



Dr. Anthony DiCesaro

Whitehall Health Centre

Dr. Anthony DiCesaro has practiced for over 27 years owning 10 offices in 6 different states up and down the east coast. Now, he resides and personally practices in the south hills of Pittsburgh. He is extremely knowledgeable and successful with Shockwave therapy and has joined our team as a Clinical Advisor.



Dr. Dustin Barton

CEO and founder of Core Health

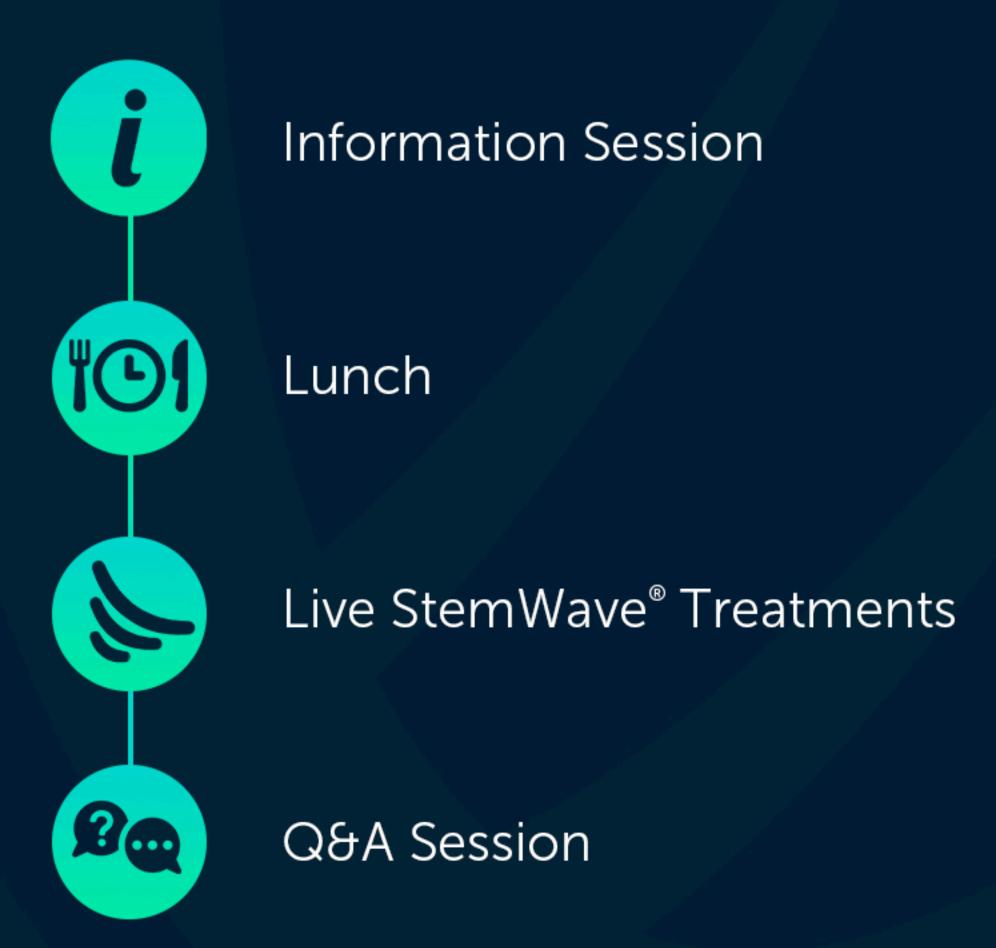
Dr. Barton has been a chiropractor for over 15 years. In 2008 he opened Core Health, one of the first family friendly, children centered, open concept clinics in Fargo ND. He has been extremely successful with ShockWave Therapy over the last 3 years and joins StemWave as a Clinical Advisor.

Goal of Training

Our goal here today is to create meaningful connections and provide systems, resources, and training that allow you to:

- Build lifelong relationships
- Grow your knowledge base
- Improve your community
- And grow your business

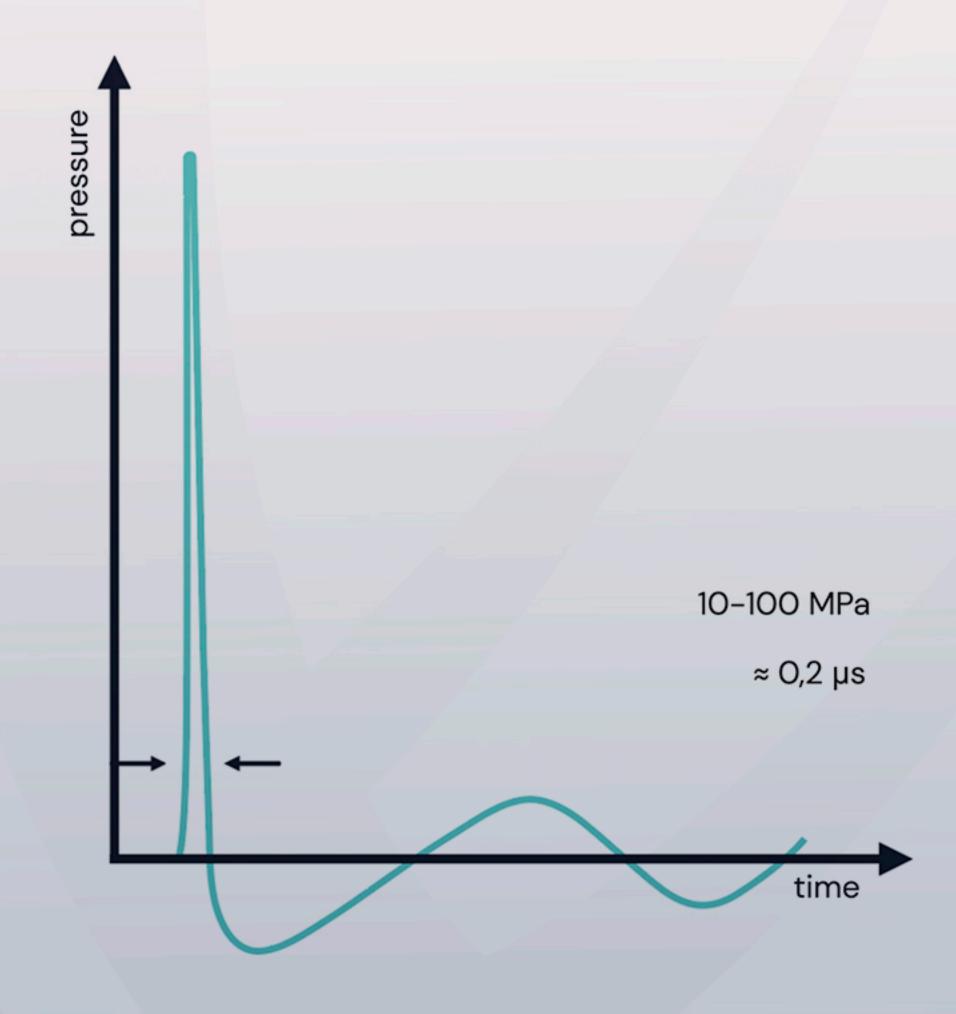
Today's Itinerary



What are shock waves?

Shock waves are acoustic pulses with high positive pressure, fast and steep rise time followed by comparatively small negative pressure (tensile wave).

Compression occurs in the wavefront and causes a sudden and violent change in stress, density, and temperature in the target tissue.



StemWave®'s Pulse Waves How and why it works

- StemWave® shockwaves are created by means of a high-energy electrical discharge.
- They require a medium such as water (or air) for propagation. This is why
 there is salt water in the head.
- The voltage is discharged between the opposing tips (plus and minus pole) of an electrode.
- The arcing or spark gap causes an equalization of voltage between the two tips of the electrode whereby a hot plasma bubble is created. This bubble explodes in all directions, compresses the surrounding water, and generates a pressure > 10 MPa* within only a few nanoseconds (10-9 ns)
- The electrohydraulic shock waves travel at 3355 mph inside the head (in water).
 That's 5 times faster than in air (767 mph). Since the body is mainly water, the propagation is very efficient.

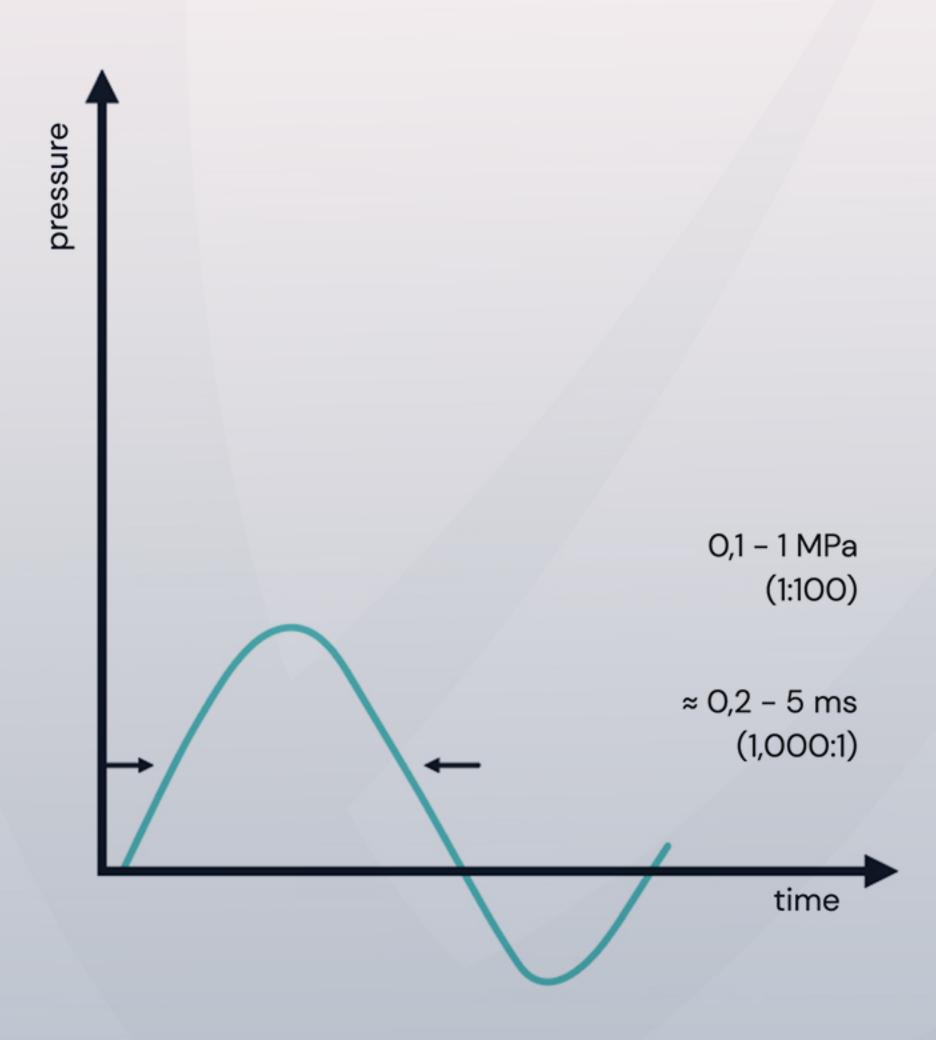




How are we different?

Radial Devices

- Radial Devices = divergent pressure waves,
 NOT shockwaves
- Radial pressure waves are pneumatic pulses with a low steeping effect, slow rise times, and large negative pressure
- The waves are shallow and have the highest energy and pressure located directly at the applicators surface
- Only 10% of the energy is actually transmitted into the tissue



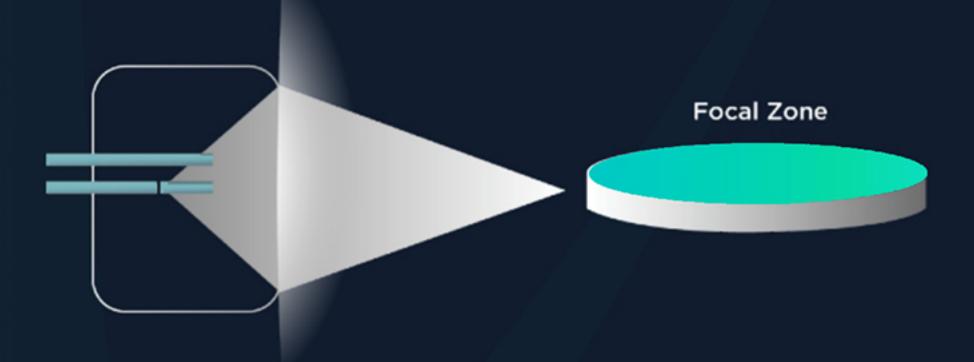
Area Directed Technology

The uniquely designed Area Directed Technology (ADT) utilizes an electro-hydraulic system that generates focused acoustic waves that apply mechanical force and energy to living tissue.

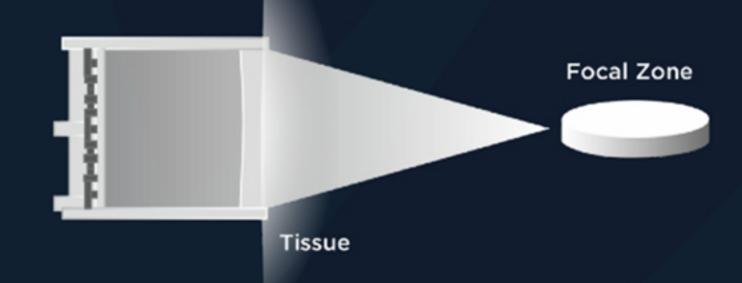
25 energy levels — our technology is different basing our energy levels off of exact mj/mm2

Why it's important — allows for customizing the experience for each person.

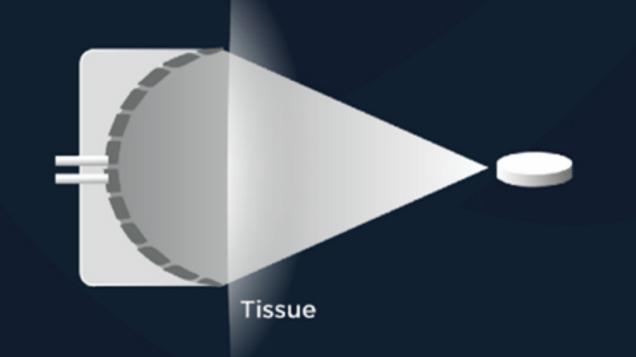




Electromagnetic System

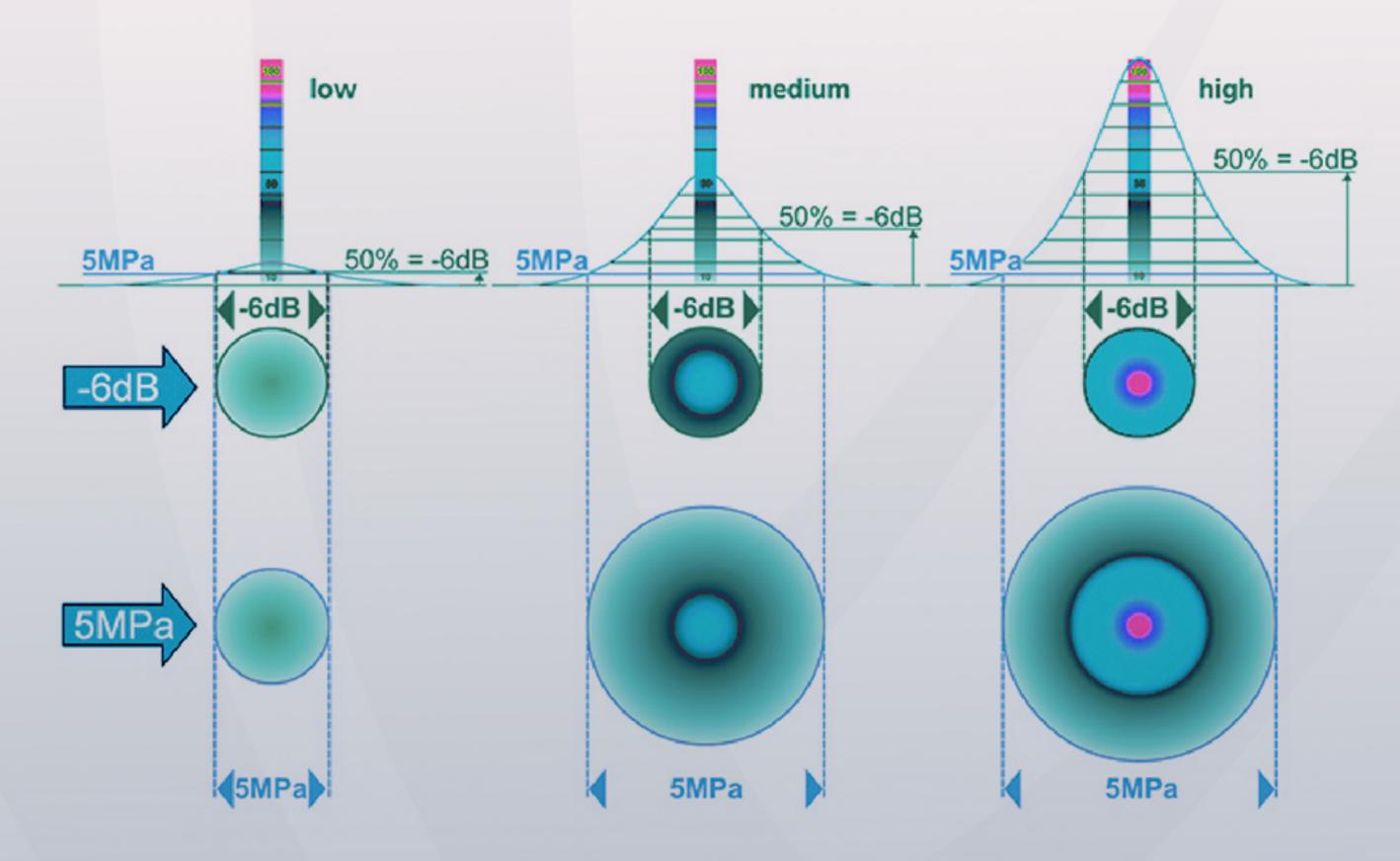


Piezoelectric System



Focal Zone

The focal zone is the area of maximum energy intensity. Its size is basically independent of the selected energy level. By contrast, the size of the treatment zone depends on the selected energy level and is generally larger than the focal zone.



-6dB focal zone and 5MPa treatment at different energy settings

Effects on the Body

Mechanotransduction — Occurs when a mechanical stimuli is initiated on the body and triggers a cellular response to activate the natural repair process.

Release of nitric oxide (NO) — leads to vasodilation, increased circulation, metabolic ctivity & angiogenesis

Migration of Stem Cells — increases cell proliferation, migration & differentiation

Anti-Inflammatory action - lowers the pro-inflammatory immune response, decreases cellular apoptosis and reduces necrosis

Stimulates natural anabolic & growth functions & increases tissue remodeling and regeneration



Replacing Parts

Refer to printed replacing parts sheet

You get 8 electrodes to start — so you have around 1,080 treatments at 500 shocks per treatment before you have to replace your first consumable.

This is the only device on the market where you can replace consumables in office.

*for other replacements refer to the replacing parts sheet in your binder



Intensity Guidelines

Refer to printed protocols sheet

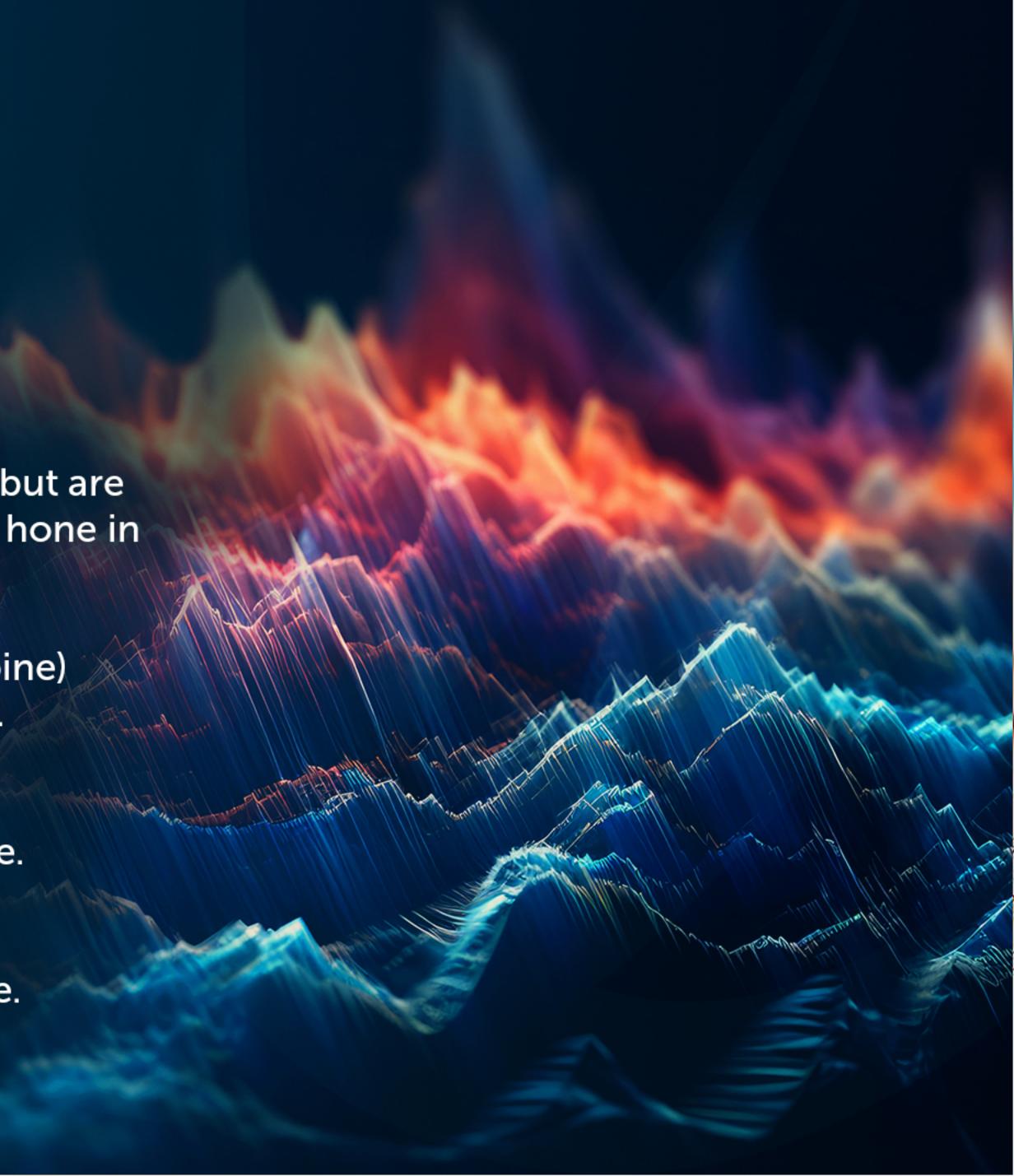
Quick Tip: Practice on your friends and family first.

The following instructions provides a template for care, but are not exact rules. As you become more proficient you will hone in on the INTENSITY used for Day 1 patients.

Less Dense Tissue Areas (hands, feet, elbows, cervical spine) Begin with an INTENSITY of 7-10 and gradually increase.

Dense Tissue Areas (shoulders, knees)
Begin with an INTENSITY of 10-15 and gradually increase.

More Dense Tissue Areas (Thoracis, Lumbar, Hips)
Begin with an INTENSITY of 12-17 and gradually increase.



Hertz Guidelines

Refer to printed protocols sheet

Begin with 2.0 for an initial Day 1 visit.

Continue to implement 2.0 Hertz for the next 1-2 visits or until you feel confident that you are utilizing each wave in the areas you intended to.

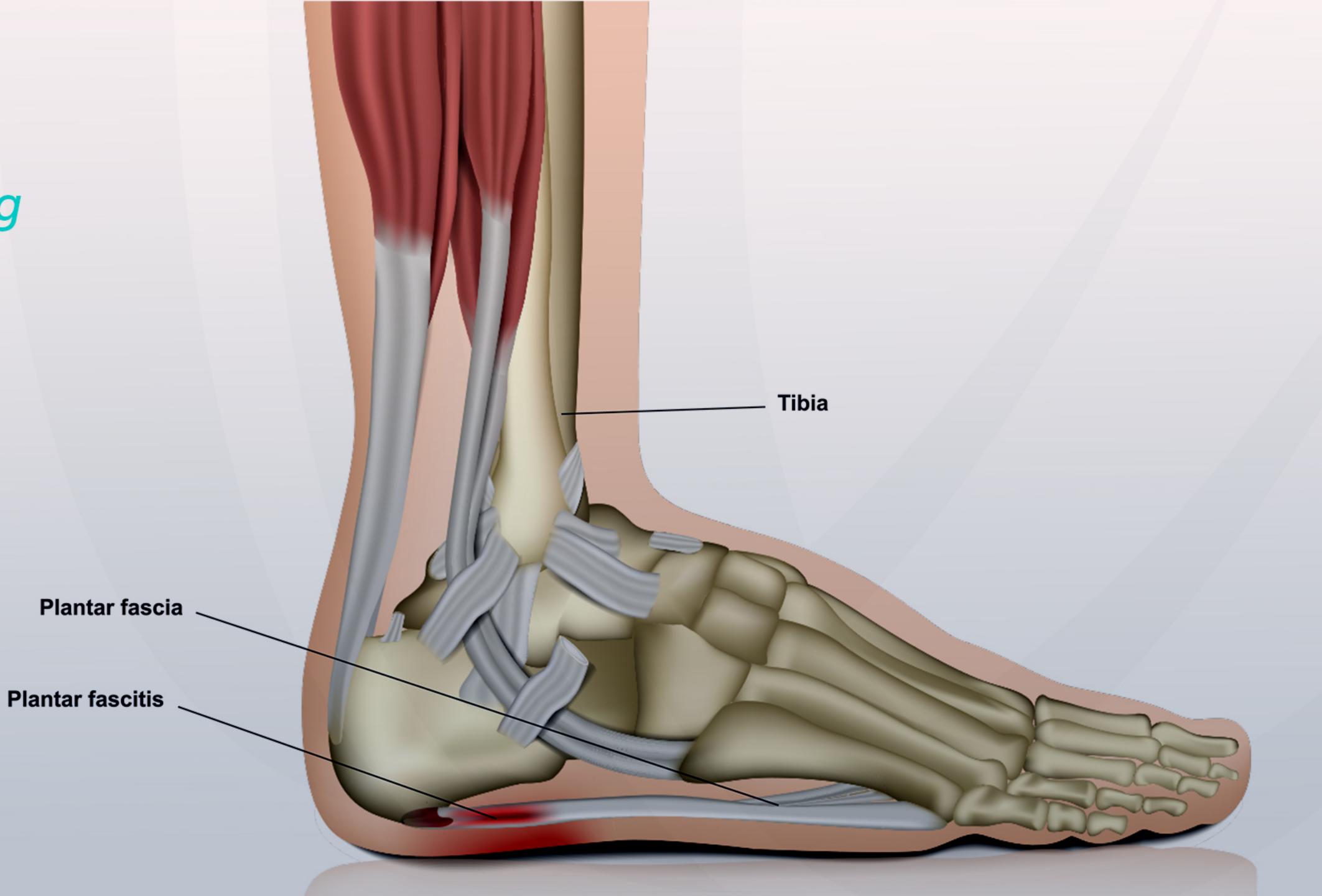
Thereafter, 3.0 is a common and you may use up to 4.0 Hertz.

Something to consider: 2.0 Hertz = 2 pulses/second, 3.0 Hertz = 3 pulses/second and so on. Be efficient with the use of pulses.

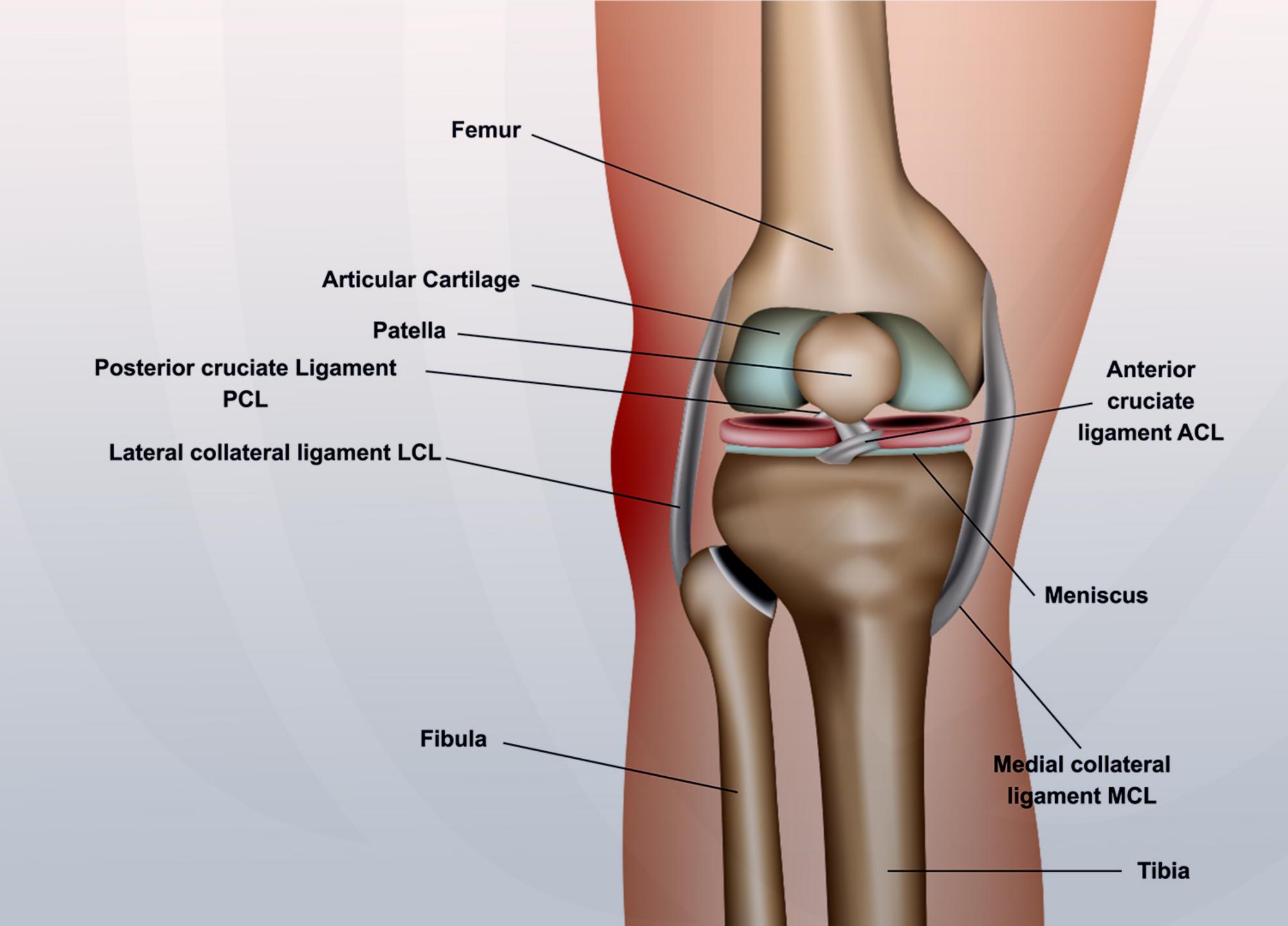
NOTE: As you INCREASE the Hertz, the amount of energy in an area increases per time. Therefore, be mindful that you may need/want to decrease the INTENSITY to an initial tolerance/condition level, then again increase accordingly.



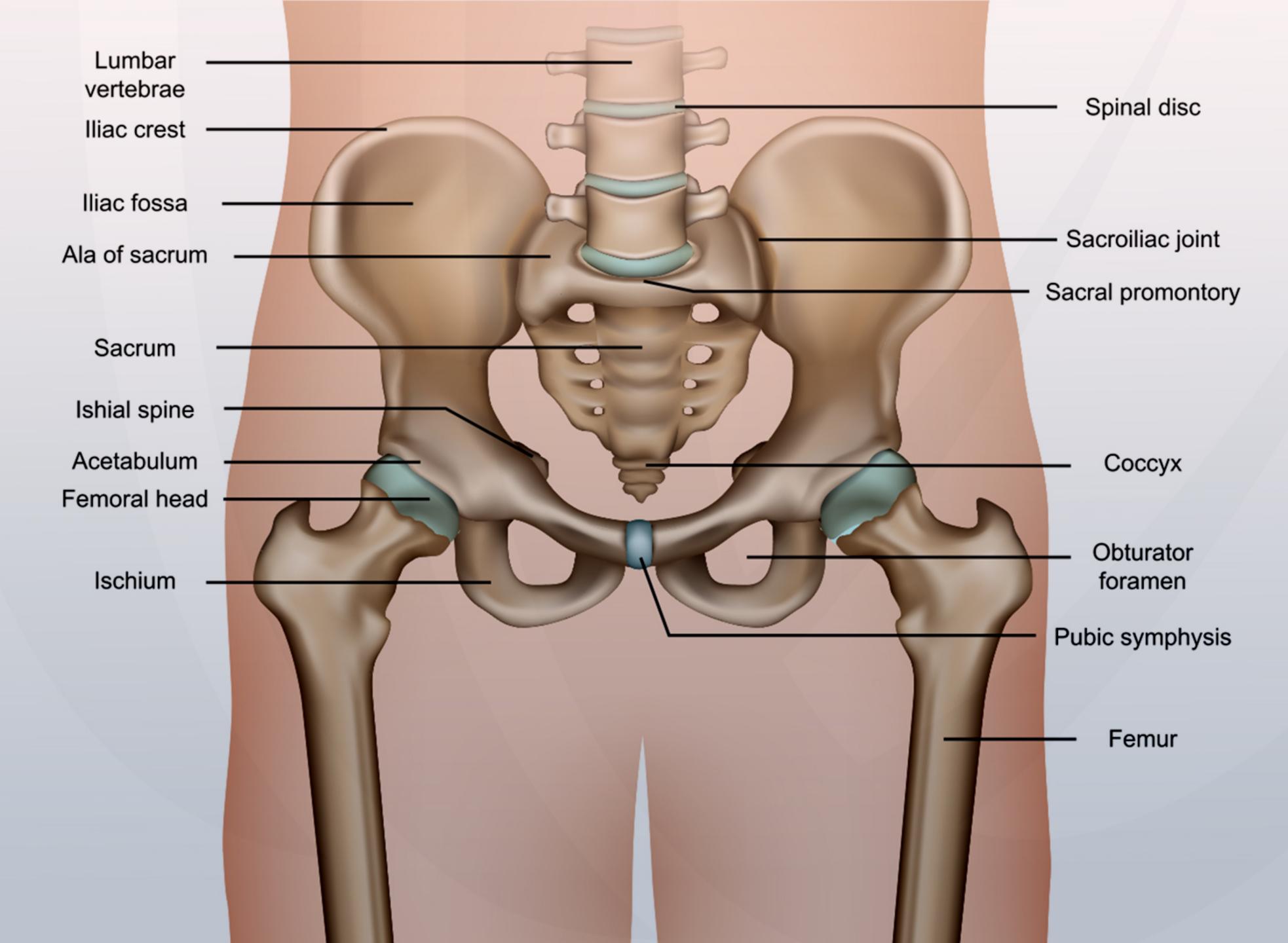
Foot Mapping



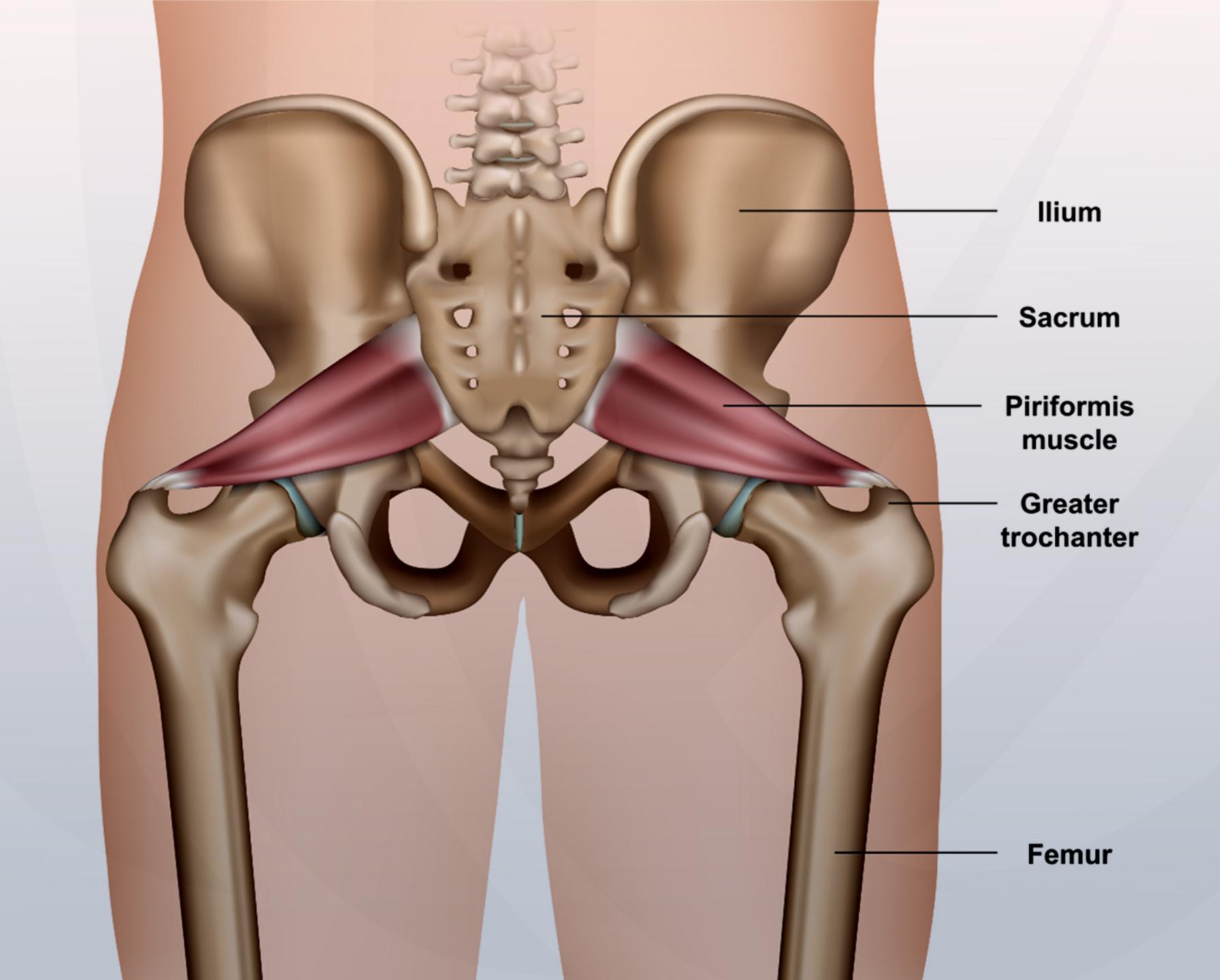
Knee Mapping



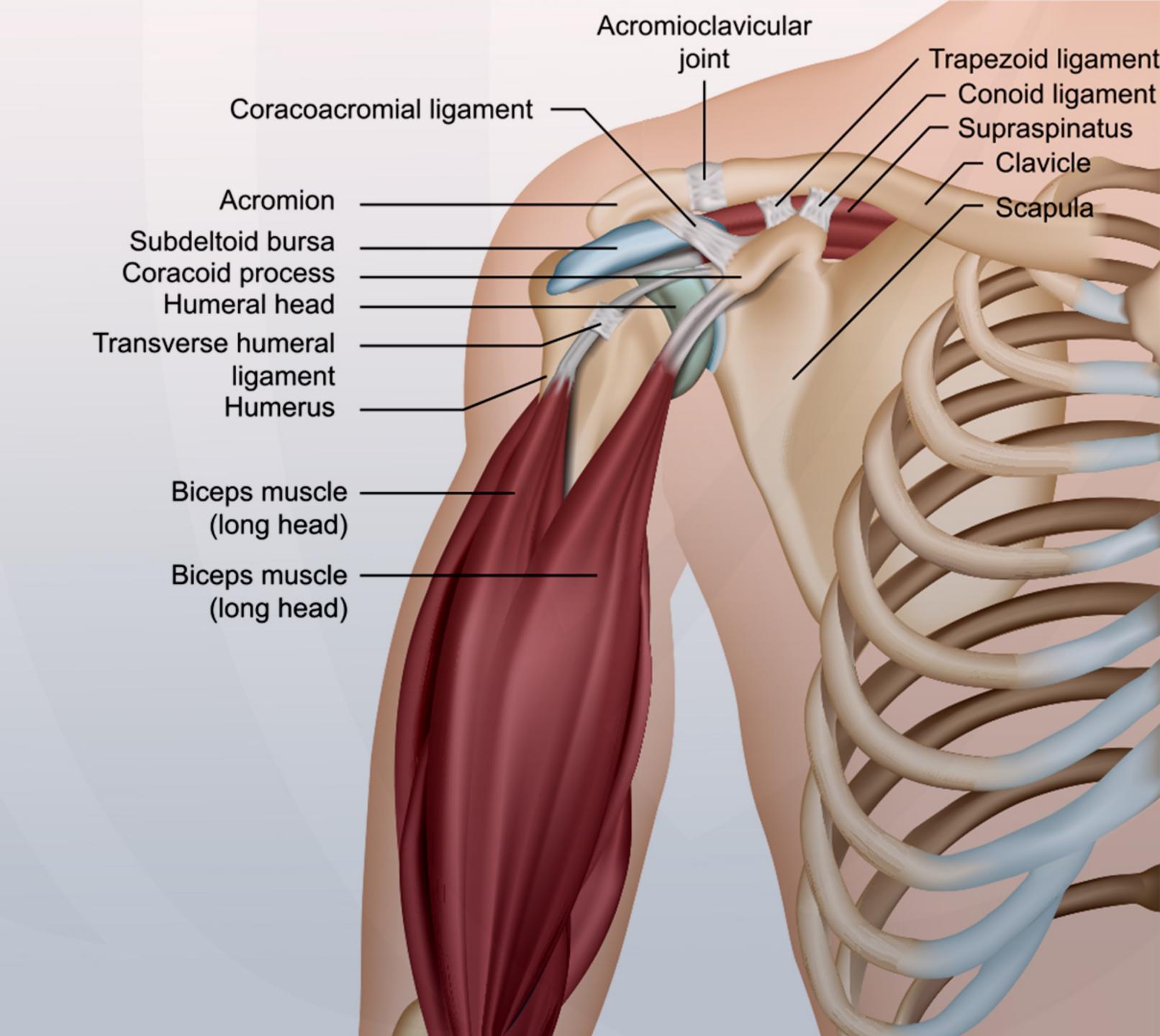
Hip Mapping



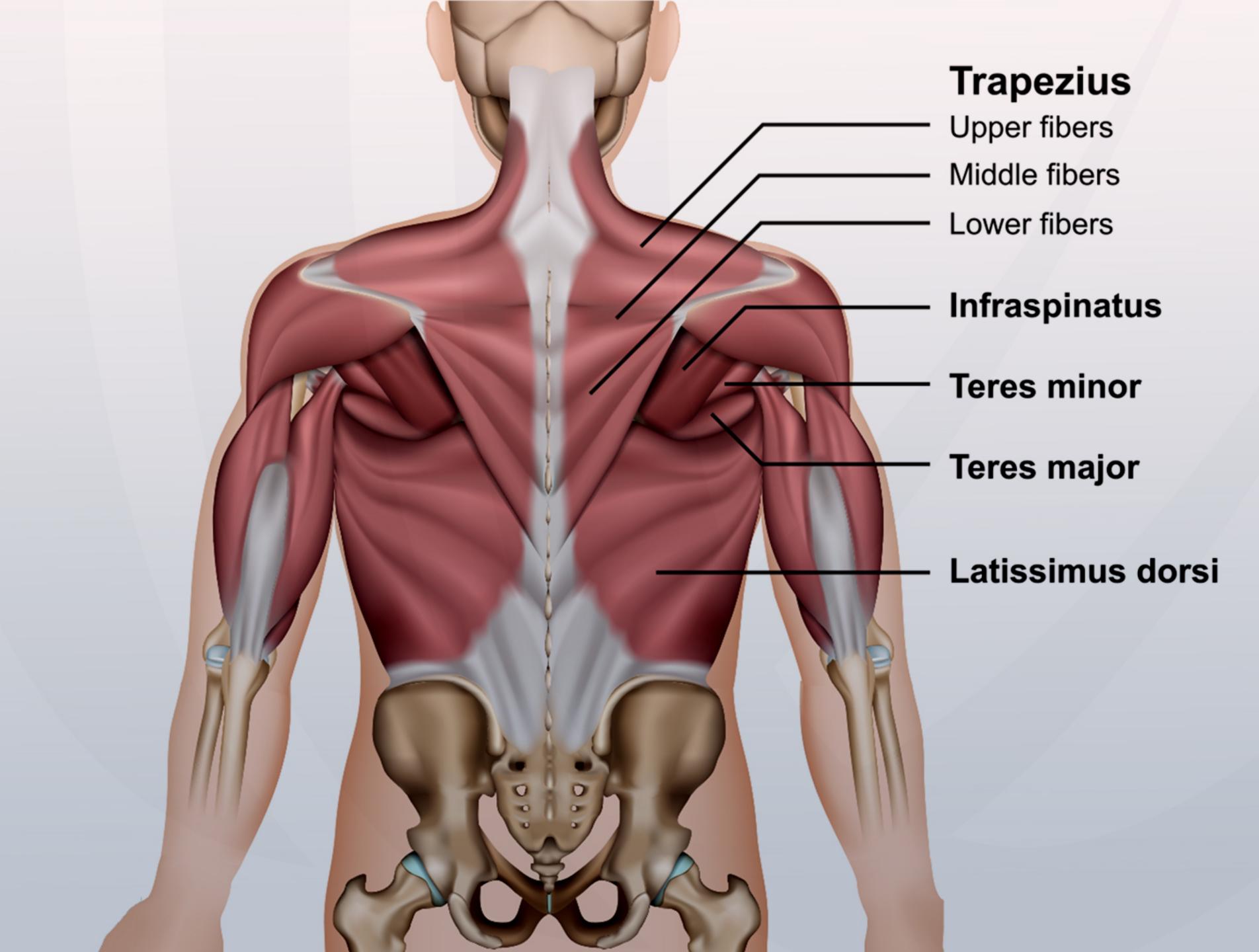
Pelvis Mapping



Shoulder *Mapping*



Back Mapping



Use your judgement as a doctor

Refer to printed protocols sheet as a guideline

Patient setbacks and/or accelerated progress can occur — consistency is key

Use your discretion as a doctor to determine if a patient would benefit from more or less pulses depending on their specific case.

Your results are directly correlated to how well you qualify the patient. Make sure to ask quality, clarifying questions and set clear expectations at each patient visit.

Qualifying your prospective patients before treating them will lead to better results, higher patient satisfaction, and build a trustworthy reputation. As amazing as this technology is, please keep in mind that it is not for everyone.



info@stemwave.com 361 Newbury St, Floor 5 Boston, MA 02115

