Most of our interventional pain management procedures are done in a procedure room using a special X-ray camera called a Fluoroscope.

**Procedures for Musculoskeletal and Spine Related Pain**
(back radiating to legs, or neck radiating to arm)

**Lumbar and Cervical Epidural Steroid Injections (ESI):**
ESI can help with pain caused from discs that are torn, bulging or herniated, as well as from narrowing of the spinal canal (a.k.a. spinal stenosis), and from arthritis and other causes that result in nerve compression and decreased blood flow. During an ESI, corticosteroid and local anesthetic medication are injected into the epidural space in order to reduce inflammation and relieve pain. Evidence shows that more than half of well-selected patients will benefit from ESI for at least 6 weeks.

**Lumbar and Cervical “Facet Block” and Radiofrequency (RF) Denervation:**
These procedures can help with pain coming from the spinal joints (facet joints) themselves. These joints may be painful from degenerative changes that occur with arthritis or through injury such as whiplash or frequent parachute jumps. Facet blocks are injections of local anesthetic onto nerves around the joints, or into the joints themselves. If this block reduces pain, it suggests that your pain is coming from the joints blocked, and that RF denervation (i.e. a controlled burn of the pain-transmitting nerve) might provide longer lasting relief. RF denervation uses RF energy to sever nerves so they no longer transmit pain from the facet joint. Evidence suggests that more than half of the patients who receive RF denervation will obtain at least 6 months of benefit.

**Sacro-iliac (SI) Joint Injection:**
The SI Joint connects your spine to your hip bone. Pain from this area often presents as low back or buttock pain. Corticosteroid and local anesthetic are injected into the SI joint for pain relief coming from this joint, and can be used to diagnose the condition. Clinical trials show that injections performed both into the joint and into the ligaments just outside of the joint can provide pain relief for more than 6 weeks, and that these injections may help determine candidates for more invasive, longer-lasting procedures such as RF SI joint denervation and SI joint fusion.

**Muscle/Myofascial Pain and Trigger Point Injections:**
Hypersensitive, tight bands of muscle called trigger points can also cause pain. Injections of local anesthetic into and around these areas help to break up these bands. These injections are often offered in conjunction with advice on stretching and a physical therapy program. Randomized studies have shown that these injections can provide pain relief and improved function for more than 6 weeks when accompanied by a physical exercise program.

**Joint Injections:**
Other joints such as knees, hips and shoulders can also be injected with local anesthetic and corticosteroid. For some of these joints (e.g. knees), if an injection provides only short-term relief, RF energy can be targeted to specific nerves to disrupt signal transmission and help ease joint pain. Evidence supports the use of corticosteroid injection for benefits lasting at least 6 weeks; and for knee pain, RF denervation to provide pain relief and improved function for at least 6 months.

**Medication:**
We use a multi-modal approach to medication management. This means that more than one type of treatment, or class of medication may be prescribed in order to target different pain pathways.
PAIN MANAGEMENT CLINIC
INTEGRATIVE MEDICINE TREATMENTS AND PROCEDURES

The American College of Physicians’ evidence-based guidelines recommend an integrative, multi-disciplinary approach to treating chronic low back pain. Evidence shows the following integrative therapies can help manage low back pain, as well as other pain conditions. Please place a check mark next to the therapies that you may be interested in trying so that you can discuss these options with your pain management provider:

- **Acupuncture (and other integrative medicine procedures)**
  Provided by physician acupuncturists in the Pain Management Clinic who also address other factors that may be causing, contributing to, or intensifying pain such as nutrition, sleep, function, activities, and stress management. Treatment goals are to reduce pain, increase function and improve quality of life.

- **Alpha-Stimulation**
  Provides cranial electrotherapy stimulation, a form of non-invasive brain stimulation that applies small, pulsed electric current across a person’s head to treat anxiety, insomnia, and chronic pain. The alpha-stimulation device also comes with handheld wands and pads that can be used to apply microcurrent electrical therapy directly to your pain site. (TRICARE only covers the cost of the device for in-home use for active duty service members. Other patients may trial the cranial electrotherapy portion of alpha-stimulation during in-office CBT appointments with our pain psychologists.)

- **Biofeedback**
  Biofeedback was developed based on the belief that pain causes stress on our body and mind, and that stress is associated with changes in the body such as increased heart rate and muscle tension, which can make it difficult to break the pain cycle. Biofeedback can help alter certain physiological processes within a person’s body by using cues (feedback) to help patients recognize the body’s response to pain and have more control over their physiological response.

- **Calmare* (available to active duty service members only)**
  A non-invasive medical device for treatment of severe chronic neuropathic pain using biophysical “scrambler” technology. Treatment involves daily visits (Monday-Friday) for two consecutive weeks.

  **Cognitive Behavioral Therapy (CBT) for chronic pain and insomnia**
  CBT is a form of psychotherapy that is based on the idea that a person’s perceptions of and behavioral reactions to pain have a direct impact on how they experience and cope with their pain. The goal of CBT is to reduce symptom severity (e.g., reduce pain severity, improve sleep quality), optimize functioning, and reduce the negative impact that pain can have on people’s lives.

- **Medical Yoga and Breathwork**
  Medical yoga providers work with patients to increase healthy movement by aligning breath with movement and providing adaptive poses to address their particular medical/pain condition.

- **Mind/Body Therapy**
  Mind/body practitioners incorporate a number of techniques that focus on the interactions between mind and body, including mindfulness practices, relaxation techniques, aromatherapy, and acupressure points.

- **Reiki**
  Reiki is an integrative health approach in which practitioners place their hands lightly on or just above a person, with the goal of facilitating the person’s own healing response.

*Unfortunately, these therapies may not be as widely accessible as we would like due to provider and space availability.