

MEDICAL PROTOCOLS: INTRODUCTION



BACKGROUND

Workers' Compensation Medical Protocols first became effective on January 1, 1996 as a result of legislative changes to Section 31-280 of the Workers' Compensation Act.

These protocols will be used by the Commission to evaluate whether a treatment is reasonable and appropriate based on the diagnosis of injury or illness.

The protocols are not meant to be absolute; there must be room for medical judgment. Medical providers are urged to contact the insurer, if they feel that a treatment pattern other than the published protocol is required.

It is expected that the payer will work with the provider to ensure that the injured worker receives the most appropriate treatment.

NEW

In consultation with practitioners, insurers and the Medical Advisory Panel, the medical protocols for treatment of injuries to the lumbar spine and cervical spine have been updated. These revisions reflect the latest changes in the medical field regarding new procedures, treatments and diagnostic tests.

Additionally, protocols for opioid management have been created. The Commission recognizes that some injured workers may require opioids for the management of their acute and chronic pain.

Proper opioid management is essential for the safe and efficient care of injured workers.

EFFECTIVE DATES

The effective date of the revised portions of the protocols (lumbar spine, cervical spine, and opioid management) is July 1, 2012.

The other portions of the protocols (musculoligamentous injury of the arm, hand, or leg) continue in effect, having first become effective on January 1, 1996.

FUTURE UPDATES

The Commission, along with practitioners, insurers and the Medical Advisory Panel, is currently working on updates to the medical protocols for treatment of injuries to the shoulder, knee and hand.

These will be published upon completion.

Check the Commission's website at wcc.state.ct.us for notification of updates to the medical protocols.

ACKNOWLEDGMENTS

The Commission is grateful to the medical professionals who have spent and continue to spend many hours working with us to bring the most appropriate and the highest standard of care to injured workers in Connecticut.



OPIOID MANAGEMENT OF THE INJURED PATIENT

OVERVIEW

Proper opioid management is essential for the safe and efficient care of injured patients. The WCC recognizes that some injured patients may require opioids for the management of their acute and chronic pain. It is not the intention of the WCC to restrict the proper medical use of this class of medications, however responsible prescribing is mandatory. Additionally, studies have shown that injured workers placed on high dose opioids early in the post-injury period may experience a slower recovery, more difficulty with returning to work, more difficulty with weaning, and more frequently end up on long term opioids.

During the first two weeks post injury, low dose, short acting opioids may be appropriate for those with more severe injuries. Even during the acute phase it is preferred that the injured worker avoid opioid medications when possible. During the remaining portion of the acute and subacute period, attempts should be made to wean and discontinue opioid medications as appropriate (i.e. – as symptoms improve) and as soon as possible. Dose escalation during these periods should be avoided, as the injury should be stabilized and healing. Medications that are deemed to be inappropriate for the vast majority of injured patients include immediate release, ultra-short acting sublingual and nasal opioid preparations. Long acting opioids are not recommended in the acute and sub-acute phases of treatment. In addition, following major surgical interventions, as acute postoperative pain resolves attempts should be made to wean medications as soon as possible, again avoiding dose escalation beyond the acute post-operative period.

Opioids are not meant to completely eliminate pain, but to ease symptoms and improve function (i.e. - improvement of work capacity, ADL's, sleep and sexual function). Any continuation of medications beyond the first two week period must include proper documentation of improvement in pain level (VAS or other screening tool) and improvement in function or work capacity. At each visit history should be obtained to ensure medications are providing the desired pain reducing effect and looking specifically for side effects such as over sedation, cognitive impairment, or inappropriate medication usage. Any patient maintained beyond a four week period on chronic medications should have appropriate compliance monitoring documented. This should occur through history, screening questionnaires, prescription monitoring programs queries, urine drug tests (up to 2x/yr. for a stable, low risk patient and more frequently as indicated for high risk patients), and/or pill counts, as deemed appropriate by the physician. Patients continuing on opioids longer than 4 weeks should be managed under a narcotic agreement as recommended by the Federation of State Medical Boards. Medical necessity should be documented as to the need for all opioid prescriptions in terms of measured improvement in pain, function or work capacity.

If an injured patient requires opioid maintenance longer than 12 weeks, evaluation/consultation and treatment by a physician with appropriate specialty training in pain management should be considered. Documentation of medical necessity, including gains in pain, function or work capacity, is mandatory for prescribing beyond what is described within these guidelines.

The total daily dose of opioids should not be increased above 90mg oral MED (Morphine Equivalent Dose) unless the patient demonstrates measured improvement in function, pain or work capacity. Second opinion is recommended if contemplating raising the dose above 90 MED.

Before prescribing opioids for chronic pain, potential comorbidities should be evaluated. These include opioid addiction, drug or alcohol problems and depression. A baseline urine test for drugs of abuse and assessment of function and pain should be performed prior to institution of opioids for chronic pain.

GUIDELINES FOR PRESCRIBING

Single prescriber

Single pharmacy

Opioid Agreement

Caution should be used with combination therapy, sedative-hypnotics, benzodiazepines, barbiturates, and muscle relaxants

Routine assessment of pain and function, if there is no improvement, weaning of opioid

REASONS TO DISCONTINUE OPIOIDS OR REFER FOR ADDICTION MANAGEMENT

No measured improvement in function and/or pain,

or

Opioid therapy produces significant adverse effects,

or

Patient exhibits drug-seeking behaviors or diversion such as:

- Selling prescription drugs
- Forging prescriptions
- Stealing or borrowing drugs
- Frequently losing prescriptions
- Aggressive demand for opioids
- Injecting oral/topical opioids
- Unsanctioned use of opioids
- Unsanctioned dose escalation
- Concurrent use of illicit drugs
- Failing a drug screen
- Getting opioids from multiple prescribers
- Recurring emergency department visits for chronic pain management

If there is no measured improvement in pain, function, ADL's or work capacity after 3 months of opioid medication, the prescribing physician must justify the continued use of opioids and should consider weaning of the opioid.

Opioids may allow the patient to return to work safely and more expeditiously and therefore may be indicated, nevertheless attempts to wean these medications and avoidance of dose escalation should be the goal of treatment. This document is meant as a guideline for the practitioner and should not supplant proper medical judgment.

SAMPLE OPIOID EQUIVALENCY TABLE

OPIOID	MED
Codeine	0.15
Fentanyl Transdermal	2.4
Hydrocodone	1
Hydromorphone	4
Methadone up to 20mg	4
Methadone 21-40mg	8
Methadone 41-60mg	10
Methadone >60mg	12
Morphine	1
Oxycodone	1.5
Oxymorphone	3



NECK PAIN HISTORY AND PHYSICAL EXAMINATION

HISTORY OF PRESENT ILLNESS	MEDICATIONS	ALLERGIES	PAST MEDICAL / SURGICAL HISTORY	SOCIAL HISTORY	REVIEW OF SYSTEMS	PHYSICAL EXAMINATION
<p>Description of Injury:</p> <p>This includes details of events before, during, and immediately after the alleged injury including the mechanism of injury. Identification of body parts involved, location of pain, characteristics of the pain, distribution of the pain symptoms, frequency and duration of symptoms, and alleviating/exacerbating factors. Any limitations in functional activities should be noted.</p> <p>The history should include the presence and distribution of any upper extremity numbness, paresthesias, or weakness and a description as to whether or not it is precipitated or worsened by coughing or sneezing. Any changes in gait, bowel, bladder or sexual function should be identified as they may indicate a more severe spinal injury. The presence of a serious or progressive neurological deficit demands immediate attention and appropriate triage. The possibility of neck pain from other non-traumatic sources should be investigated by asking questions about fever, rash, swelling, unexplained weight loss, morning stiffness etc. A visual analog pain scale should be used and monitored at each visit. The patient should be asked their current rating, average over the last week and range from low to high. Note any history of emotional and/or psychological response to the current injury.</p>	<p>History should include previous medications taken for this neck injury and a list of all current medications including dose and frequency. Any significant side effects from previous medications should be noted.</p>	<p>Medication allergies should be verified at every visit.</p>	<p>Identify any previous occupational and non-occupational injuries to the same area. Determine if the patient has any history of non-traumatic neck problems such as arthritis, cancer, surgery etc. Document any prior neck treatment, chronic or recurrent symptoms, response to previous treatment, and any functional limitations or previous restrictions in work capacity.</p>	<p>Smoking, alcohol and other drug use, vocational and recreational activities should be identified.</p>	<p>Cardiac, endocrine, gastrointestinal, hematological, infectious, neurologic, neoplastic, renal, rheumatologic, and other systemic disease symptoms should be identified.</p>	<p>Vital signs; weight, general appearance including posture and any pain behaviors. Signs of symptom amplification should be noted. Visual inspection of neck. Palpation of cervical spine including midline, paraspinal and posterior elements, trapezius, and shoulders. Range of motion, quality of motion, exacerbating or alleviating motions of neck and shoulders, and presence of muscle spasm should be noted. Nerve tension compression should be noted. Sensory and motor examination of the upper and lower extremities with specific description of abnormalities. Deep tendon reflexes and any pathological reflexes should be noted. Assessment of transfers and gait.</p> <p>In cases where the mechanism of injury, history, or clinical presentation suggests a possible severe injury, additional evaluation is indicated. A detailed neurological examination for possible spinal cord injury should include sharp and light touch, deep pressure, temperature, and proprioceptive sensory function; anal sphincter tone and/or perianal sensation.</p>



ACUTE AXIAL NECK INJURY (LESS THAN 4 WEEKS)

DIAGNOSTIC CRITERIA	DIAGNOSTIC STUDIES	TREATMENT	GOALS OF TREATMENT	IF GOALS NOT MET
<p>Complete History, PE and Pain Diagram on initial visit</p> <p>Height and Weight (BMI)</p> <p>On each visit document:</p> <ul style="list-style-type: none"> a. Primary Diagnosis b. Precise location and character of pain c. VAS Pain level d. Exam pertinent to injured body part e. Functional Capacity f. Appraisal of ADL's and functional activity <p>Work Capacity and Status</p>	<p>Recommended:</p> <p>No x-rays unless indicated by amount of trauma or based on documented medical suspicion</p> <p>MRI or CT myelogram for progressive neurological deficit</p>	<p>Recommended:</p> <p>Chiropractic or Physical Therapy:</p> <ol style="list-style-type: none"> 1. Encourage increased activity ASAP 2. Education 3. Active treatment strengthening and aerobic as tolerated 4. Passive modalities up to 2 weeks <p>Up to 12 visits – document functional and VAS improvement to continue after 8 visits</p> <p>Medications:</p> <ol style="list-style-type: none"> 1. NSAIDS 2. Acetaminophen 3. Muscle Relaxants 4. Opioid – see opioid protocol <p>Injections:</p> <p>See IPM Protocol</p> <p>Follow-up:</p> <p>1 week, if work modified</p> <p>4 weeks, if no work modification</p> <p>Not Recommended:</p> <p>Bed Rest</p>	<p>Recommend RTW:</p> <ol style="list-style-type: none"> a. Sedentary 0-3 days b. Light-Med 7-17 days c. Heavy 14-35 days <p>Contingent on assessment of functional capacity</p>	<p>Document:</p> <ol style="list-style-type: none"> a. Compliance b. No Show/Cancel c. Effort: clinic & home <p>Consider Oral Steroids for severe pain</p>



SUBACUTE AXIAL NECK INJURY (1-3 MONTHS)

DIAGNOSTIC CRITERIA	DIAGNOSTIC STUDIES	TREATMENT	GOALS OF TREATMENT	IF GOALS NOT MET
<p>Complete History, PE and Pain Diagram on initial visit</p> <p>Height and Weight (BMI)</p> <p>On each visit document:</p> <ul style="list-style-type: none"> a. Primary Diagnosis b. Precise location and character of pain c. VAS Pain level d. Current Meds e. Exam pertinent to injured body part f. Functional Capacity g. Appraisal of ADL's and functional activity <p>Work Capacity and Status</p> <p>Appraise compliance</p> <p>Consider specialty referral, if not improving</p>	<p>Recommended:</p> <p>X-Ray, especially if previous injury or surgery</p> <p>MRI after 6 weeks, if clinically indicated</p> <p>Not Recommended:</p> <p>CT Scan</p> <p>Discogram</p>	<p>Chiropractic or Physical Therapy:</p> <p>No isolated passive treatment</p> <p>Exercise, strengthening, core, aerobic – assess and document progress</p> <p>Up to 12 additional visits based on measured improvement in VAS, function and work capacity.</p> <p>Assess BMI and smoking and counsel appropriately</p> <p>Medications:</p> <ol style="list-style-type: none"> 1. NSAIDS 2. Acetaminophen 3. Opioid – see opioid protocol 4. Antidepressants 5. Muscle Relaxants <p>Injections:</p> <p>See IPM Protocol</p> <p>Limited Indication:</p> <p>Anticonvulsants</p>	<p>Recommend RTW:</p> <ul style="list-style-type: none"> a. Sedentary 0-3 days b. Light-Med 7-17 days c. Heavy 14-35 days <p>Contingent on assessment of functional capacity</p>	<p>Consider alternative cause</p> <p>Consider psychological factors – see Psychological Guideline</p> <p>Administer standard psych assessment tool such as ODI</p>



CHRONIC AXIAL NECK INJURY (GREATER THAN 3 MONTHS)

DIAGNOSTIC CRITERIA	DIAGNOSTIC STUDIES	TREATMENT	GOALS OF TREATMENT	IF GOALS NOT MET
<p>Complete History, PE and Pain Diagram on initial visit</p> <p>Height and Weight (BMI)</p> <p>On each visit document:</p> <ul style="list-style-type: none"> a. Primary Diagnosis b. Precise location and character of pain c. VAS Pain level d. Current Meds e. Exam pertinent to injured body part f. Functional Capacity g. Appraisal of ADL's and functional activity <p>Work Capacity and Status</p> <p>Appraise compliance</p> <p>Consider specialty referral, if not improving</p>	<p>Recommended:</p> <p>X-rays Consider F&E x-rays</p> <p>MRI if not already done</p> <p>Consider CT to evaluate bony anatomy</p> <p>Consider SPECT scan to evaluate for pseudoarthrosis from previous surgery or alternative causes of neck pain</p>	<p>Recommended:</p> <p>Chiropractic or Physical Therapy</p> <p>No passive modalities</p> <p>Exercise, strengthening, core, aerobic – assess and document measured improvement in VAS, functional and work capacity to continue treatment.</p> <p>TENS (not isolated Rx) only if compliant with other modalities and not improving</p> <p>Assess BMI and smoking and counsel appropriately</p> <p>Weight reduction for BMI > 30</p> <p>Medications:</p> <ol style="list-style-type: none"> 1. NSAIDS 2. Acetaminophen 3. Opioid – see opioid protocol 4. Antidepressants 5. Muscle Relaxants <p>Injections: See IPM Guideline</p> <p>Not Recommended: Bed Rest Anticonvulsants</p>	<p>Recommend RTW:</p> <ul style="list-style-type: none"> a. Sedentary 0-3 days b. Light-Med 7-17 days c. Heavy 14-35 days <p>Contingent on assessment of functional capacity</p>	<p>Consider alternative cause</p> <p>Consider psychological factors – see Psychological Guideline</p> <p>Administer standard psych assessment tool such as ODI</p> <p>Consider time limited behavioral cognitive therapy</p> <p>FCE – Vocational Rehab</p> <p>Change of job</p> <p>Surgery may be considered for appropriate cases – see Surgery page</p>



ACUTE CERVICAL RADICULOPATHY (LESS THAN 4 WEEKS)

DIAGNOSTIC CRITERIA	DIAGNOSTIC STUDIES	TREATMENT	GOALS OF TREATMENT	IF GOALS NOT MET
<p>Complete History, PE and Pain Diagram on initial visit</p> <p>Height and Weight (BMI)</p> <p>On each visit document:</p> <ul style="list-style-type: none"> a. Primary Diagnosis b. Precise location and character of pain c. Accurate description of weakness, sensory and reflex abnormalities d. Root tension signs e. VAS Pain level and/or leg on each visit f. Functional Capacity g. Appraisal of ADL's and functional activity <p>Work Capacity and Status</p>	<p>Recommended:</p> <p>No x-rays (unless indicated by amount of trauma or based on documented medical suspicion)</p> <p>MRI or CT myelogram for progressive neurological deficit</p> <p>Not Recommended:</p> <p>CT (unless indicated by degree of trauma)</p> <p>Discogram</p>	<p>Recommended:</p> <p>Chiropractic or Physical Therapy:</p> <ol style="list-style-type: none"> 1. Encourage increased activity ASAP 2. Education 3. Active treatment strengthening and aerobic, as tolerated 4. Passive modalities up to 2 weeks 5. Traction <p>Up to 12 visits – document functional and VAS improvement to continue after 8 visits</p> <p>Medications:</p> <ol style="list-style-type: none"> 1. NSAIDS 2. Steroids, if severe 3. Muscle Relaxants – 2 weeks 4. Opioid – see opioid protocol 5. Anticonvulsants 6. Antidepressants 7. Acetaminophen <p>Injections:</p> <p>See Injection Guideline</p> <p>Follow-up:</p> <p>Within 2 weeks</p> <p>Not Recommended:</p> <p>Bed Rest</p>	<p>Recommend RTW:</p> <ol style="list-style-type: none"> a. Sedentary 0-3 days b. Light-Med 7-17 days c. Heavy 14-35 days <p>Contingent on assessment of functional capacity</p>	<p>Document:</p> <ol style="list-style-type: none"> a. Compliance b. No Show / Cancels c. Effort: clinic & home



SUBACUTE CERVICAL RADICULOPATHY (1-3 MONTHS)

DIAGNOSTIC CRITERIA	DIAGNOSTIC STUDIES	TREATMENT	GOALS OF TREATMENT	IF GOALS NOT MET
<p>Complete History, PE and Pain Diagram on initial visit</p> <p>Height and Weight (BMI)</p> <p>On each visit document:</p> <ul style="list-style-type: none"> a. Primary Diagnosis b. Precise location and character of pain c. Accurate description of weakness, sensory and reflex abnormalities d. Root tension signs e. VAS Pain level and/or leg on each visit f. Functional Capacity g. Appraisal of ADL's and functional activity <p>Current Meds</p> <p>Work Capacity and Status</p> <p>Appraise compliance</p> <p>Consider specialty referral, if not improving</p>	<p>Recommended:</p> <p>X-ray (especially if previous injury or surgery)</p> <p>MRI</p> <p>Consider CT to evaluate bony anatomy for foraminal stenosis</p> <p>EMG (needle) with neurological signs and symptoms and equivocal MRI or CT findings</p> <p>Not Recommended:</p> <p>Discogram</p>	<p>Recommended:</p> <p>Chiropractic or Physical Therapy:</p> <ol style="list-style-type: none"> 1. No isolated passive Rx, except traction 2. Exercise, strengthening, core, aerobic – assess and document progress 3. Additional visits based on measured Improvement in VAS, functional and work capacity 4. Assess BMI and smoking and counsel appropriately <p>Medications:</p> <ol style="list-style-type: none"> 1. NSAIDS 2. Antidepressants 3. Anticonvulsants 4. Acetaminophen 5. Opioid – see opioid protocol <p>Injections:</p> <p>See IPM Guideline</p> <p>Follow-up:</p> <p>Within 3 weeks</p> <p>Not Recommended:</p> <p>Bed Rest</p>	<p>Recommend RTW:</p> <ul style="list-style-type: none"> a. Sedentary 0-3 days b. Light-Med 7-17 days c. Heavy 14-35 days <p>Contingent on assessment of functional capacity</p>	<p>Document compliance</p> <p>Consider psychological factors – see Psychological Guideline</p> <p>Administer standard psych assessment tool (such as ODI)</p> <p>Consider surgery for compressive radiculopathy</p>



CHRONIC CERVICAL RADICULOPATHY (GREATER THAN 3 MONTHS)

DIAGNOSTIC CRITERIA	DIAGNOSTIC STUDIES	TREATMENT	GOALS OF TREATMENT	IF GOALS NOT MET
<p>Complete History, PE and Pain Diagram on initial visit</p> <p>Height and Weight (BMI)</p> <p>On each visit document:</p> <ul style="list-style-type: none"> a. Primary Diagnosis b. Precise location and character of pain c. Accurate description of weakness, sensory and reflex abnormalities d. Root tension signs e. VAS Pain level and/or leg on each visit f. Functional Capacity g. Appraisal of ADL's and functional activity <p>Current Meds</p> <p>Work Capacity and Status</p> <p>Appraise compliance</p> <p>Consider specialty referral, if not improving</p>	<p>Recommended:</p> <p>X-ray (especially if previous injury or surgery)</p> <p>MRI</p> <p>Consider CT to evaluate bony anatomy for foraminal stenosis</p> <p>EMG (needle) with neurological signs and symptoms and equivocal MRI or CT findings</p>	<p>Recommended:</p> <p>Chiropractic or Physical Therapy:</p> <ol style="list-style-type: none"> 1. No isolated passive Rx, except traction 2. Exercise, strengthening, core, aerobic – assess and document progress 3. Assess BMI and smoking and counsel appropriately 4. Weight reduction for BMI>30 <p>Medications:</p> <ol style="list-style-type: none"> 1. NSAIDS 2. Antidepressants 3. Anticonvulsants 4. Acetaminophen 5. Opioid – see opioid protocol <p>Injections:</p> <p>See IPM Guideline</p> <p>Surgery:</p> <p>If documented compression</p> <p>Not Recommended:</p> <p>Bed Rest</p>	<p>Recommend RTW:</p> <ol style="list-style-type: none"> a. Sedentary 0-3 days b. Light-Med 7-17 days c. Heavy 14-35 days <p>Contingent on assessment of functional capacity</p>	<p>EMG to document neurological status</p> <p>Consider psychological factors – see Psychological Guideline</p> <p>Administer standard psych assessment tool (such as ODI)</p> <p>Consider time-limited behavioral cognitive therapy</p> <p>FCE – Vocational Rehab</p> <p>Functional Restoration Program</p> <p>Spinal Cord Stimulation:</p> <ol style="list-style-type: none"> a. Neurological pain > 6 months b. Adequate Psychological evaluation prior to SCS trial c. See Psychological Guideline



ROOT DECOMPRESSION (NECK)

DIAGNOSIS

Radiculopathy due to compression

Symptoms in the distribution of a nerve root caused by compression of a herniated disc or altered bony anatomy

INDICATIONS

Failure to improve with appropriate chiropractic or physical treatment, including traction, documented compliance

Time: 4-6 weeks minimum, unless progressive neurological deficit

Medications: steroids, NSAID's

RADIOGRAPHIC INDICATIONS

Lateral disc herniation

Lateral recess stenosis

SURGERY

Administer standard tool, ODI before and after surgery to document outcome

Hemilaminectomy with or without discectomy

Laminectomy for stenosis with myelopathy, normal cervical lordosis

POST-OPERATIVE RECOVERY

Chiropractic or PT rehabilitation for strength and aerobic capacity

Return to work:

- Temporary Total Disability up to 4 weeks
 - Return to light or modified duty 4-8 weeks
 - Return to full duty after 8 weeks
-

MMI

6 months

Impairment based on objective standard (per CT WC Statute)

FUSION (NECK)

DIAGNOSIS

Severe degeneration with foraminal stenosis

Recurrent disc herniation

Instability (<3.5mm or 11 degrees)

Myelopathy

Pseudoarthrosis from previous fusion

INDICATIONS

Failure to improve with at least 3 months of conservative care, including traction, documented compliance

No long-acting opioids

No smoking – Smoking is an absolute contraindication for fusion

Warning: Signs of symptom amplification, narcotics, long time out of work, failed psychological screening

RADIOGRAPHIC INDICATIONS

X-rays (including oblique's to assess foraminal stenosis)

Flexion extension views for instability

MRI to assess adjacent levels

CT or SPECT to assess pseudoarthrosis

Discography for appropriate clinical indications

SURGERY

Administer standard tool, ODI before and after surgery to document outcome

Consider psychological screening prior to fusion surgery

One or two levels only

Autograft or allograft with internal fixation

POST-OPERATIVE RECOVERY

Chiropractic or PT rehabilitation for strength and aerobic capacity

Return to work:

- Temporary Total Disability up to 4 weeks
 - Return to full duty after 8 weeks
-

MMI

12 months

Impairment based on objective standard (per CT WC Statute)



INTERVENTIONAL PAIN MANAGEMENT: BASIC GUIDELINES FOR AXIAL NECK PAIN

1. Medical necessity for all injections must be documented with a clear description of the diagnosis and rationale for the injection.
2. Injured workers should be re-evaluated @ 2 weeks following any intervention to assess change in pain level, change in function (and hence work status), and to determine next steps in the treatment course if medically indicated. IPM treatments ('blocks') are generally not a treatment performed in isolation; it is important to look at the underlying cause and include functional based exercise programs along with injections.
3. Frequently cervical injuries are simply myofascial strains that can be relieved with PT and stretching. Trigger point injections may be used to facilitate and speed the recovery process if the injured worker is not progressing with conservative management alone or if it is felt that early intervention will speed return to normal work activities.
4. All spinal injections must be performed with radiologic guidance, typically fluoroscopy is utilized. CT guided pain management injections should only be performed for specific indications and medical necessity must be documented. Ultrasound is a form of radiologic guidance being used for many different pain injections but cannot be recommended for spinal injections at this time.
5. All spinal injections should be accompanied with a report of both the diagnostic and therapeutic response. An injection that does not provide relief still provides diagnostic information as to what is not the cause of the pain. A lack of response to a particular intervention still provides useful information and that should be duly noted in the records. This will prevent further unnecessary injections for pain generating structures that have been found to not be the cause of pain.
6. For injured workers who fail to respond to treatment, alternative diagnoses should be considered. If the worker fails to respond to treatment that appears to be appropriate for the condition, evaluation of other barriers to improvement such as psychological issues should be considered.
7. Cervical facet blocks are indicated for the diagnosis and treatment of neck pain with or without pseudoradicular symptoms for pain that is suspected of arising from the facet joints. A history and physical examination should document the clinician's rationale for this suspected diagnosis. Definitive diagnosis requires documenting the patient's response to a diagnostic injection.
8. Therapeutic facet blocks will only be considered as proper management when they provide at least 70% relief of the cervical symptoms and at least 3 months of pain relief and will be limited to a maximum of 3 sets of therapeutic facet injections/year. All facet injections should include steroid (unless otherwise contraindicated) in hopes of providing long term therapeutic effect and to improve the diagnostic specificity of these injections. Patients obtaining only short term relief (less than 3 months) should be considered for more long lasting solutions, such as RF ablation. Some patients can be managed with intermittent therapeutic facet injections.
9. Repeat therapeutic injections/procedures are only indicated for those individuals who document sustained improvement in both pain and function, including improved ADL's and functional capacities for at least three months.
10. In addition, if the patient has significant bilateral pain, bilateral injections should be performed with the diagnostic injection so the clinician can better and more fully assess the etiology of the pain. Residual pain from joints that are not treated will confuse the diagnostic information that is obtained from a diagnostic block.
11. Radiofrequency ablation (Facet rhizotomy) may be considered for patients who achieve short-term relief with at least 70% reduction of target symptoms along with improved function and ROM with a diagnostic injection (Note- facet blocks are not expected to result in improvement of radicular symptoms). Radiofrequency ablation requires that the patient has had a facet medial branch mapping procedure; intra-articular injections are not diagnostic for determining the need for RF. Rhizotomy cannot be performed more frequently than once every 6 months.
12. If there is a question about the etiology of recurrent pain, re-evaluation and repeat diagnostic workup should be considered prior to repeat injections.
13. Epidural steroid injections may be indicated for axial neck pain that is felt to be radicular or discogenic in origin and for which there is a specific possible spinal cause. A diagnosis of discogenic pain is often a diagnosis of exclusion and other causes of neck pain should be evaluated before considering ESI's for treatment of axial pain. Epidural steroid injections may not be performed without an MRI documenting the specific location and extent of spinal pathology, for both safety and accuracy reasons. The routine performance of three epidural steroid injections is not appropriate and results in unnecessary treatment. After each injection, the response should be documented both for pain and functional improvement; if a repeat injection is required medical necessity should be documented even if a series of injections has been approved.
14. Pain can arise out of multiple structures and therefore can be multifactorial in origin, nevertheless it is not expected that every single injured worker with a cervical injury will require every single different type of injection, and in fact such practice is not recommended and is strongly discouraged.

INTERVENTIONAL PAIN MANAGEMENT: THERAPIES FOR CERVICAL RADICULOPATHY

1. Epidural Steroid Injections (ESI) are indicated for the treatment of a radiculopathy/radiculitis with symptoms of pain in a radicular distribution, which can be associated with numbness, tingling, and/or weakness in that nerve root distribution. A lack of response should lead the clinician to reconsider the diagnosis or look for alternative treatment options. Medical necessity for all injections must be documented with a clear description of the symptoms, physical findings, diagnosis and rationale for the injection.
2. Injured workers should be re-evaluated @ 2 weeks following any intervention to assess change in pain level, change in function (and hence work status), and to determine next steps in the treatment course if medically indicated. IPM treatments ('blocks') are generally not a treatment performed in isolation; it is important to look at the underlying cause and include functional based exercise programs along with injections.
3. All spinal injections should be accompanied with a report of both the diagnostic and therapeutic response. An injection that does not provide relief still provides diagnostic information as to what is not the cause of the pain. This will prevent further unnecessary injections for structures that have been found not to be the cause of pain.
4. Earlier intervention with an ESI may help to speed recovery and promote progress in PT and therefore should be considered in the management of an acute radiculopathy that is not responding to conservative management.
5. Epidural steroid injections may not be performed without an MRI documenting the specific location and extent of spinal pathology and should be correlated with neurologic findings.
6. Delivery of medication to the location of nerve irritation is the key to success. Injections require radiologic guidance for accuracy and safety. All spinal injections must be performed with radiologic guidance, typically fluoroscopy. CT guided pain management injections should only be performed for specific indications and medical necessity must be documented. Ultrasound is not recommended for spinal injections at this time.
7. There are several different approaches to the epidural space but delivery of medication as close as possible to the target location is helpful to optimize outcomes. The choice between interlaminar, transforaminal, and catheter guided approaches will be left to the clinician but the risks and benefits of the various approaches should be carefully considered when deciding technique.
8. The routine performance of three epidural steroid injections is not appropriate and results in unnecessary treatment. After each injection, the response should be documented both for pain and functional improvement; if a repeat injection is required medical necessity must be documented.
9. Injured Workers who do not respond with sustained benefit should be considered for definitive decompression of the involved nerve root(s).



LOW BACK PAIN HISTORY AND PHYSICAL EXAMINATION

HISTORY OF PRESENT ILLNESS	MEDICATIONS	ALLERGIES	PAST MEDICAL / SURGICAL HISTORY	SOCIAL HISTORY	REVIEW OF SYSTEMS	PHYSICAL EXAMINATION
<p>Description of Injury:</p> <p>This includes details of events before, during, and immediately after the alleged injury including the mechanism of injury. Identification of body parts involved, location of pain, characteristics of the pain, distribution of the pain symptoms, frequency and duration of symptoms, and alleviating/exacerbating factors. Any limitations in functional activities should be noted.</p> <p>The history should include the presence and distribution of any lower extremity numbness, paresthesias, or weakness and a description as to whether or not it is precipitated or worsened by coughing or sneezing. Any changes in bowel, bladder or sexual function should be identified as they may indicate a more severe spinal injury. The presence of a serious or progressive neurological deficit demands immediate attention and appropriate triage. The possibility of low back pain from other non-traumatic sources should be investigated by asking questions about fever, rash, swelling, unexplained weight loss, morning stiffness etc. A visual analog pain scale should be used and monitored at each visit. The patient should be asked their current rating, average over the last week and range from low to high. Note any history of emotional and/or psychological response to the current injury.</p>	<p>History should include previous medications taken for this back injury and a list of all current medications including dose and frequency. Any significant side effects from previous medications should be noted.</p>	<p>Medication allergies should be verified at every visit.</p>	<p>Identify any previous occupational and non-occupational injuries to the same area. Determine if the patient has any history of non-traumatic back problems such as arthritis, cancer, surgery etc. Document any prior back treatment, chronic or recurrent symptoms, response to previous treatment, and any functional limitations or previous restrictions in work capacity.</p>	<p>Smoking, alcohol and other drug use, vocational and recreational activities should be identified.</p>	<p>Cardiac, endocrine, gastrointestinal, hematological, infectious, neurologic, neoplastic, renal, rheumatologic, and other systemic disease symptoms should be identified.</p>	<p>Vital signs; height, weight, general appearance including posture and any pain behaviors. Signs of symptom amplification should be noted. Visual inspection of back. Palpation of lumbar spine including midline, paraspinal and posterior elements, sacroiliac regions, gluteal regions, and hips. Range of motion, quality of motion, exacerbating or alleviating motions and presence of muscle spasm should be noted. Nerve tension testing both single leg and crossed leg. Sacroiliac and piriformis testing should be considered. Sensory and motor examination of the lower extremities with specific description of abnormalities. Deep tendon reflexes. Assessment of transfers and gait.</p> <p>In cases where the mechanism of injury, history, or clinical presentation suggests a possible severe injury, additional evaluation is indicated. A detailed neurological examination for possible spinal cord injury should include sharp and light touch, deep pressure, temperature, and proprioceptive sensory function; anal sphincter tone and/or perianal sensation.</p>



ACUTE AXIAL BACK INJURY (LESS THAN 4 WEEKS)

DIAGNOSTIC CRITERIA	DIAGNOSTIC STUDIES	TREATMENT	GOALS OF TREATMENT	IF GOALS NOT MET
<p>Complete History, PE and Pain Diagram on initial visit</p> <p>Height and Weight (BMI)</p> <p>On each visit document:</p> <ul style="list-style-type: none"> a. Primary Diagnosis b. Precise location and character of pain c. VAS Pain level d. Exam pertinent to injured body part e. Functional Capacity f. Appraisal of ADL's and functional activity <p>Work Capacity and Status</p>	<p>Recommended:</p> <p>No x-rays (unless indicated by amount of trauma or based on documented medical suspicion)</p> <p>MRI or CT myelogram for progressive neurological deficit</p>	<p>Recommended:</p> <p>Chiropractic or Physical Therapy:</p> <ol style="list-style-type: none"> 1. Encourage increased activity ASAP 2. Education 3. Active treatment strengthening and aerobic as tolerated 4. Passive modalities up to 2 weeks <p>Up to 12 visits – document functional and VAS improvement to continue after 8 visits</p> <p>Medications:</p> <ol style="list-style-type: none"> 1. NSAIDS 2. Acetaminophen 3. Muscle Relaxants 4. Opioid – see opioid protocol <p>Injections:</p> <p>See IPM Guideline</p> <p>Follow-up:</p> <ul style="list-style-type: none"> 1 week, if work modified 4 weeks, if no work modification <p>Not Recommended:</p> <p>Bed Rest</p>	<p>Recommend RTW:</p> <ol style="list-style-type: none"> a. Sedentary 0-3 days b. Light-Med 7-17 days c. Heavy 14-35 days <p>Contingent on assessment of functional capacity</p>	<p>Document:</p> <ol style="list-style-type: none"> a. Compliance b. No Show/Cancel c. Effort: clinic & home <p>Consider Oral Steroids for severe pain</p>



SUBACUTE AXIAL BACK INJURY (1-3 MONTHS)

DIAGNOSTIC CRITERIA	DIAGNOSTIC STUDIES	TREATMENT	GOALS OF TREATMENT	IF GOALS NOT MET
<p>Complete History, PE and Pain Diagram on initial visit</p> <p>Height and Weight (BMI)</p> <p>On each visit document:</p> <ul style="list-style-type: none"> a. Primary Diagnosis b. Precise location and character of pain c. VAS Pain level d. Current Meds e. Exam pertinent to injured body part f. Functional Capacity g. Appraisal of ADL's and functional activity <p>Work Capacity and Status</p> <p>Appraise compliance</p> <p>Consider specialty referral, if not improving</p>	<p>Recommended:</p> <p>X-Ray (especially if previous injury or surgery)</p> <p>MRI after 6 weeks (if clinically indicated)</p> <p>Not Recommended:</p> <p>CT Scan</p> <p>Discogram</p>	<p>Recommended:</p> <p>Chiropractic or Physical Therapy:</p> <p>No isolated passive treatment</p> <p>Exercise, strengthening, core, aerobic – assess and document progress</p> <p>Up to 12 additional visits based on measured improvement in VAS, function and work capacity.</p> <p>Assess BMI and smoking and counsel appropriately</p> <p>Medications:</p> <ol style="list-style-type: none"> 1. NSAIDS 2. Acetaminophen 3. Opioid – see opioid protocol 4. Antidepressants 5. Muscle Relaxants <p>Injections:</p> <p>See IPM Protocol</p> <p>Limited Indication:</p> <p>Anticonvulsants</p>	<p>Recommend RTW:</p> <ul style="list-style-type: none"> a. Sedentary 0-3 days b. Light-Med 7-17 days c. Heavy 14-35 days <p>Contingent on assessment of functional capacity</p>	<p>Consider alternative cause</p> <p>Consider psychological factors – see Psychological Guideline</p> <p>Administer standard psych assessment tool such as ODI</p>



CHRONIC AXIAL BACK INJURY (GREATER THAN 3 MONTHS)

DIAGNOSTIC CRITERIA	DIAGNOSTIC STUDIES	TREATMENT	GOALS OF TREATMENT	IF GOALS NOT MET
<p>Complete History, PE and Pain Diagram on initial visit</p> <p>Height and Weight (BMI)</p> <p>On each visit document:</p> <ul style="list-style-type: none"> a. Primary Diagnosis b. Precise location and character of pain c. VAS Pain level d. Current Meds e. Exam pertinent to injured body part f. Functional Capacity g. Appraisal of ADL's and functional activity <p>Work Capacity and Status</p> <p>Appraise compliance</p> <p>Consider specialty referral, if not improving</p>	<p>Recommended:</p> <p>X-rays Consider F&E x-rays</p> <p>MRI if not already done</p> <p>Consider CT to evaluate bony anatomy (e.g. spondylolithesis)</p> <p>Consider SPECT scan to evaluate for pseudoarthrosis from previous surgery alternative causes of back pain</p>	<p>Recommended:</p> <p>Chiropractic or Physical Therapy:</p> <p>No passive modalities</p> <p>Exercise, strengthening, core, aerobic – assess and document measured improvement in VAS, functional and work capacity to continue treatment.</p> <p>TENS (not isolated Rx) only if compliant with other modalities and not improving</p> <p>Assess BMI and smoking and counsel appropriately</p> <p>Weight reduction for BMI > 30</p> <p>Medications:</p> <ol style="list-style-type: none"> 1. NSAIDS 2. Acetaminophen 3. Opioid – see opioid protocol 4. Antidepressants <p>Injections:</p> <p>See IPM Guideline</p> <p>Not Recommended:</p> <p>Bed Rest Muscle Relaxants</p>	<p>Recommend RTW:</p> <ul style="list-style-type: none"> a. Sedentary 0-3 days b. Light-Med 7-17 days c. Heavy 14-35 days <p>Contingent on assessment of functional capacity</p>	<p>Consider alternative cause</p> <p>Consider psychological factors – see Psychological Guideline</p> <p>Administer standard psych assessment tool such as ODI</p> <p>Consider time limited behavioral cognitive therapy</p> <p>FCE – Vocational Rehab</p> <p>Change of job</p> <p>Surgery may be considered for appropriate cases – see Surgery page</p>



ACUTE LUMBAR RADICULOPATHY (LESS THAN 4 WEEKS)

DIAGNOSTIC CRITERIA	DIAGNOSTIC STUDIES	TREATMENT	GOALS OF TREATMENT	IF GOALS NOT MET
<p>Complete History, PE and Pain Diagram on initial visit</p> <p>Height and Weight (BMI)</p> <p>On each visit document:</p> <ul style="list-style-type: none"> a. Primary Diagnosis b. Precise location and character of pain c. Accurate description of weakness, sensory and reflex abnormalities d. Root tension signs e. VAS Pain level back and/or leg on each visit f. Functional Capacity g. Appraisal of ADL's and functional activity <p>Work Capacity and Status</p>	<p>Recommended:</p> <p>No x-rays (unless indicated by amount of trauma or based on documented medical suspicion)</p> <p>MRI or CT myelogram for progressive neurological deficit</p> <p>Not Recommended:</p> <p>Discogram</p>	<p>Recommended:</p> <p>Chiropractic or Physical Therapy:</p> <ol style="list-style-type: none"> 1. Encourage increased activity ASAP 2. Education 3. Active treatment strengthening and aerobic, as tolerated 4. Passive modalities up to 2 weeks <p>Up to 12 visits – document functional and VAS improvement to continue after 8 visits</p> <p>Medications:</p> <ol style="list-style-type: none"> 1. NSAIDS 2. Acetaminophen 3. Muscle Relaxants – 2 weeks 4. Opioids – see opioid protocol 5. Anticonvulsants 6. Antidepressants 7. Oral steroids <p>Injections:</p> <p>See Injection Guideline</p> <p>Follow-up:</p> <p>2 weeks</p> <p>Not Recommended:</p> <p>Bed Rest</p>	<p>Recommend RTW:</p> <ol style="list-style-type: none"> a. Sedentary 0-3 days b. Light-Med 7-17 days c. Heavy 14-35 days <p>Contingent on assessment of functional capacity</p>	<p>Document:</p> <ol style="list-style-type: none"> a. Compliance b. No Show / Cancels c. Effort: clinic & home <p>Consider Oral Steroids for severe pain</p>



SUBACUTE LUMBAR RADICULOPATHY (1-3 MONTHS)

DIAGNOSTIC CRITERIA	DIAGNOSTIC STUDIES	TREATMENT	GOALS OF TREATMENT	IF GOALS NOT MET
<p>Complete History, PE and Pain Diagram on initial visit</p> <p>Height and Weight (BMI)</p> <p>On each visit document:</p> <ul style="list-style-type: none"> a. Primary Diagnosis b. Precise location and character of pain c. Accurate description of weakness, sensory and reflex abnormalities d. Root tension signs e. VAS Pain level back and/or leg on each visit f. Functional Capacity g. Appraisal of ADL's and functional activity <p>Current Meds</p> <p>Work Capacity and Status</p> <p>Appraise compliance</p> <p>Consider specialty referral, if not improving</p>	<p>Recommended:</p> <p>X-ray (especially if previous injury or surgery)</p> <p>MRI</p> <p>Consider CT to evaluate bony anatomy (e.g. spondylolithesis)</p> <p>EMG (needle) with neurological signs and symptoms and equivocal MRI or CT findings</p> <p>Not Recommended:</p> <p>Discogram</p>	<p>Recommended:</p> <p>Chiropractic or Physical Therapy:</p> <ol style="list-style-type: none"> 1. No isolated passive treatment 2. Exercise, strengthening, core, aerobic – assess and document progress 3. Additional visits based on measured Improvement in VAS, functional and work capacity 4. Assess BMI and smoking and counsel appropriately <p>Medications:</p> <ol style="list-style-type: none"> 1. NSAIDS 2. Acetaminophen 3. Opioid – see opioid protocol 4. Antidepressants 5. Anticonvulsants <p>Injections:</p> <p>See IPM Guideline</p> <p>Follow-up:</p> <p>Within 3 weeks</p> <p>Not Recommended:</p> <p>Bed Rest</p>	<p>Recommend RTW:</p> <ol style="list-style-type: none"> a. Sedentary 0-3 days b. Light-Med 7-17 days c. Heavy 14-35 days <p>Contingent on assessment of functional capacity</p>	<p>Document compliance</p> <p>Consider psychological factors – see Psychological Guideline</p> <p>Administer standard psych assessment tool (such as ODI)</p> <p>Consider surgery for compressive radiculopathy</p>



CHRONIC LUMBAR RADICULOPATHY (GREATER THAN 3 MONTHS)

DIAGNOSTIC CRITERIA	DIAGNOSTIC STUDIES	TREATMENT	GOALS OF TREATMENT	IF GOALS NOT MET
<p>Complete History, PE and Pain Diagram on initial visit</p> <p>Height and Weight (BMI)</p> <p>On each visit document:</p> <ul style="list-style-type: none"> a. Primary Diagnosis b. Precise location and character of pain c. Accurate description of weakness, sensory and reflex abnormalities d. Root tension signs e. VAS Pain level back and/or leg on each visit f. Functional Capacity g. Appraisal of ADL's and functional activity <p>Current Meds</p> <p>Work Capacity and Status</p> <p>Appraise compliance</p> <p>Consider specialty referral, if not improving</p>	<p>Recommended:</p> <p>X-ray (especially if previous injury or surgery)</p> <p>MRI</p> <p>Consider CT to evaluate bony anatomy (e.g. spondylolithesis)</p> <p>EMG (needle) with neurological signs and symptoms and equivocal MRI or CT findings</p>	<p>Recommended:</p> <p>Chiropractic or Physical Therapy:</p> <ol style="list-style-type: none"> 1. No passive modalities 2. Exercise, strengthening, core, aerobic – assess and document progress 3. Additional visits based on measured Improvement in VAS, functional and work capacity 4. Assess BMI and smoking and counsel appropriately 5. Weight reduction for BMI>30 <p>Medications:</p> <ol style="list-style-type: none"> 1. NSAIDS 2. Acetaminophen 3. Opioid – see opioid protocol 4. Antidepressants 5. Anticonvulsants <p>Injections:</p> <p>See IPM Guideline</p> <p>Surgery:</p> <p>If documented compression</p> <p>Not Recommended:</p> <p>Bed Rest</p>	<p>Recommend RTW:</p> <ol style="list-style-type: none"> a. Sedentary 0-3 days b. Light-Med 7-17 days c. Heavy 14-35 days <p>Contingent on assessment of functional capacity</p>	<p>EMG to document neurological status</p> <p>Consider psychological factors – see Psychological Guideline</p> <p>Administer standard psych assessment tool (such as ODI)</p> <p>Consider time-limited behavioral cognitive therapy</p> <p>FCE – Vocational Rehab</p> <p>Functional Restoration Program</p> <p>Spinal Cord Stimulation:</p> <ol style="list-style-type: none"> a. Neurological pain > 6 months b. Adequate Psychological evaluation prior to SCS trial c. See Psychological Guideline



ROOT DECOMPRESSION (BACK)

DIAGNOSIS

Radiculopathy due to compression

Symptoms in the distribution of a nerve root caused by compression of a herniated disc or altered bony anatomy

INDICATIONS

Failure to improve with appropriate chiropractic or physical treatment for aerobic and strength with documented compliance

Time: 4-6 weeks minimum (unless progressive neurological deficit)

Medications: steroids, NSAID's and transforaminal injection

RADIOGRAPHIC INDICATIONS

Lateral disc herniation

Lateral recess stenosis

Spinal stenosis

SURGERY

Administer standard tool (ODI) before and after surgery to document outcome

Hemilaminectomy, discectomy, Laminectomy, Laminectomy for stenosis

POST-OPERATIVE RECOVERY

Chiropractic or PT rehabilitation for strength and aerobic capacity

Return to work:

- Temporary Total Disability up to 4 weeks
 - Return to light or modified duty 4-8 weeks
 - Return to full duty after 8 weeks
-

MMI

6 months

Impairment based on objective standard (per CT WC Statute)

FUSION (BACK)

DIAGNOSIS

Spondylolytic spondylololthesis

Degenerative spondylololthesis

Recurrent disc herniation

Removal of facet for decompression

Instability (>4mm or 10 degrees)

Pseudoarthrosis from previous fusion

INDICATIONS

Failure to improve with at least 3 months of conservative care, documented compliance

No long acting opioids

No smoking – Smoking is an absolute contraindication for fusion

Warning: Signs of symptom amplification, narcotics, long time out of work, failed psychological screening

RADIOGRAPHIC INDICATIONS

X-rays including oblique's for spondylololthesis

Flexion extension views for instability

MRI to assess adjacent levels

Discography for appropriate clinical indications

CT or SPECT to assess pseudoarthrosis

SURGERY

Administer standard tool, ODI before and after surgery to document outcome

Consider psychological screening prior to fusion surgery

One or two levels only

Posterolateral fusion (PLF)

PSF + Pedicle screws

TLIF

ALIF + PSF + Pedicle Screws

POST-OPERATIVE RECOVERY

Chiropractic or PT rehabilitation for strength and aerobic capacity

Return to work

Temporary Total Disability up to 16 weeks.

Return to light or modified duty depending on demand level

MMI

12 months

Impairment based on objective standard (per CT WC Statute)



INTERVENTIONAL PAIN MANAGEMENT: BASIC GUIDELINES FOR LOW BACK PAIN

1. Medical necessity for all injections must be documented with a clear description of the diagnosis and rationale for the injection.
2. Injured workers should be re-evaluated @ 2 weeks following any intervention to assess change in pain level, change in function (and hence work status), and to determine next steps in the treatment course if medically indicated. IPM treatments ('blocks') are generally not a treatment performed in isolation; it is important to look at the underlying cause and include functional based exercise programs along with injections.
3. All spinal injections must be performed with radiologic guidance, typically fluoroscopy is utilized. CT guided pain management injections should only be performed for specific indications and medical necessity must be documented. Ultrasound is a form of radiologic guidance being used for many different pain injections but cannot be recommended for spinal injections at this time.
4. All spinal injections should be accompanied with a report of both the diagnostic and therapeutic response. An injection that does not provide relief still provides diagnostic information as to what is not the cause of the pain. A lack of response to a particular intervention still provides useful information and that should be duly noted in the records. This will prevent further unnecessary injections for pain generating structures that have been found to not be the cause of pain.
5. For injured workers who fail to respond to treatment, alternative diagnoses should be considered. If the worker fails to respond to treatment that appears to be appropriate for the condition, evaluation of other barriers to improvement such as psychological issues should be considered.
6. Facet blocks are indicated for the diagnosis and treatment of axial low back pain with or without pseudoradicular symptoms for pain that is suspected of arising from the facet joints. A history and physical examination should document the clinician's rationale for this suspected diagnosis. Definitive diagnosis requires documenting the patient's response to a diagnostic injection. Therapeutic facet blocks will only be considered as proper management when they provide at least 70% relief of the axial back symptoms and at least 3 months of pain relief and will be limited to a maximum of 3 sets of therapeutic facet injections/year. Patients obtaining only short term relief (less than 3 months) should be considered for more long lasting solutions, such as RF ablation.
7. Sacroiliac joint injections are appropriate for suspected sacroiliac joint pain. This should be specifically confirmed by history and physical examination and the clinician must document medical necessity. A diagnostic sacroiliac block can be used to confirm this diagnosis. A negative response indicates this is not the cause of the pain. Therapeutic sacroiliac joint injections will only be considered as proper management when they provide at least 3 months of pain relief and will be limited to a maximum of 3 injections/year.
8. All facet and sacroiliac joint injections should include steroid (unless otherwise contraindicated) in hopes of providing long term therapeutic effect and to improve the diagnostic specificity of these injections. It

should be recognized that patients who have short term relief with these injections may benefit from rhizotomy to achieve longer term pain relief. Some patients can be managed with intermittent therapeutic facet and/or sacroiliac joint injections in hopes of providing long term therapeutic effect and to improve the diagnostic specificity of these injections. Patients obtaining only short term relief (less than 3 months) should be considered for more long lasting solutions, such as RF ablation. Some patients can be managed with intermittent therapeutic facet injections.

9. Repeat therapeutic injections/procedures are only indicated for those individuals who document sustained improvement in both pain and function, including improved ADL's and work capacities for at least three months.
10. In addition, if the patient has significant bilateral pain, bilateral injections should be performed with the diagnostic injection so the clinician can better and more fully assess the etiology of the pain. Residual pain from joints that are not treated will confuse the diagnostic information that is obtained from a diagnostic block.
11. Radiofrequency ablation (Facet and sacroiliac rhizotomy) may be considered for patients who achieve at least 70% reduction of target symptoms along with improved function and ROM with a diagnostic injection (Note- facet and sacroiliac joint blocks are not expected to result in improvement of radicular symptoms). Radiofrequency ablation requires that the patient has had a facet medial branch mapping procedure; intra-articular injections are not diagnostic for determining the need for RF. Rhizotomy cannot be performed more frequently than once every 6 months.
12. If there is a question about the etiology of recurrent pain, re-evaluation and repeat diagnostic workup should be considered prior to repeat injections.
13. Epidural steroid injections are indicated for back pain that is felt to be radicular or discogenic in origin and for which there is a specific possible spinal cause. There are situations where epidural steroid injections may help with axial low back pain, such as a central disc herniation, spinal stenosis, and/or other discogenic pain problems. A diagnosis of discogenic back pain is often a diagnosis of exclusion and other causes of back pain should be evaluated before considering ESI's for treatment of axial back pain. Epidural steroid injections may not be performed without an MRI documenting the specific location and extent of spinal pathology. The routine performance of three epidural steroid injections is not appropriate and results in unnecessary treatment. After each injection, the response should be documented both for pain and functional improvement; if a repeat injection is required medical necessity should be documented even if a series of injections has been approved.
14. Pain can arise out of multiple structures and therefore can be multifactorial in origin, nevertheless it is not expected that every single injured worker with back pain will require every single different type of injection, and in fact such practice is not recommended and is strongly discouraged.

INTERVENTIONAL PAIN MANAGEMENT: THERAPIES FOR LUMBAR RADICULOPATHY

1. Epidural Steroid Injections (ESI) are indicated for the treatment of a radiculopathy/ radiculitis with symptoms of pain in a radicular distribution, which can be associated with numbness, tingling, and/or weakness in that nerve root distribution. A lack of response should lead the clinician to reconsider the diagnosis or look for alternative treatment options. Medical necessity for all injections must be documented with a clear description of the symptoms, physical findings, diagnosis and rationale for the injection.
2. Injured workers should be re-evaluated @ 2 weeks following any intervention to assess change in pain level, change in function (and hence work status), and to determine next steps in the treatment course if medically indicated. IPM treatments ('blocks') are generally not a treatment performed in isolation; it is important to look at the underlying cause and include functional based exercise programs along with injections.
3. All spinal injections should be accompanied with a report of both the diagnostic and therapeutic response. An injection that does not provide relief still provides diagnostic information as to what is not the cause of the pain. This will prevent further unnecessary injections for structures that have been found not to be the cause of pain.
4. Earlier intervention with an ESI may help to speed recovery and promote progress in PT and therefore should be considered in the management of an acute radiculopathy that is not responding to conservative management.
5. Epidural steroid injections may not be performed without an MRI documenting the specific location and extent of spinal pathology and should be correlated with neurologic findings.
6. Delivery of medication to the location of nerve irritation is the key to success. Injections require radiologic guidance for accuracy and safety. All spinal injections must be performed with radiologic guidance, typically fluoroscopy. CT guided pain management injections should only be performed for specific indications and medical necessity must be documented. Ultrasound is not recommended for spinal injections at this time.
7. There are several different approaches to the epidural space but delivery of medication as close as possible to the target location is helpful to optimize outcomes. The choice between interlaminar, transforaminal, and catheter guided approaches will be left to the clinician but the risks and benefits of the various approaches should be carefully considered when deciding technique.
8. The routine performance of three epidural steroid injections is not appropriate and results in unnecessary treatment. After each injection, the response should be documented both for pain and functional improvement; if a repeat injection is required medical necessity must be documented.
9. Injured Workers who do not respond with sustained benefit should be considered for definitive decompression of the involved nerve root(s).



MUSCULOLIGAMENTOUS INJURY (FROM THE ELBOW UP TO, BUT NOT INCLUDING, THE NECK)

BACKGROUND	DIAGNOSTIC CRITERIA	APPROPRIATE DIAGNOSTIC STUDIES	APPROPRIATE TREATMENT	REFERRAL	RETURN TO WORK
<p>Injuries may occur on the job, including operation of motor vehicle as it relates to patient's employment. Symptoms are believed to be related to a severe stretching or tearing of the soft tissues (muscles, fascia, ligaments, facet joint capsule, etc.). This may be associated, in addition to shoulder pain, with upper extremity complaints. Initially there is severe limitation of the range of motion and spasm.</p>	<p>Historical and Physical Findings: Onset of shoulder pain and parispinal muscle spasms begins suddenly after injury or may develop gradually over the next 24 hours. Pain is generally aggravated by limited motion of the shoulder or arm and is frequently relieved by rest. Pain may radiate below the shoulder. It can be accompanied by paresthesia or sense of weakness in upper extremities related to the muscle spasm in the shoulder or arm. Physical findings include tenderness to palpation, spasm of the paravertebral muscles and aggravation of pain with motion. Neurological examination and nerve root stretch tests are usually negative.</p>	<p>In general, in an acute, severe injury, when you have deformity, pain, swelling, severe loss of motion, x-rays are probably indicated. These x-rays would include an AP view internal and external rotation and some type of lateral view to be determined by the practitioner.</p> <p>INAPPROPRIATE DIAGNOSTIC STUDIES</p> <ol style="list-style-type: none"> 1. CT Scan 2. MRI 3. Bone Scan 4. Arthrogram 5. EMG 6. Thermogram (never appropriate) 	<p>Weeks 1-2 Out-patient Treatment: Treatment may be initiated as early as the first day of injury. Indications for and focus of early intervention include:</p> <ol style="list-style-type: none"> a. Acute management of pain/spasms b. Limited use of passive modalities, except unlimited ice c. Instruction in ROM/stretching exercises for arm/shoulder muscles d. Assessment of return to work readiness and identifying necessary work modifications. For a patient who is totally disabled, the period of disability should not exceed 2 weeks. e. Patient education in healing process and body mechanics f. No more than 5 physical medicine treatments in the first calendar week, and no more than 3 physical medicine treatments in the second calendar week. g. Pain medication, non-narcotic; muscle relaxants; anti-inflammatory drugs, non-steroidal. <p>Weeks 2-6: If patient has not demonstrated objective signs of improvement in 2 weeks time, physical medicine treatments may be continued for a maximum of 3 times a week for the next 3 weeks. A maximum of 4 doctor visits during the first 4 weeks. If patient is not completely healed, but is getting better, conservative treatment twice a week should be continued for no more than 2 additional weeks.</p> <p>Week 6: If patient has not responded in 4-6 weeks time, patient must be referred to an Orthopedic Surgeon (if one was not treating him/her during the first 4-6 weeks). Said specialist may order further diagnostic procedures: x-ray if not already taken; MRI or arthrogram if indicated. Failure to respond to conservative treatment brings with it the distinct possibility of a different diagnosis.</p>	<p>REFERRAL</p> <ol style="list-style-type: none"> 1. Original treating physician, i.e., Chiropractic Physician, Internist, or Orthopedic Surgeon, shall refer the patient to another specialist (except the Orthopedic Surgeon) for further diagnostic tests at the end of 6 weeks if the patient is not healed. If the diagnostic test does not indicate surgery but further conservative treatment, the Orthopedic Surgeon shall refer the patient back to the initial treating physician. If it is recommended that additional physical medicine is necessary, it shall be referred to the employer or his representative for determination. If physical medicine is denied by said employer or his representative, then the patient may request same from the appropriate Workers' Compensation Commissioner. 2. If surgery is indicated, the Orthopedic Surgeon should perform the surgery. The Orthopedic Surgeon will continue to treat the patient after surgery and it is expected that the patient will be returned to work 4 to 6 weeks after surgery. The surgeon should make said determination. <p>INAPPROPRIATE TREATMENT</p> <ol style="list-style-type: none"> a. Exclusive use of passive (palliative) modalities; TENS is not indicated. b. Narcotic medication for a prolonged period of time. c. In-patient treatment 	<p>Total disability after surgery is 4 to 6 weeks. Temporary modified light duty is 4 to 6 weeks. Return to full duty is after 8 to 12 weeks.</p>



MUSCULOLIGAMENTOUS INJURY (FROM THE WRIST TO THE ELBOW)

BACKGROUND	DIAGNOSTIC CRITERIA	APPROPRIATE DIAGNOSTIC STUDIES	APPROPRIATE TREATMENT	REFERRAL	RETURN TO WORK
<p>These injuries may occur on the job, including operation of motor vehicle as it relates to patient's employment. Symptoms are believed to be related to a severe stretching or tearing of the soft tissues (muscles, fascia, ligaments, etc.). This may be associated, in addition to wrist/elbow pain, with upper extremity complaints. Initially there is severe limitation of the range of motion and spasm.</p>	<p>Historical and Physical Findings: Onset of wrist/elbow pain begins suddenly after injury or may develop gradually over the next 24 hours. Pain is generally aggravated by limited motion of the wrist/elbow and is frequently relieved by rest. Pain may radiate below the elbow. It can be accompanied by paresthesia or sense of weakness in the elbow or wrist related to the muscle spasm in the elbow or wrist. Physical findings include tenderness to palpation and aggravation of pain with motion.</p>	<p>In general, in an acute, severe injury, the appropriate x-rays are an AP, and allow a pre and post reduction film if a dislocation has been present.</p> <p>INAPPROPRIATE DIAGNOSTIC STUDIES</p> <ol style="list-style-type: none"> 1. CT Scan 2. MRI 3. Bone Scan 4. Arthrogram 5. EMG 6. Thermogram (never appropriate) 	<p>Weeks 1-2 Out-patient Treatment: Treatment may be initiated as early as the first day of injury. Indications for and focus of early intervention include:</p> <ol style="list-style-type: none"> a. Acute management of pain/spasms b. Limited use of passive modalities, except unlimited ice c. Instruction in ROM/stretching exercises for elbow/forearm muscles d. Assessment of return to work readiness and identifying necessary work modifications. For a patient who is totally disabled, the period of disability should not exceed 1 week. e. Patient education in healing process and body mechanics f. No more than 5 physical medicine treatments in the first calendar week, and no more than 3 physical medicine treatments in the second calendar week. g. Pain medication, non-narcotic; muscle relaxants; anti-inflammatory drugs, non-steroidal. <p>Weeks 2-6: If patient has not responded in 1 week time, physical medicine treatments may be continued for a maximum of 3 times a week for the next 3 weeks. A maximum of no more than 4 doctor visits during the first 4 weeks. If patient is not completely healed, but is getting better, conservative treatment twice a week should be continued for no more than 2 additional weeks.</p> <p>Week 6: If patient has not responded in 4-6 weeks time, patient must be referred to a Plastic Surgeon or Orthopedic Surgeon (if one was not treating him/her during the first 4-6 weeks). Said specialist may order further diagnostic procedures: x-ray if not already taken; MRI or arthrogram if indicated. Failure to respond to conservative treatment brings with it the distinct possibility of a different diagnosis.</p>	<p>1. Original treating physician, i.e., Chiropractic Physician, Internist, or Orthopedic Surgeon, shall refer the patient to another specialist (except the Orthopedic Surgeon) for further diagnostic tests at the end of 6 weeks if the patient is not healed. If the diagnostic test does not indicate surgery but further conservative treatment, the specialist, i.e., Plastic Surgeon or Orthopedic Surgeon, shall refer the patient back to the initial treating physician. If it is recommended that additional physical medicine is necessary, it shall be referred to the employer or his representative for determination. If physical medicine is denied by said employer or his representative, then the patient may request same from the appropriate Workers' Compensation Commissioner.</p> <p>2. If surgery is indicated, the specialist should perform the surgery. The specialist will continue to treat the patient after surgery and it is expected that the patient will be returned to work 2 to 4 weeks after surgery. The surgeon should make said determination.</p> <p>INAPPROPRIATE TREATMENT</p> <ol style="list-style-type: none"> a. Exclusive use of passive (palliative) modalities; TENS is not indicated. b. Narcotic medication for a prolonged period of time. c. In-patient treatment 	<p>Total disability after surgery may be 2 to 4 weeks. Return to modified light duty is 2 to 4 weeks. Return to full duty after up to 8 weeks.</p>



MUSCULOLIGAMENTOUS INJURY (LOSS AT OR ABOVE THE KNEE)

BACKGROUND	DIAGNOSTIC CRITERIA	APPROPRIATE DIAGNOSTIC STUDIES	APPROPRIATE TREATMENT	REFERRAL	RETURN TO WORK
<p>These injuries may occur on the job, including operation of motor vehicle as it relates to patient's employment. Symptoms are believed to be related to a severe stretching or tearing of the soft tissues (muscles, fascia, ligaments, facet joint capsule, etc.). This may be associated, in addition to leg pain, with lower extremity complaints. Initially there is severe limitation of the range of motion and spasm.</p>	<p>Historical and Physical Findings: Onset of leg pain and paraspinal muscle spasms begins suddenly after injury or may develop gradually over the next 24 hours. Pain is generally aggravated by limited motion of the leg and is frequently relieved by rest. Pain may radiate below the leg and can be accompanied by paresthesia or sense of weakness in the lower extremities related to the spasm in the leg. Physical findings include tenderness to palpation, spasm of the paravertebral muscles and aggravation of pain with motion. Neurological examination and nerve root stretch tests are usually negative.</p>	<p>In general, in an acute, severe injury, when there is deformity, pain, swelling, severe loss of motion, x-rays are probably indicated. These x-rays should include an AP view and lateral view of the affected area to be determined by the practitioner.</p> <p>INAPPROPRIATE DIAGNOSTIC STUDIES</p> <ol style="list-style-type: none"> 1. CT Scan 2. MRI 3. Bone Scan 4. Arthrogram 5. EMG 6. Thermogram (never appropriate) 	<p>Weeks 1-2 Out-patient Treatment:</p> <p>Treatment may be initiated as early as the first day of injury. Indications for and focus of early intervention include:</p> <ol style="list-style-type: none"> a. Acute management of pain/spasms b. Limited use of passive modalities, except unlimited ice c. Instruction in ROM/stretching exercises for leg muscles d. Assessment of return to work readiness and identifying necessary work modifications. For a patient who is totally disabled, the period of disability should not exceed 2 weeks. e. Patient education in healing process and body mechanics f. No more than 5 physical medicine treatments in the first calendar week, and no more than 3 physical medicine treatments in the second calendar week. g. Pain medication, non-narcotic; muscle relaxants; anti-inflammatory drugs, non-steroidal. <p>Weeks 2-6:</p> <p>If patient has not demonstrated objective signs of improvement in 2 weeks time, physical medicine treatments may be continued for a maximum of 3 times a week for the next 3 weeks. A maximum of no more than 4 doctor visits during the first 4 weeks. If patient is not completely healed, but is getting better, conservative treatment twice a week should be continued for no more than 2 additional weeks.</p> <p>Week 6:</p> <p>If patient has not responded in 4-6 weeks time, patient must be referred to an Orthopedic Surgeon (if one was not treating him/her during the first 4-6 weeks). Said specialist may order further diagnostic procedures: x-ray if not already taken; MRI or arthrogram if indicated. Failure to respond to conservative treatment brings with it the distinct possibility of a different diagnosis.</p>	<ol style="list-style-type: none"> 1. Original treating physician, i.e., Chiropractic Physician, Internist, or Orthopedic Surgeon, shall refer the patient to another specialist (except the Orthopedic Surgeon) for further diagnostic tests at the end of 6 weeks if the patient is not healed. If the diagnostic test does not indicate surgery but further conservative treatment, the specialist shall refer the patient back to the initial treating physician. If it is recommended that additional physical medicine is necessary, it shall be referred to the employer or his representative for determination. If physical medicine is denied by said employer or his representative, then the patient may request same from the appropriate Workers' Compensation Commissioner. 2. If surgery is indicated, the Orthopedic Surgeon should perform the surgery. The surgeon will continue to treat the patient after surgery and it is expected that the patient will be returned to work 4 to 6 weeks after surgery. The surgeon should make said determination. 	<p>Total disability after surgery is 4 to 6 weeks.</p> <p>Temporary modified light duty is 4 to 6 weeks.</p> <p>Return to full duty is after 8 to 12 weeks.</p>
			<p>INAPPROPRIATE TREATMENT</p> <ol style="list-style-type: none"> a. Exclusive use of passive (palliative) modalities; TENS is not indicated. b. Narcotic medication for a prolonged period of time. c. In-patient treatment 		