- Knee: Pain, Osteoarthritis & Meniscus Tear
- Back Pain and Spasms: Lower/Trapezius & Sciatic Pain
- Chronic Shoulder Tendonitis, Pain, and Frozen Shoulder
- Chronic Lateral or Medial Epicondylitis
- Ankle Injuries: Sprain, Frayed Achilles & Post-Op Achilles
- Carpel Tunnel Syndrome
- Plantar Fasciitis



## CLINICAL STUDIES

### LEVEL 1:

1. Patterson et al 2020: Low-Intensity Continuous Ultrasound for the Symptomatic Treatment of Upper Shoulder and Neck Pain: A Randomized, Double-Blind Placebo-Controlled Clinical Trial. Journal of Pain Research 2020;13 1277-1287
2. Draper et al 2018 “Effect of low-intensity long-duration ultrasound on the symptomatic relief of knee 1 osteoarthritis: a randomized, placebo-controlled double-blind study” Journal of Orthopedic Surgery 2018;13:257.
3. Daniels et al 2018 “The Effects of Low-Intensity Therapeutic Ultrasound on Measurable Outcomes: A Critically Appraised Topic” Journal of Sport Rehabilitation, 2018, 27, 390-395
4. Mattern et al 2017 “The Effect of Low Intensity Wearable Ultrasound on Blood Lactate and Muscle Performance after High Intensity Resistance Exercise” JEP Online August 2017 Vol 20 No 4
5. Draper et al 2016 “Low Intensity Ultrasound or Promoting Soft Tissue Healing: A Systematic Review of the Literature and Medical Technology” Intern Rev (Wash DC)



“sam<sup>®</sup> has clearly changed the way we are able to accelerate return to function.”

– Dr. David Draper, DEd, AT  
Professor of Education,  
Brigham Young University, Provo, UT

“sam<sup>®</sup> is clinically proven to reduce pain and restore function in patients with osteoarthritis.”

– Dr. Thomas Best, MD, PHD  
Professor of Medicine,  
University of Miami, Miami, FL





HOW



HELPS PATIENTS

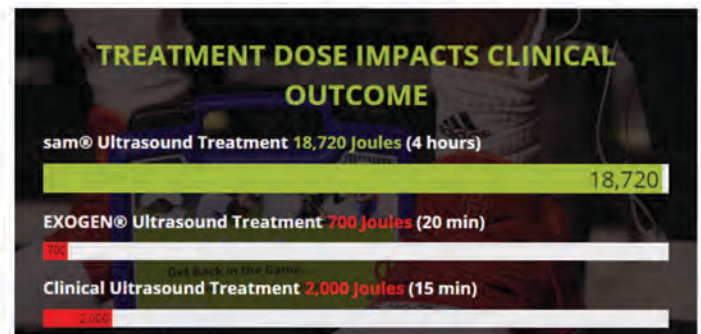


## All Walks of Life Can Benefit from sam® Technology

- Gets them back to work and social activities sooner
- Improves function up to 505 points in first six weeks
- Heals injuries 50% faster and reduces pain by two points on the pain scale
- Reduces or eliminates use of opioid-based drugs and terrible side-effects
- Eliminates risk of addiction if used without opioid-based drugs
- Reduces, puts off, or eliminates many costly and more risky surgical procedures
- Improves mental and physiological well-being
- Reduces risk of serious depression and downward decline
- Improves attitude and motivation to get involved with personal & family activities
- Reduces the risk of adverse events and readmittance or reinjury

- Is a safer and more conservative approach
- Is a clinically proven effective "home" treatment for soft-tissue recovery and pain, minimizing risk and exposure

### Small but Mighty, sam® Packs a Massive Punch with More Energy and Faster Healing



Wearable Multi-Hour Ultrasound Technology  
Delivering Sustained Acoustic Medicine

*“ I am a retired U.S. Army First Sergeant that sustained many injuries to my ankles, shoulders, neck, wrist and back while performing the duties as an Airborne Ranger Infantryman, Jumpmaster, Rappel Master, Pathfinder and Sniper. My goal was to stay away from prescribed narcotics medications as much as possible. Eight months ago, I was introduced to the sam® ultrasound unit through my occupational therapist. Several parts of my body have responded well with the device and I have achieved 70% improvement. The sam® unit has gone beyond my expectations. The sam® unit makes rehab on the road and in-house so much easier. It has helped me get through some very difficult pain such as severe tendinitis and bursitis. This modality works. I would highly recommend it! ”*

– Dr. Ervin Rodriguez, Retired U.S. Army First Sergeant





HOW



sam®

BENEFITS PAYORS

## Current Situation U.S. Bureau of Labor Statistics 2019 Data

- sam® heals the most common soft-tissue injuries faster, period!
  - Sprains, strains, and tears
  - Soreness or pain
  - Cuts, lacerations, and punctures
  - Bruises and contusions
- Payors can save \$27,000 or more on the cost of a treatable claim
- Return to Maximum Medical Improvement (MMI) by more than eight to ten weeks sooner in most cases
  - Clinically proven to heal injuries up to 50% faster than historic home treatment protocols
  - Reduces pain by two points on the pain scale
  - Improves function up to 505 points in first six weeks
- Reduces the number of costly patient visits
- sam® treats patients at HOME, reducing exposure and improving outcomes
- Reduces, puts off, or eliminates many costly and more risky interventions like drugs and surgical procedures
- Eliminates risk of addiction and/or death
- Reduces the odds of additional costly adverse events like infection and readmittance

### Is the "status quo" good enough? Why not try sam®?

"sam® helped one of my athletes who had the UCL tear in his thumb and the Doctor was trying to treat it non-operatively by using rest and a brace. I asked the Doctor if I could use sam® to help promote healing. The Doctor had never heard of sam® but said sure if you think it would help. The athlete was told he would probably be out for at least 2-3 weeks while the ligament healed. Two weeks post injury the athlete was seen by a Hand Specialist. From his evaluation he said everything appeared to be healing and if we could appropriately brace the injury the athlete could play. He played for the next 3 weeks with a brace while using the sam®. The athlete continued to use sam® and was able to finish the season without using tape or a brace. I truly believe that sam® helped prevent this athlete from having a surgery. It also allowed the athlete to be able to return to play in a week and a half after receiving the unit. This is just another reason why I love to use sam®"



- B.J. Duplantis, Jr. Assistant Athletic Trainer University of Louisiana at Lafayette







sam<sup>®</sup> is already helping thousands of patients to heal faster, reduce pain, improve function and get back to a much higher quality of life!

**Say yes** and prescribe sam<sup>®</sup> to your patients for faster outcomes and increased patient satisfaction!  
**Say yes** to a new clinically proven home-based treatment for soft-tissue healing and pain reduction!  
**Say yes** to prescribing fewer drugs and provide safe, effective, and a more conservative treatment option!  
**Say yes** to improving mental & physiological well-being, and reducing risk of depression & downward decline!  
**Say yes** to reducing the use of opioid-based drugs and their terrible side-effects!  
**Say yes** to reducing cost by more than \$27,000 on a treatable claim!  
**Say yes** to reaching MMI (Maximum Medical Improvement) up to 50% faster!  
**Say yes** to putting off, or eliminating costly and more risky interventions like drugs and surgical procedures!  
**Say yes** to creating a better quality of living for all walks of life, **with sam<sup>®</sup>!**



### Military and Veteran Patients

sam<sup>®</sup> wearable ultrasound is available for all active duty members on contract, and for US Veterans through the national network of VA Healthcare Centers.

Most commonly used for arthritis, chronic pain and post-surgical recovery.



### Professional and College Athletes

sam<sup>®</sup> is used by over 75% of injured professional athletes in the USA.

Pre-approved by insurance for most professional US athletes and most collegiate athletes, daily wearable ultrasound treatment can accelerate return to play.



### Personal Injury or Work Related Injury

Injured in a car accident or on the job and looking for another option besides surgery or drugs?

sam<sup>®</sup> products are covered by most insurance carriers to help you get back to life, work and living pain free.

**sam<sup>®</sup> is covered by more than 50 major payors and TPAs**

**Team clinicians for Pro & College Sports trust sam<sup>®</sup> to get their team back in the game.**



**440innovations**  
HEALTHCARE SOLUTIONS

To Order or for information:

eMail: [info@440innovations.com](mailto:info@440innovations.com)

Call: 757.848.3354

Fax: 757.868.7437



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