Effective March 1, 2013, the New York State Workers’ Compensation System will implement Medical Treatment Guidelines for Carpal Tunnel Syndrome. The following information is a brief summary of the guidelines as they relate to physical therapy services.

**General Guideline Principles:**

- Providers should evaluate the efficacy of the treatment or modality 2-3 weeks after the initial visit and 3-4 weeks thereafter.
- Treatment time frames for specific interventions commence once treatment is initiated, not on the date of injury.
- For patients who are not making expected progress 6-12 weeks after injury, re-examination in order to confirm the accuracy of the diagnosis should be made.
- Active therapeutic exercise program goals should incorporate patient strength, endurance, flexibility, range of motion, coordination, and education.

**Non-operative Treatment Procedures:**

- Initial treatment may include NSAIDS or other analgesics for symptomatic relief; wrist splint at night and restriction of activities.
- Patient education should include instruction in self-management techniques, including sleeping postures that avoid excessive wrist flexion, ergonomics and a home therapy program that includes heat treatment, stretching exercises, and nerve gliding, to provide symptomatic relief.
- Complete work cessation should be avoided if possible. All patients should be encouraged to return to work as soon as possible.

**Orthotics/Immobilization with Splinting:**

- Time to Produce Effect: 1-4 weeks. If after 4 weeks the patient has partial improvement, continue to follow since neuropathy may worsen even in the face of diminished symptoms.
- Frequency: During sleep hours. Daytime intermittent, depending on symptoms and activities.
- Optimum Duration: 2-4 months. If symptoms persist, consideration should be given to either repeating electrodiagnostic studies or to more aggressive treatment.
**Therapy: Active**

**Activities of Daily Living (ADL)** are well-established interventions that involve instruction, active-assisted training, and/or adaptation of activities or equipment to improve a person’s capacity in normal daily activities such as self care, work re-integration training, homemaking, and driving.

- Time to Produce Effect: 4-5 treatments
- Frequency: 3-5 times per week
- Optimum Duration: 4-6 weeks
- Maximum Duration: 6 weeks

**Functional Activities** are interventions that involve the use of therapeutic activity to enhance mobility, body mechanics, employability, coordination, and sensory motor integration.

- Time to Produce Effect: 4-5 treatments
- Frequency: 3-5 times per week
- Optimum Duration: 4-6 weeks
- Maximum Duration: 6 weeks

**Nerve Gliding Exercises** consist of range of motion (ROM) exercises of the upper extremity and neck that produce tension and longitudinal movement along the length of the median and other nerves of the upper extremity. The exercises are simple to perform and can be done by the patient after brief instruction.

- Time to Produce Effect: 2-4 weeks
- Frequency: Up to 5 times per day by patient (patient-initiated)
- Optimum Duration: 2 provider-directed sessions
- Maximum Duration: 3 provider-directed sessions

**Neuromuscular Re-education**: Indications include the need to promote neuromuscular responses through carefully timed proprioceptive stimuli, to elicit and improve motor activity in patterns similar to normal neurologically developed sequences, and improve neuromotor response with independent control.

- Time to Produce Effect: 2-6 treatments
- Frequency: 3 times per week
- Optimum Duration: 4-8 weeks
- Maximum Duration: 8 weeks

**Therapeutic Exercise** with or without medical assistance or resistance may include isointertial, isotonic, isometric, and isokinetic types of exercises.

- Time to Produce Effect: 2-6 treatments
- Frequency: 3-5 times per week
- Optimum Duration: 4-8 weeks
- Maximum Duration: 8 weeks
**Therapy: Passive:** Should be used in adjunct with active therapies to help control swelling, pain and inflammation during the rehabilitation process. May be used intermittently as a therapist deems appropriate or regularly if there are specific goals with objectively measured functional improvements during treatment.

**Electrical Stimulation (Unattended):** Once applied, requires minimal on-site supervision by the physician or non-physician provider.

- Time to Produce Effect: 2-4 treatments
- Frequency: Varies, depending upon indication, between 2-3 times/day to 1 time/week. Provide home unit if frequent use.
- Optimum Duration: 2-4 weeks
- Maximum Duration: Home unit as needed

**Iontophoresis, Magnets or Laser Acupuncture:** These interventions are not recommended

**Low Level Laser:** Not recommended

**Manual Therapy Techniques:** There is no evidence supporting manipulation of the spine for treatment of CTS. There is no clear evidence supporting carpal bone mobilization or manual therapy. However, other myofascial components that may occur with CTS may be treated with manual therapy.

**Massage Manual or Mechanical:** Indications include edema, muscle spasm, adhesions, the need to improve peripheral circulation and range of motion, or to increase muscle relaxation and flexibility prior to exercise.

- Time to Produce Effect: Immediate
- Frequency: 1-2 times per week
- Optimum Duration: 6 weeks
- Maximum Duration: 2 months

**Paraffin Bath:** Accepted indications include the need to enhance collagen extensibility before stretching, reduce muscle guarding, or reduce inflammatory response.

- Time to Produce Effect: 1-4 treatments
- Frequency: 1-3 times per week
- Optimum Duration: 4 weeks
- Maximum Duration: 1 month. If beneficial, provide with home unit or purchase if effective.
Superficial Heat and Cold Therapy: For the reduction of pain, inflammation, and/or effusion resulting from injury or induced by exercise. Indications include acute pain, edema, need to increase pain threshold, reduce muscle spasm and promote stretching/flexibility. Cold and heat packs can be used at home as an extension of therapy in the clinic setting.

- Time to Produce Effect: Immediate
- Frequency: 2-5 times per week (clinic). Home treatment as needed.
- Optimum Duration: 3 weeks as primary or intermittently as an adjunct to other therapeutic procedures up to 2 months.
- Maximum Duration: 2 months. If symptoms persist, consideration should be given to further diagnostic studies or other treatment options.

Ultrasound: This treatment may be used in conjunction with an active therapy program for non-surgical patients who do not improve with splinting and activity modification.

- Time to Produce Effect: Immediate
- Frequency: 1-2 times per week
- Optimum Duration: 6 weeks
- Maximum Duration: Ultrasound treatments may extend longer if objective functional gains can be documented or when benefits facilitate progression in the patient’s treatment program. *Treatment beyond 12 sessions must be documented with respect to the need and ability to facilitate positive functional gains.*

Ongoing Maintenance Care

A maintenance program of PT or OT may be indicated in certain situations, after the determination of MMI (Maximum Medical Improvement), when tied to maintenance of functional status.

- Although the current body of scientific evidence as reviewed does not support the routine use of this intervention, maintenance therapy modalities may be indicated in certain situations in order to maintain functional status, without which an objective deterioration of function has been previously observed and documented in the medical record.

- Specific object goals should be identified and measured in order to support the need for ongoing maintenance care.

- Progressively longer trials of therapeutic withdrawal are to be attempted to ascertain whether therapeutic goals can be maintained in the absence of clinical interventions.

- Within a year and annually thereafter, a trial without maintenance treatment should be instituted.
The care of chronic CTS symptoms should include an ongoing patient self-management program performed by the patient regularly and self-directed pain management program initiated as indicated:

- An ongoing clinically appropriate self-management program typically independent, home-based, and self-directed, developed jointly by the provider and patient, should be implemented to encourage physical activities despite residual pain, with the goal of preserving function.

- In addition to the self-management program, a self-directed pain management plan should be developed, which can be initiated by the patient in the event that symptoms worsen and function decreases.

If deterioration of ability to maintain function is documented, reinstatement of ongoing maintenance may be acceptable.

Frequency: Maximum up to 10 visits/year, after determination of MMI, according to objectively documented maintenance of functional status. No variance from the maximum frequency is permitted.

Postoperative Treatment

Rehabilitation

Two postoperative visits are recommended to ensure appropriate scar management and two additional visits, at intervals of four to six weeks afterwards, are recommended to ensure appropriate return to function.

The postoperative rehabilitation program should be based on communication between the treating physician and the therapist. In all cases, communication between the physician and therapist is important to the timing of exercise progression.

- Time to Produce Effect: Immediate
- Frequency: 2-3 times a week
- Optimum Duration: 6 weeks
- Maximum Duration: 12 weeks.