



# Athletic Training Overview

**REACT**innovations.com





# WHAT IS REACT?

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- World's Most Advanced & Effective Neuro-Muscular Rehabilitation Technology
- A Class II, FDA-Cleared Medical Device
- Issued 510
  - Stimulates tissue up to 4 inches deep within the body, with ***no skin contact required, non-invasive.***
  - The brain initiates a full loadbearing contraction of the muscle group being treated. Causing the muscles to contract 90-120 times per minute.
  - Rebuilds connectivity between the brain, nerves and musculature system.

# THE REACT TABLE

REACT technology provides a **Proven, Safer, Outcomes Driven, Non-invasive, Revenue Generating** treatment that naturally fixes the root cause of physical dysfunction.

**FDA**  
**CLEARED**

REACT has more than 60 peer reviewed published citations and has treated over 10,000 patients treated in the last 18 months.

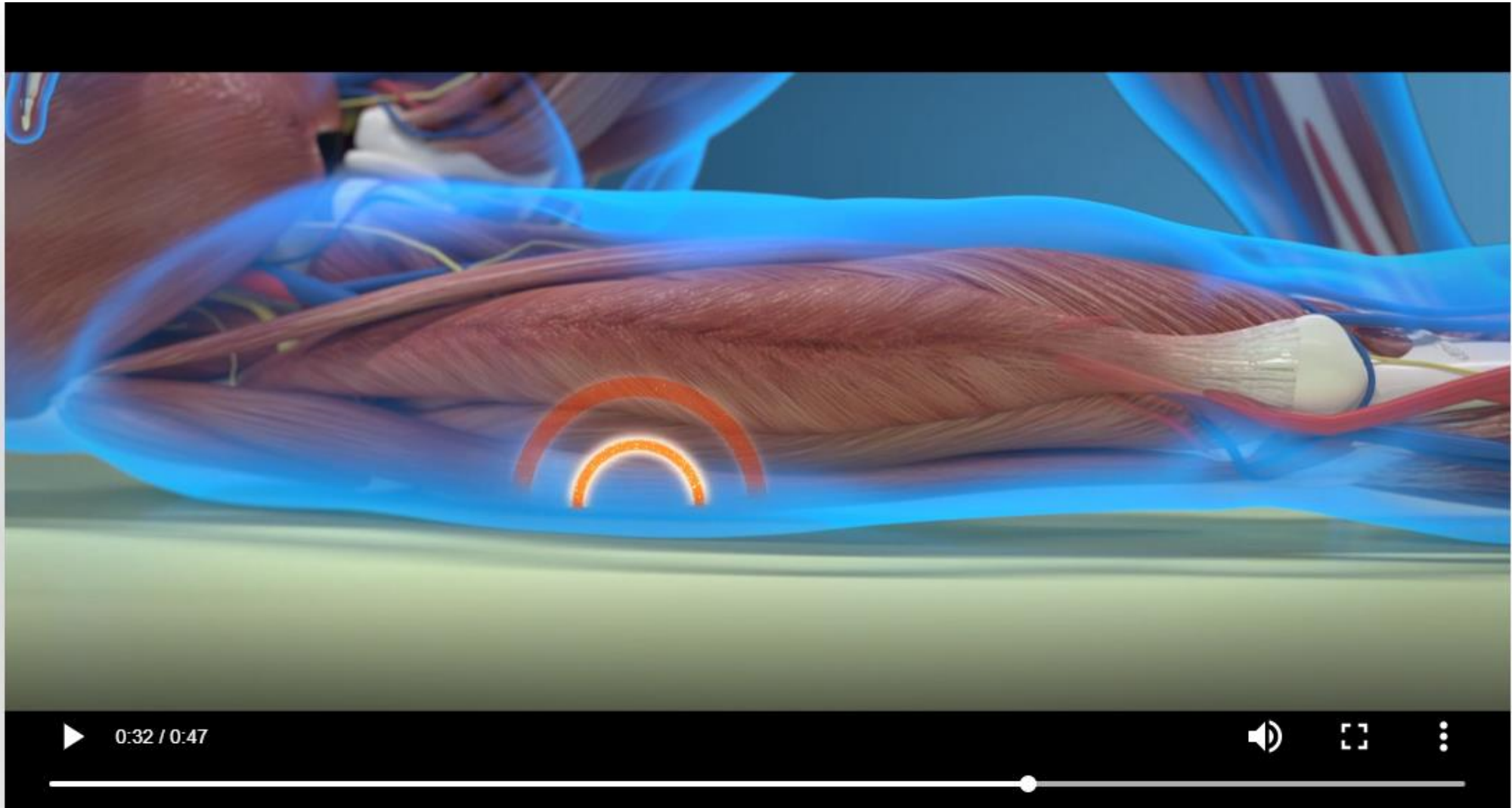


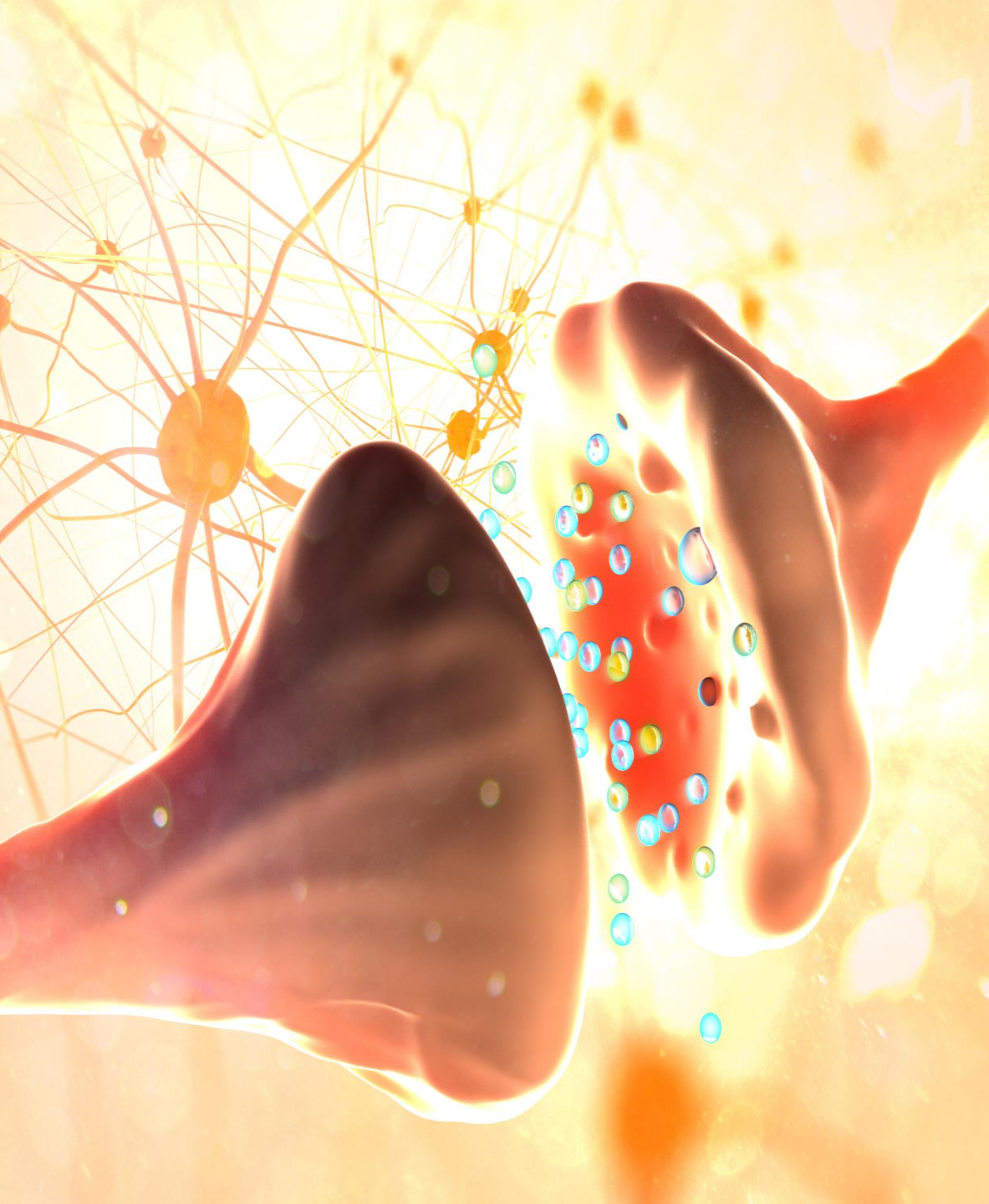


# HOW IT WORKS – REACT TABLE

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Click on the image below to launch a 3D video demonstrating how REACT builds new neuromuscular pathways between the brain, nerves and muscles creating immediate and long-term results.





# HOW DOES REACT HELP TO HEAL THE BODY?

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- Inflammation is one of the primary drivers of disease, pain and death. REACT can reduce inflammation by increasing blood flow to combat underlying conditions, which allows patients to improve function and fight disease.
- Our bodies are connected through neuromuscular junctions, which transmit signals between the brain and muscle fibers. If there is damage or a signal disruption to the nerves, muscles cannot function properly. REACT, reconnects the brain, nerve, muscle relationship (kinetic chain) by creating new neuropathways.
- REACT's core mechanism of action is a bio-electric magnet that stimulates the kinetic chain through a chemical depolarization of the potassium and sodium ions within the muscle fibers.
- REACT's engagement of muscles generate a rapid amount of blood flow when the brain activates the targeted muscle. This improves circulation, increases range-of-motion, alleviates pain, advances healing and reduces inflammation.



# Customer & Patient Testimonials



# TESTIMONIALS: DOCTORS, TRAINERS & THERAPISTS 7



Steven Sher, SVP, Team Rehabilitation  
MSPT, ATC, CSCS, PES, TPI  
Former NFL / MLB Athletic Trainer

*"In my role at Team Rehabilitation I am presented with new technologies for evaluation and use within the company. They claim to be better and different, but in most cases are not. However, with REACT I have found those claims to be true. REACT has fundamentally changed the way we treat and approach patient care. We have seen patients achieve results that some might consider impossible. REACT is expanding our ability to treat a variety of conditions and achieve significantly improved patient outcomes, while increasing revenues as well."*



Dr. Ryan McGraw, DC  
Owner and Lead Physician  
McGraw Chiropractic

*"I was introduced to the REACT technology in 2018. My practice is located in rural PA and I treat about 225 patients per week. REACT has taken my practice to the next level, by producing patient outcomes that in the past were not possible. It has helped me significantly expand my service offerings to patients and has increased my overall cash revenue to the practice by more than 30%. Every chiropractor and physical therapist should have this technology."*



John Kasik, MPT  
Athletic Director / Sports Medicine  
University of South Carolina

*"Having been an athletic trainer for nearly 40 years, I have seen a lot of technologies within the NFL and NCAA. Early in their development, the REACT team came to USC and resolved a player's neck injury in a matter of minutes. This was a player that we couldn't fix for over a week. I was totally blown away!"*

*USC was the first NCAA sports program to bring the REACT technology to our new football facility. It's heavily used everyday, our players and athletic trainers love it."*



Dr. Jeffrey Carroll, DO  
Chief Medical Officer / Surgery  
Movement Orthopedics

*"REACT has been an amazing addition to our organization. We apply the device in both pre-surgical rehabilitation and post-surgical recovery."*

*REACT is utilized daily and we consider it a critical modality in our operations, patient outcomes and overall recovery."*

# TESTIMONIALS: PATIENTS

A former collegiate linebacker, now 64, who could not walk without pain and a walker; ***"I have been touched by the hand of God."***

A mother of 3; ***"I had terrible complications from a botched shoulder surgery that left me crippled and wretched in pain. REACT completely changed my life, brought back my range-of-motion and allowed me to finally get of pain medication"***

A parent of a child recovering from brain cancer; ***"Doctors saved our son's life, but told us he may never walk again as he was left with permanent brain damage after his cancer surgery. We struggled for a year in rehab with very little progress....until REACT. Now he can get up to his own walker and play with his brothers. This technology is a miracle. I wish he was on it day 1."***

A former collegiate Lacrosse player, now 30, who suffered from back pain and stiffness; ***"I wasn't sure how the table was going to help me, but only after one treatment my range of motion was back and stiffness was gone, I was amazed!"***

A 42 year-old woman suffering from chronic pain; ***"Thank you, I never thought I would know what it was like to live without pain, I tied so many things, but nothing worked until REACT."***

Father of a 16 year-old daughter experiencing her second ACL surgery, ***"My daughter has suffered two ACL tears in 3 years. Her first surgery was long and difficult, after she tore her other ACL, we were not optimistic about her chances of playing her senior year. We started on a REACT regiment pre and post surgery. The difference in recovery was substantial. The recovery on the second knee was 2-3 months ahead of her last surgery. She was able to play her senior year which meant so much to our family. This technology is amazing!"***





# Shoulder Outcomes Case Study



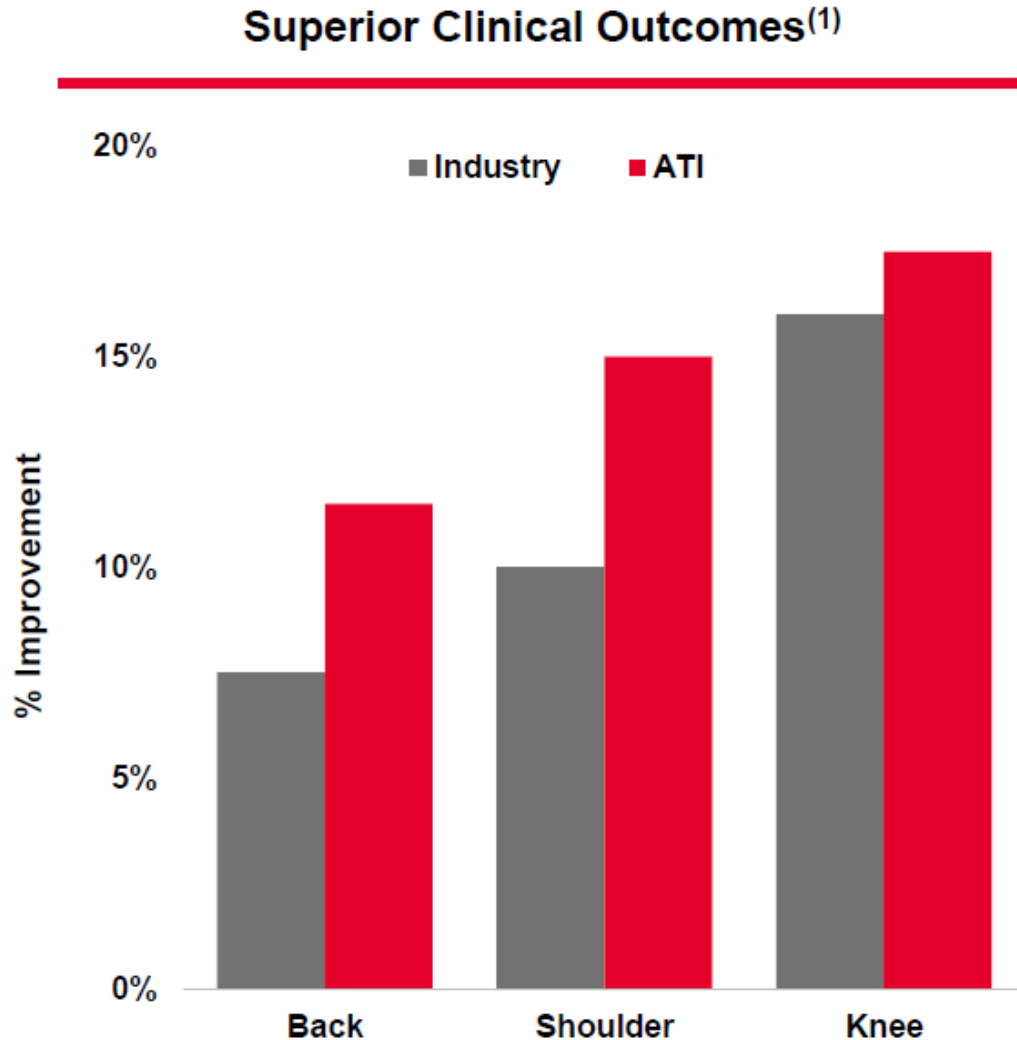
# REACT'S IMPACT ON SHOULDER RECOVERY

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- American Orthopaedic Society for Sports Medicine reports that more than 1.4 million shoulder arthroscopies are performed worldwide each year.
- Standard Outcomes within Physical Therapy, averages 5 degrees of Forward Flexion and 5 Degrees of Side Abduction per week (total of 40 degrees per month).
- Compared to the uninvolved shoulder, within 12-months the surgically repaired shoulder averages 70% in Forward Flexion and Side Abduction.
- For example, if a patient has 180 degrees of Forward Flexion on their non-surgical shoulder, by 12-months they would average 126 degrees pain free.

**REACT has demonstrated an average of 48 Degrees of combined Forward Flexion and Side Abduction during a single 8-minute treatment. This translates to more than 5-weeks of PT progress with a single 8-minute session.**

# REACT OUTPERFORMS TODAY'S SUPERIOR OUTCOMES



*(1) ATI Physical Therapy's Investor Overview – Center for Effective Research in Orthopaedics Report on Evaluation of Legacy Patient Outcomes Measures as Performance Measures in Rehabilitation (2019)*

- ATI is one of the leading Physical Therapy companies in the US with over 900 clinics in 25 states.
- ATI has recently gone public with a \$2.5B valuation. Part of their strategic focus is delivering “Superior Clinical Outcomes” for their patients.
- This will have a significant impact on the Physical Therapy industry, as most believe PT is evolving to an Accountable Care Organization (ACO), by which outcomes dictate compensation.
- The chart states that standard industry outcomes are at 10% and that ATI performs at Superior Outcomes of 15%.
- REACT's initial research shows we drive a Superior Clinical Outcomes at more than 62% in Forward Flexion and 75% in Side Abduction. 6X and 7X over national averages.

**REACT's strategic benefit to a PT organization operates through today's “per patient visit” reimbursement model or a future ACO. Within either scenario, REACT drives significantly improved outcomes with increased revenue.**



# REACT OBSERVATIONAL OUTCOMES

## SHOULDER, MARCH/APRIL 2021

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Location	Zone	Post-Sug Time	Age	Patient	Pre F Flexion	Post F Flexion	Net Flex	Net Flex %	Pre Abduction	Post Abduction	Net Abd	Net Abd %	Total Net ROM
AA, MI	Shoulder	4W	45	Colin	101	133	32	14%	65	93	28	30%	60
AA, MI	Shoulder	8W	60	Bob	140	154	14	5%	123	149	26	17%	40
AA, MI	Shoulder	16W	68	Kristen	150	158	8	3%	162	165	3	2%	11
AA, MI	Shoulder	16W	30	Carleigh	124	124	0	0%	109	109	0	0%	0
AA, MI	Shoulder	Pre-Surg	59	John M	134	131	-3	-1%	90	112	22	20%	19
AA, MI	Shoulder	8W	54	John A	104	143	39	16%	82	146	64	44%	103
Stockbridge, GA	Shoulder	8W	70s	Shirlyn	85	176	91	35%	65	147	82	56%	173
Stockbridge, GA	Shoulder	N/A	50s	Faye	58	110	52	31%	78	115	37	32%	89
Stockbridge, GA	Shoulder	N/A	40s	Melanie	151	156	5	2%	135	162	27	17%	32
Stockbridge, GA	Shoulder	N/A	30s	Craig	140	160	20	7%	133	150	17	11%	37
Stockbridge, GA	Shoulder	4W	20s	RaShawn	140	170	30	10%	125	180	55	31%	85
Chicago, IL	Shoulder	6W	29	Beecher	160	165	5	2%	155	162	7	4%	12
Chicago, IL	Shoulder	Pre-Surg	20s	Beth	118	121	3	1%	89	93	4	4%	7
Elgin, IL	Shoulder	4W	50s	Kevin	132	151	19	7%	150	158	8	5%	27
Elgin, IL	Shoulder	N/A	50s	Nancy	110	113	3	1%	124	129	5	4%	8
Chamblee, GA	Shoulder	N/A	60s	George	112	137	25	10%	85	125	40	32%	65

- The following data sets were collected from 16 patients within five Team Rehabilitation clinics over a 1 month period.
- Each patient was measured before and after REACT therapy.
- For all patients, the results were generated from their first REACT experience, a total of 8-minutes treatment.

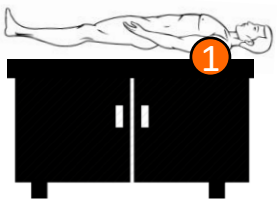
**Average Forward Flexion Increase = 21.5 Degrees (10 of 16 Experiencing Superior Clinical Outcome)**  
**Average Side Abduction Increase = 26.5 Degrees (12 of 16 Experiencing Superior Clinical Outcomes)**  
**Total Combined Average Increase = 48 Degrees**

# REACT TREATMENT PROTOCOL - SHOULDER

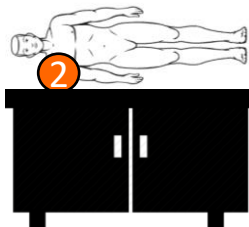
- Standard Protocol includes an 8-minute treatment with the patient placed on the REACT Table in three positions.

Zone	Muscle Groupings	Frequency Hz	On / Off Cycle (sec)	Position / Duration
1	Rhomboid, Scapulae, Trap, Infraspinatus, Teres and	2/10/34 Hz	5 / 2	#1 – 1 min Each
2	Deltoid, Teres, A/C	2/23 Hz	5 / 2	#2 – 1 min Each
3	Deltoid, Rotator, Humerus, Bicep and Pectoral	2/10/34 Hz	5 / 2	#3 – 1 min Each

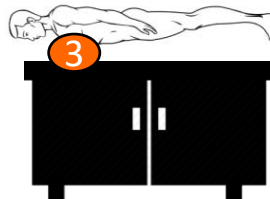
**Position #1**  
**Supine**



**Position #2**  
**Sideline**



**Position #3**  
**Prone**



*Click on the image to hear about a REACT Shoulder Testimonial*



# Football & PT Outcomes



# FOOTBALL PATIENT OUTCOMES

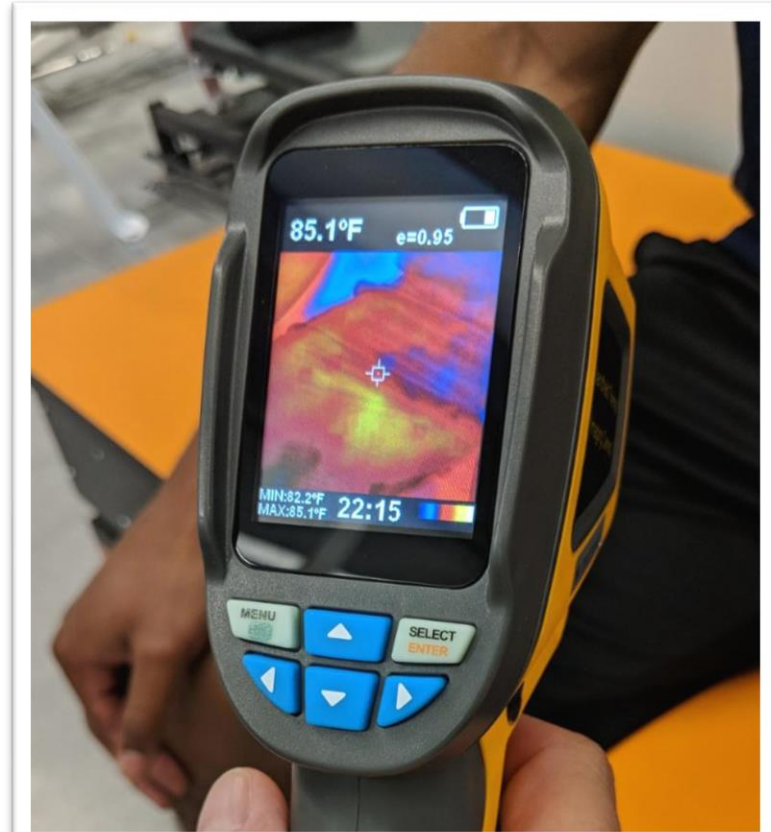
## Grade 2 Adductor Pain + Perineum Strain

**Patient Profile:** Male, Age 20 (College Wide Receiver)

**Condition:** Grade 2 adductor / perineum strain

**Pre-REACT:** Injury occurred in the middle of the 2018 season. Player missed significant time. No surgery option at the end of the season, but came into spring camp with same issue, total of 9 months. VAS of 5 out of 10. Strong concern by player and staff that he would create more damage during season.

**Post-REACT:** Two-week protocol consisting of two 10-minute treatments daily. Reduced VAS from 5 to 0. Player's ability to come off the line and cut significantly improved. No lingering effects from previous injury of 9-months. Sixth round pick of 2020 NFL Draft



*Thermal image of player quad, adductor and hamstring illustrating blood flow concentration after just 2 minutes of treatment, 34 Hz*

# FOOTBALL PATIENT OUTCOMES

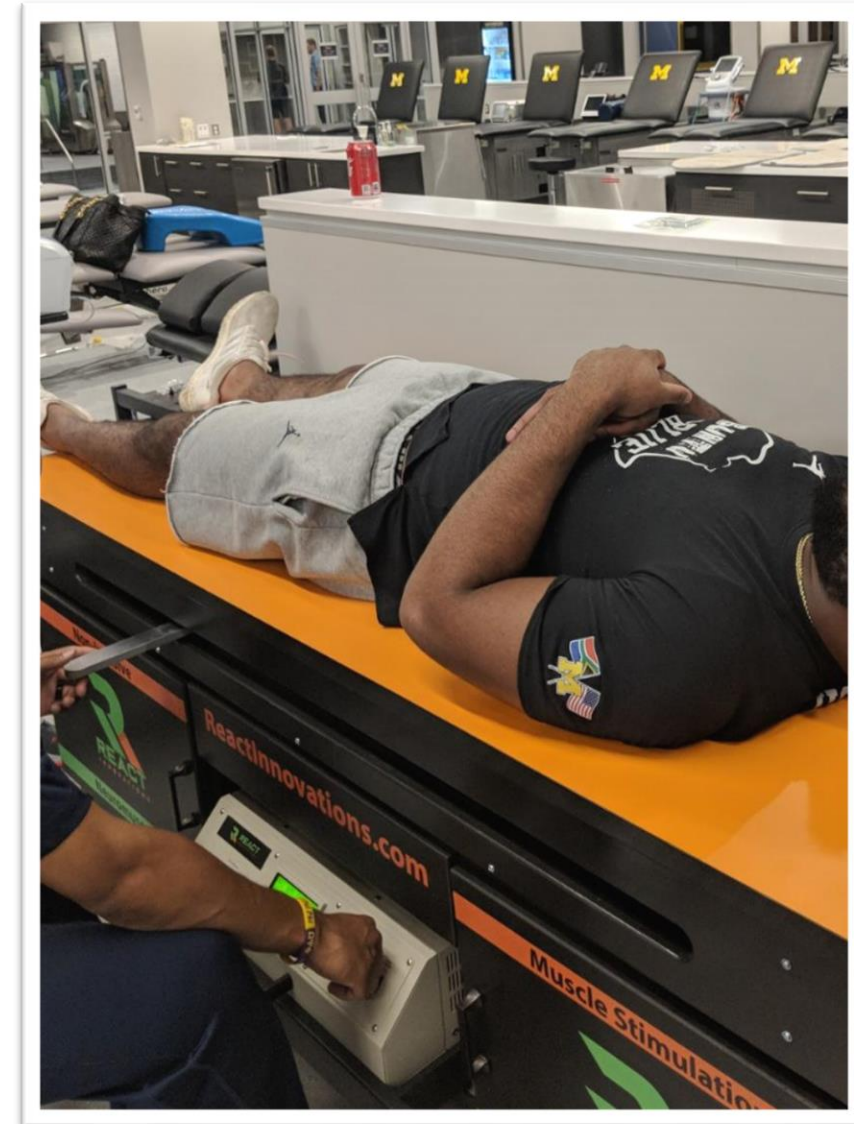
## Grade 2 Hamstring Tear + Kinetic Chain Deficiency

**Patient Profile:** Male, Age 20 (College Defensive Lineman)

**Condition:** Grade 2 hamstring tear

**Pre-REACT:** Injury sustained in spring practice mid August 2019. Player extremely sensitive to touch, VAS 7 of 10. Hamstring injury began to effect lower back, glute, quad and calf strength.

**Post-REACT:** Two-week protocol consisting of two 15-minute treatments daily. Focus on hamstring and surrounding soft tissue, include L4/L5, glute, quad and calf. Reduced VAS from 7 to 0. Player's ability to explode off the line and leverage blocks significantly improved. No lingering effects from previous injury. Second round pick of the 2020 NFL Draft.



# FOOTBALL PATIENT OUTCOMES

## Psoas Imbalance & Low Back Pain

**Patient Profile:** Male, Age 20 (Offensive Lineman)

**Condition:** Lateral pelvic tilt (psoas imbalance), with L4/5 Back Pain

**Pre-REACT:** Patient was experiencing chronic back pain which was believed to be caused by his size (6-4, 315 lbs) and his football position (OL Center). During examination discovered a lateral pelvic tilt between 1.5-2 inches with the left hip higher than the right.

**Post-REACT:** After 2 weeks of protocol and support from on-site D.O. for spinal correction, psoas released on left side, psoas strengthened on right side to eliminate hip imbalance. To start, pain VAS was a 7/10, post treatment VAS 0/10. Player selected in 1st round of 2020 NFL Draft.





# SAMPLE PATIENT OUTCOMES

## Hit & Run Pedestrian Car Accident – Compound Leg Fracture, Nerve Damage, Wound Care

**Patient Profile:** Male, Age 28 (Factory Worker)

**Condition:** Compound leg fracture, 3<sup>rd</sup> degree skin abrasion, nerve damage

**Pre-REACT:** Patient was struck by a hit and run vehicle on a highway and dragged 200 yards. Patient suffered multiple injuries including compound fractures in the right femur, right tibia and right fibula, severe laceration and muscle loss in right quad, 3<sup>rd</sup> degree skin abrasions and nerve damage.

Patient was in recovery for over 3 months prior to REACT. Recovery was beginning to peak with continued issues related to nerve damage (drop foot), lack of bone density in repaired leg and wound management. Injuries still caused significant reduction in ROM and caused continuous pain.

**Post-REACT:** Performed a total of 24 treatments. Patient started experiencing pain reduction after first treatment. Increased ROM, foot strength and ADL's. Wound abrasion (road rash) went from a hot pink color to gray within 6 weeks. Follow up x-rays from surgeon revealed increased bone density within leg whereas pre-REACT treatments revealed very little progress in bone density.



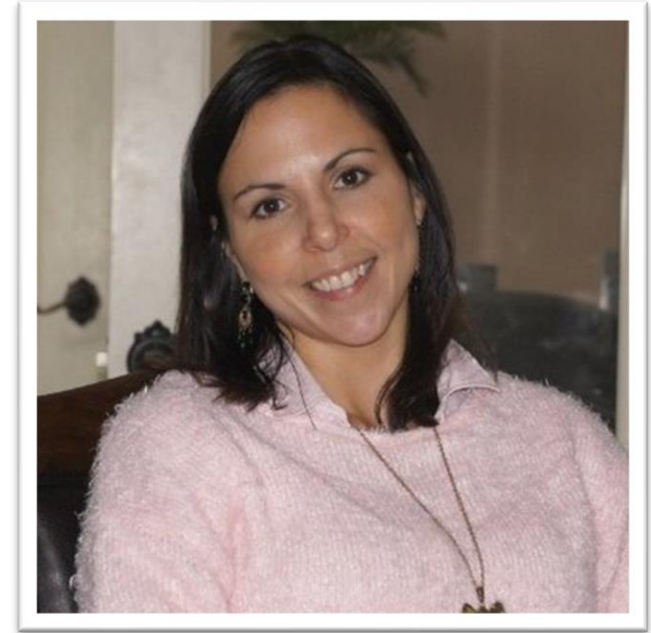
# SAMPLE PATIENT OUTCOMES

## Herniated Disk & Labrum Repair

**Patient Profile:** Female, Age 41 (Teacher)

**Condition:** Skiing accident right herniated disk, moderate to large HNP at L4-L5 and a torn right labrum in shoulder.

**Pre-REACT:** After surgical repair on her right labrum (shoulder) we were able to resolve her sciatica in November 2017 with standard correction. Patient discontinued chiropractic care due to her work and post-surgical rehabilitation schedule for the labrum repair. Sciatica and disc symptoms returned in March 2018 after Skiing. Patient had difficulty sleeping, standing at work (teacher) and had a significant reduction in ADL's. Chiropractic care consisted of Cox, EMS, ice, spinal adjustment with slow improvement over 4-6 visits.



**Post-REACT:** Prior to her first visit on the REACT table, her pain level was VAS 8/10. Pain was more centralized at this point, stopped at her posterior right knee. REACT visit #1 was a 9-minute session, patient's post treatment VAS 0-1/10. The following week patient missed the second appointment due to a blizzard. Two weeks post REACT visit #1, patient VAS was a 2-3/10. Post REACT treatment #2, patient VAS reduced to 0-1/10. Current treatment plan includes REACT twice a week with a spinal adjustment post therapy. Treatment continuing and pain is now centralized to L5-S1 and top of her right glute. Treatment is ongoing with a significant improvement in ADL's.

# SAMPLE PATIENT OUTCOMES

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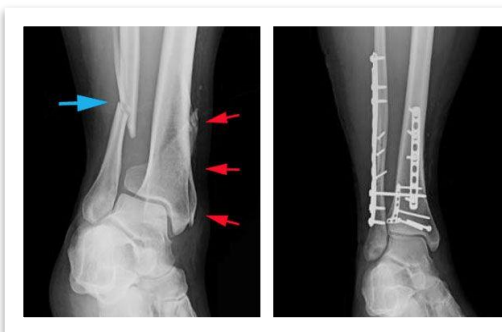
## Bone Callus Formation / Rotator Cuff

**Patient Profile:** Male, Age 56 (Engineer)

**Condition:** Compound fracture of tibia and fibula

**Pre-REACT:** Injury sustained after falling off a ladder. Surgery performed with standard rod, plates and screws. After 14-weeks of therapy, bones still not callused. Patient had no ability to load on leg, was relegated to the knee scooter for ADL.

**Post-REACT:** Six-week program, which included REACT therapy 3 times per week (18 treatments) resulted in new bone callus formation of both tibia and fibula. Patient was walking full load bearing, with no cane, crutches or scooter.



**Patient Profile:** Male, Age 23 (Minor League Outfielder)

**Condition:** Grade 1 rotator cuff tear

**Pre-REACT:** Injury sustained during season. Player had a VAS of 5-6 out of 10 when throwing. Did not want to perform surgery.

**Post-REACT:** Three-week program, which included REACT therapy once a day (21 treatments) resulted in a reduction VAS to 0. Focus on rotator cuff and surrounding tissue to prevent atrophy / build strength. Patient was reexamined by team surgeon, tear healed.

# SAMPLE PATIENT OUTCOMES

## Lateral Epicondylitis / Psoas

**Patient Profile:** Male, Age 58 (Executive)

**Condition:** Lateral Epicondylitis (tennis elbow)

**Pre-REACT:** Patient operates machinery using arms daily. VAS 5-6/10, reduced ROM. Therapy included stretching, ultrasound, laser, hot / cold compress and bracing. Chronic recurring issue for over 3 years.

**Post-REACT:** Patient started experiencing pain reduction after first treatment. Performed a total of 6 treatments, VAS reduced to 0-1/10. Increased ROM, grip strength and ADL's. Continued therapy on an as needed basis.

**Patient Profile:** Female, Age 35 (Dance Instructor)

**Condition:** Grade 1 Psoas Strain

**Pre-REACT:** Left psoas, snapping and popping with dance and external rotation of left hip. Decreased ROM in her left hip. Treatment included ART, spinal adjustment (Thompson and Gonstead). Partial resolution of snapping in the left psoas.

**Post-REACT:** Demo day and 2 subsequent visits in conjunction with same adjusting techniques. Nearly complete elimination of the popping and snapping in her left hip. Continuing treatment at 2x per week.



# CONTACT

- FDA Cleared & Proven Technology
- Improved patient outcomes
- One technology replaces multiple modalities including E-Stim, Laser, Therapeutic Ultrasound and Diathermy
- Easy set up and use
- Patients treated with clothes on
- Penetrates muscles up to 100 mm vs 3 mm with E-Stim
- Unprecedented outcomes!



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