# MEDICAL REGULATIONS UPDATES FOR 2015

DR. CARLA HUITT, MEDICAL DIRECTOR

GOVERNOR'S CONFERENCE

Montana Department of LABOR & INDUSTRY

## PROFESSIONAL FEE SCHEDULE JULY 1, 2015

- RBRVU changes only
  - Professional Conversion Factor $61.49
  - Anesthesiology Conversion Factor $65.63
- MCA 39-71-704 (2)
  - All codes as they exist on January 1 of each year to be used and updated in the July 1 fee schedule update
- Contracted with Optum to provide reimbursement gap calculations

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## PROFESSIONAL FEE SCHEDULE JULY 1, 2015

- MCA 39-71-704 (2)
  - Montana Code Annotated specifically how the department will calculate the new conversion factors
- Calculation Method
  - Average conversion factor of the top 5 group health premium producers in the top 1% in Montana using the resource-based relative value scale. Up to 10% is added to the averaged conversion factor.

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## FACILITY FEE SCHEDULE JULY 1, 2015

- The department based the rate change on the Market Basket Increase that Medicare calculated for facilities
- New Base Rates
  - Inpatient DRG $8,076.00
  - Hospital Outpatient $111.00
  - ASC $83.00

OTHER UPDATES

Place of Service Codes, Modifiers, CCI Code Edits, Medically Unlikely Edits, CCR Values, Status Indicator Codes, Dental and Ambulance fee schedules, Facility and Professional Instruction Sets

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# GUIDANCE AND/OR CLARIFICATIONS

- The department may send out clarifications on either fee schedule
- Posted in the facility fee schedule page under (I) Clarifications

**(I) Guidance**

April 1, 2015: Facility Fee Schedule (outpatient) J1 Status Indicator Professional Fee Schedule Modifier 59

WEBSITE HAS A NEW LOOK

- Retype this URL address, enter and bookmark

  http://erd.dli.mt.gov

  - Go to "Insurers/Providers" to access the new fee schedules and Utilization and Treatment Guidelines

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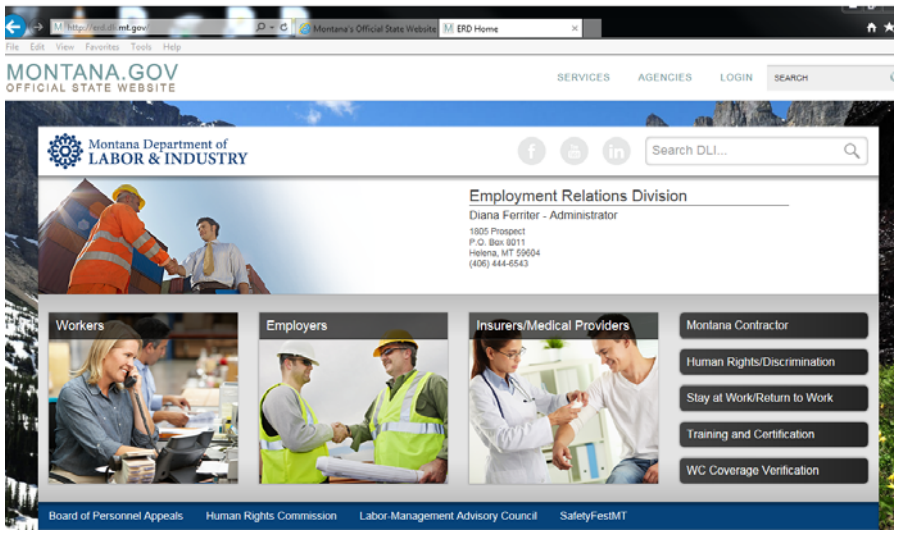


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Search DLI...

ERD Home → Montana Workers' Compensation Claims Assistance → Medical Regulations → Montana Facility Fee Schedule

## Montana Facility Fee Schedule

### Montana Facility Fee Schedule: Overview

The Montana Facility Fee Schedule applies to all services and procedures provided on or after January 1, 2008 covered under Chapter 71 of the Montana Workers' Compensation Act. Workers' compensation payers shall use the appropriate fee schedule determined by the date of service and the instruction set when paying charges submitted by medical providers, unless otherwise specified in the Act.

If you have any questions about the fee schedule, please contact Maralyn Lytle in the Medical Regulation Unit by email at mlytle@mt.gov or by telephone at (406) 444-6604.

Click here to continue to the Montana Facility Fee Schedule

### Administrative Rules of Montana

Facility Fee Schedule Administrative Rules of Montana

(This links to the Notice of Public Hearing on Proposed Amendment that was adopted and became effective July 1, 2014. Such amendments are incorporated into the Administrative Rules of Montana by the Secretary of State's office on a quarterly basis. This link will be updated to the new, complete rules at that time.)

### 2015 Medical Fee Schedule Update

On May 22, 2015, at 10:00 a.m., the Department of Labor and Industry will hold a public hearing in the Second Floor Conference Room of the Beck Building, 1805 Prospect Avenue, Helena, Montana, to consider the proposed amendment of ARM 24.29.1433, 24.29.1534, 24.29.1538, and 24.29.1591, related to workers' compensation medical service fee schedules and utilization and review of medical services.

Notice of Public Hearing on Proposed Amendment

### Related Links

- Domiciliary Care
- Electronic Access to Insurer Information for Medical Providers
- FAQs for Medical Providers
- HIPAA and Release of Workers' Compensation Information
- Meals, Lodging and Mileage
- Medical Regulations Forms
- Montana Facility Fee Schedule
- Montana Facility Fee Schedule Archives
- Montana Professional Fee Schedule
- Past Lodging Rates
- Subsequent Injury Fund
- Utilization and Treatment Guidelines

http://erd.dli.mt.gov/work-comp-claims/medical-regulations/montana-facility-fee-schedule-notice

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# MEDICAL STATUS FORM

- New Form (shorter)
  - Communication tool between employee, employer and adjuster/insurer to facilitate early and safe return to work
  - Physician can communicate the worker's improvement and increase hours and change limitations on the form as injured worker improves
- Complete at every visit
  - Providers do not need to fill out every work ability box only those that apply
  - Pink copy to injured worker to take to employer
  - Fax copy to adjustor within 48 hours; DO NOT send to the bill paying center
  - Lag time in change of work abilities is less

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- Injured worker may return to work but is hesitant:
  - Jason Swant, SAW/RTW coordinator
    - email: sawrtwrquest@mt.gov
    - phone: 406-444-1752
- Ordering forms:
  - schampagne@mt.gov
  - Number of forms, mailing address, contact information

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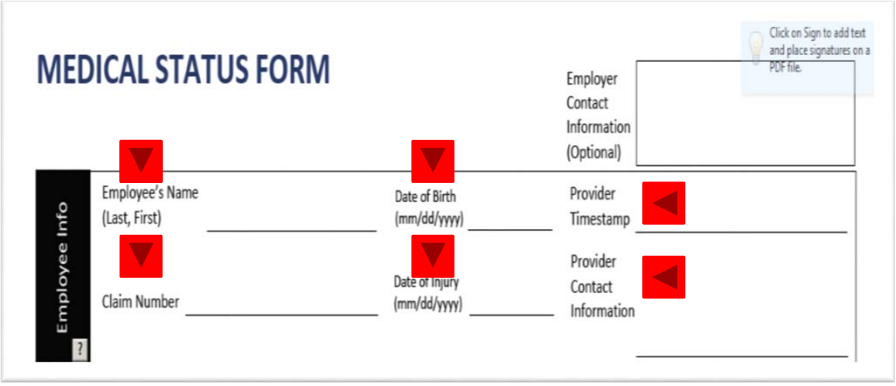
The form is a fillable PDF. Once the first page is filled out the other pages are an automatic fill.

Office Staff could fill out this top portion and have it ready for the Doctor.

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Doctor determines that the employee may be released to full duty or may work part time or limited hours. If it is a catastrophic injury, the doctor's determination to not return the injured worker to work for a time period may also be documented here. It is not the doctor's responsibility to determine if there is work available at the injured worker's job site either part time or in limited hours.

The date being the date of the visit to the date of the next visit alerts the adjustor of when to expect another visit.

**Released for Work?**

| | | | |
|---|---|---|---|
| ☐ | Employee Released to Full Duty | Date _____ | To _____ |
| ☐ | Employee Released to Modified Duty (See Work Abilities) | Date _____ | To _____ |
| ☐ | Employee May Work Limited Hours: ___ hours per day | Date _____ | To _____ |
| ☐ | Employee May Work Part-time: _____ | Date _____ | To _____ |
| ☐ | Employee Not Released to Work | Date _____ | To _____ |
| ☐ | Capacity Duration (estimate days): ☐ 1-10 ☐ 11-20 ☐ 21-30 ☐ 30+ ☐ permanent | | |

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**Modified Work Abilities**

| Blank Space = Not Restricted (NR) | Continuous | Frequent | Occasional | Never |
|---|---|---|---|---|
| Hand/Wrist ☐ L, ☐ R, ☐ B | ☐ | ☐ | ☐ | ☐ |
| Grasping ☐ L, ☐ R, ☐ B | ☐ | ☐ | ☐ | ☐ |
| Pushing/Pulling ☐ L, ☐ R, ☐ B | ☐ | ☐ | ☐ | ☐ |
| Fine Manipulation ☐ L, ☐ R, ☐ B | ☐ | ☐ | ☐ | ☐ |
| Reaching ☐ L, ☐ R, ☐ B | ☐ | ☐ | ☐ | ☐ |
| Bending | ☐ | ☐ | ☐ | ☐ |
| Climbing | ☐ | ☐ | ☐ | ☐ |
| Lifting 01-10 lbs. | ☐ | ☐ | ☐ | ☐ |
| Lifting 11-20 lbs. | ☐ | ☐ | ☐ | ☐ |
| Lifting 21-25 lbs. | ☐ | ☐ | ☐ | ☐ |
| Lifting 26-50 lbs. | ☐ | ☐ | ☐ | ☐ |
| Lifting 51-70 lbs. | ☐ | ☐ | ☐ | ☐ |

Number of Hours Employee May: Sit ____ Stand ____ Walk ____

List Other Restrictions:

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The department recommends that you discuss the injured worker's restrictions with him and that you provide that person a copy of the medical status form at the end of the visit. This is valuable information for the injured worker to help them stay at work/return to work either on a limited or full time schedule.

The last copy of the form is for the employer which maybe given to the injured employee at the time of the visit. The last page has the treatment plan information redacted to protect the injured worker's medical confidentiality.

Date of next visit is redundant if the released to work section is filled out. It was put in as a convenience for the injured worker.

| Signatures | | |
|---|---|---|
| | Employee Signature | Date |
| | Provider Signature | Date |

☐ Copy of Medical Status Form to employee

Date of Next Visit _____

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Cervical Spine: Summary of Changes

| Current Montana Cervical Spine Guideline | Proposed Montana Cervical Spine Guideline Changes |
|---|---|
| | C. Overview of Care - New section added<br>C.1. Neck Pain without Radicular Pain or Neurologic Findings<br>C.2 Neck Pain with Radicular and Neurological Findings |
| **C. Initial Diagnostic Procedures** | **D. Initial Diagnostic Procedures** |
| C.1 History-taking and Physical Examination<br>C.1.a History of Present Injury<br>C.1.b Past History<br>C.1.c Physical Examination<br>C.1.d Relationship to Work<br>C.1.e Spinal Cord Evaluation<br>C.1.f Soft Tissue injury Evaluation<br>C.1.g Assessing Red Flags | D.1.b Past History<br>Added Type 1 or Type 2 diabetes, medication list<br>D.1.c Physical Examination<br>Added statement on whiplash, testing for hip flexion, assessment of gait, provocative tests for possible radiculopahy, repeated end range testing, combination of multiple physcial exam tests; deleted palpitation<br>D.1.f. Assessing Red Flags<br>Left this section in (originally from ACOEM)<br>D.1.g Relationship to Work and Other Activity<br>Section moved here and substantially expanded |
| C.2 Imaging | D.2 Imaging<br>Added suspected lesion, past medical history |
| C.3 Laboratory Testing | D.3 Laboratory Testing<br>Added blood-glucose level |
| **D. Follow-up Diagnostic Imaging and Testing Procedures – Cervical Spine Injury** | **E. Follow-up Diagnostic Imaging and Testing Procedures** |
| D.1 Imaging Studies<br>D.1.a Roentgenograms (X-rays)<br>D.1.b Magnetic Resonance Imaging (MRI)<br>D.1.c Computed Axial Tomography (CT)<br>D.1.d Myelography<br>D.1.e CT Myelogram<br>D.1.f Lineal Tomography | E.1 Imaging Studies<br>Deleted Roentgenograms (X-rays) |

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Low Back Pain: Summary of Changes

| Current Montana Low Back Pain Guideline | Proposed Montana Low Back Pain Guideline |
|---|---|
| | **C. Overview of Care**<br>New section added |
| | C.1 Low Back Pain Without Radicular Pain or Neurologic Findings |
| | C.2 Low Back Pain With Radicular and Other Neurological Findings |
| **C. Initial Diagnostic Procedures** | **D. Initial Diagnositic Procedures** |
| C.1 History-taking and Physical Examination<br>C.1.a History of Present Injury<br>C.1.b Past History<br>C.1.c Physical Examination<br>C.1.d Relationship to Work | D.1. History Taking and Physical Examination<br>D.1.b Past History - Information added<br>D.1.c Physical Examination - Information added<br>D.1.d Relationship to Work and Other Activity - Substantially expanded |
| **E. Therapeutic Procedures – Non-operative** | **F. Therapeutic Procedures – Non-operative** |
| E.2 Biofeedback | F.2 Biofeedback - Same as new Cervical Spine (substantially expanded/edited from previous Low Back Pain guideline) |
| E.3 Injection – Therapeutic<br>E.3.a Therapeutic Spinal Injections<br>E.3.a.i Cervical Epidural Steroid Injection (ESI)<br>E.3.a.ii Zygapophyseal (Facet) Injection<br>E.3.a.iii Sacroiliac Joint Injection<br>E.3.a.iv Intradiscal Steroid Therapy<br>E.3.b Radio Frequency (RF) Medial Branch Neurotomy/Facet Rhizotomy<br>E.3.c Sacro-iliac (SI) Joint Radiofrequency Denervation<br>E.3.d Trigger Point Injections and Dry Needling Treatment<br>E.3.e Prolotherapy<br>E.3.f Epiduroscopy and Epidural Lysis of Adhesions | F.3. Injections – Spinal Therapeutic<br>Divided into two sections (like Cervical Spine). General information expanded.<br>F.3.a Epidural Steroid Injection (ESI) - Significantly expanded Recommendation changed to not recommended<br>F.3.c Sacroiliac Joint Injection - Added<br>F.3.d Transforaminal Injection with Etanercept - Added<br>F.3.e Zygapophyseal (Facet) Injection Expanded |

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# TRAINING AND OUTREACH

SAW/RTW, Medical Status Form, Medical Fee Schedule, and U&T Guidelines trainings from September 2013 – September 2015

- Employer Trainings
  - 42 Trainings / 1,109 employers/managers
- Provider Trainings
  - 31 Trainings / 259 providers
- Insurer Trainings
  - 21 Trainings / 337 claims managers

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## IMRs COMPLETED SEPTEMBER 2013 – SEPTEMBER 2015

- Total IMRs completed 41
  - NR = Not Recommended 12 29%
  - NIMR = Not Qualified IMR 5 12%
  - R = Recommended 12 29%
  - RC = Recommended w/conditions 3 7%
  - RO = Recommended other guidelines 8 20%
  - NC = Not Completed (By Request) 1 2%
- Total Recommended 24

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- Dr. John G. Sandness, MD, MS, FACOEM
- Physical & Occ Med Associates
- Bloomington, MN
- Training program Dr. Phillip E. Greenman, DO

Low Back Pain: Thinking Outside the Disc

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## Traditional Medical Dogma

- In 85% of cases " specific diagnosis is neither possible nor necessary."
- 90% of low back pain patients recover spontaneously in 4 to 12 weeks.

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- Croft PR, Macfarlane GJ et al, "Outcome of low back pain in general practice: a prospective study" British Med Jour 316(7141): p 1356-9, May 2, 1998
- Cherkin DC, et al, "Predicting poor outcomes for back pain seen in primary care using patient's own criteria" Spine(Phila PA 1976) 1996 Dec 15:21(24): 2009-790% Spontaneous Recovery?
- Mehling WE et al, "The prognosis of acute low back pain in primary care in the United States" Spine 2012: 37:678-684

90% Spontaneous Recovery?

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- "…in the patient with LBP…The precise cause remains unclear in most cases. Anatomic abnormalities can be readily identified by imaging studies, but most of these abnormalities are common even in healthy people…"
- Many patients have symptoms with little recognizable spinal abnormality.

Deyo RA, "Diagnostic Evalution of LBP: reaching a specific diagnosis is often impossible," Arch Intern Med 202 Jul 8: 162(12): 1444-7; discussion 1447-8

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- 49%- Sacral dysfunctions (92.8%)
- 84%- Non-neutral dysfunctions of the lumbar spine
- 75%-Symphysis pubis dysfunction
- 24% Innominate shear dysfunction
- 63% Short leg/pelvic tilt syndrome
- 100% Muscle imbalances

The Dirty Half-Dozen

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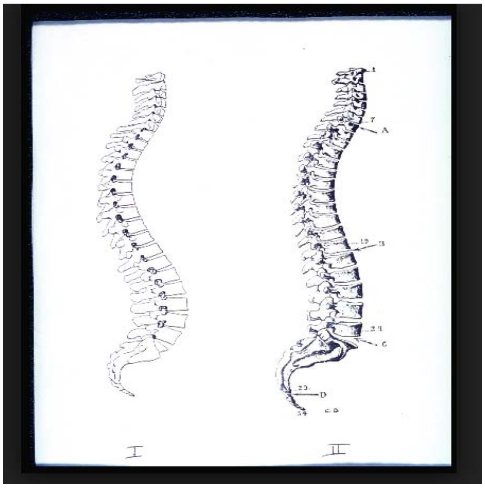

S-Spine vs J-Spine

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Try these exercises while you're working at your desk, sitting at the dinner table or walking around,

1. Do a shoulder roll
2. Lengthen your spine
3. Squeeze, squeeze your glute muscles when you walk
4. Don't put your chin up
5. Don't sit up straight!

Esther Gokhale's Five Tips For Better Posture And Less Back Pain

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## Contact information for WC Medical Regulations

email: mlytle@mt.gov

phone: 406-444-6604

email: chuitt@mt.gov

phone: 406-444-1600

## QUESTIONS ?

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| | Current Montana Cervical Spine Guideline | Proposed Montana Cervical Spine Guideline Changes | |
|---|---|---|---|
| | | C. Overview of Care - New section added<br>C.1. Neck Pain without Radicular Pain or Neurologic Findings<br>C.2 Neck Pain with Radicular and Neurological Findings | 4 |
| | **C. Initial Diagnostic Procedures** | **D. Initial Diagnostic Procedures** | 9 |
| | C.1 History-taking and Physical Examination<br>C.1.a History of Present Injury<br>C.1.b Past History<br>C.1.c Physical Examination<br>C.1.d Relationship to Work<br>C.1.e Spinal Cord Evaluation<br>C.1.f Soft Tissue injury Evaluation<br>C.1.g Assessing Red Flags | D.1.b Past History<br>Added Type 1 or Type 2 diabetes, medication list<br>D.1.c Physical Examination<br>Added statement on whiplash, testing for hip flexion, assessment of gait, provocative tests for possible radiculopahy, repeated end range testing, combination of multiple physcial exam tests; deleted palpitation<br>D.1.f. Assessing Red Flags<br>Left this section in (originally from ACOEM)<br>D.1.g Relationship to Work and Other Activity<br>Section moved here and substantially expanded | |
| | C.2 Imaging | D.2 Imaging<br>Added suspected lesion, past medical history | 18 |
| | C.3 Laboratory Testing | D.3 Laboratory Testing<br>Added blood-glucose level | 19 |
| | **D. Follow-up Diagnostic Imaging and Testing Procedures – Cervical Spine Injury** | **E. Follow-up Diagnostic Imaging and Testing Procedures** | 21 |
| | D.1 Imaging Studies<br>D.1.a Roentgenograms (X-rays)<br>D.1.b Magnetic Resonance Imaging (MRI)<br>D.1.c Computed Axial Tomography (CT)<br>D.1.d Myelography<br>D.1.e CT Myelogram<br>D.1.f Lineal Tomography<br>D.1.g Bone Scan (Radioisotope Bone Scanning)<br>D.1.h Other Radioisotope Scanning<br>D.1.i Dynamic [Digial] Fluoroscopy | E.1 Imaging Studies<br>Deleted Roentgenograms (X-rays) | 21 |
| | D.2.a Electrodiagnostic Testing<br>D.2.a.i Electromyography (EMG) and Nerve Conduction Studies | E.2 Other Tests<br>General information substantially expanded | **24** |

| | | | |
|---|---|---|---|
| | (NCS)<br>D.2.a.ii Portable Automated Electrodiagnostic Device<br>D.2.a.iii Somatosensory Evoked Potential (SSEP)<br>D.2.a.iv Current Perception Threshold Evaluation (CPT)<br>D.2.b Injections Diagnostic<br>D.2.b.i-vi Diagnostic Injections<br>D.2.b.vii Specific Diagnostic Injections<br>D.2.b.vii.A Medial Branch Blocks<br>D.2.b.vii.B Atlanto-Axial and Atlanto-Occipital Injections<br>D.2.b.vii.C Transforaminal Injections<br>D.2.b.vii.D Zygapophyseal (Facet) Blocks<br>D.2.c Personality/Psychological/Psychosocial Evaluation<br>D.2.d Provocation Discography<br>D.2.d.i Provocation Discography<br>D.2.d.ii Indications for provocation discography<br>D.2.d.iii Pre-conditions for provocation discography<br>D.2.d.iv Complications of provocation discography<br>D.2.d.v Contraindications for provocation discography<br>D.2.d.vi Special considerations for provocation discography<br>D.2.d.vii Reporting of discography<br>D.2.d Thermography | E.2.b.i Epidural Injections<br>Added<br>E.2.b.ii Medial Branch Blocks<br>Expanded<br>E.2.b.iii Zygapophyseal (Facet) Blocks<br>Expanded; prior authorization now required<br>E.2.d Provocation Discography<br>Recommendation changed to not recommended | |
| | D.3 Special Tests<br>D.3.a Computer-Enhanced Evaluations<br>D.3.b Functional Capacity Evaluation (FCE)<br>D.3.c Job Site Evaluation<br>D.3.d Vocational Assessment<br>D.3.e Work Tolerance Screening | E.3 Special Tests<br>E.3.a Computer-Enhanced Evaluations<br>Frequency changed<br>E.3.b Functional Capacity Evaluation (FCE)<br>Expanded; prior authorization now required | 36 |
| | **E. Therapeutic Procedures – Non-operative** | F. Therapeutic Procedures – Non-operative | 39 |
| | E.1. Acupuncture<br>E.1.a Acupuncture without Electrical Stimulation<br>E.1.b Acupuncture with Electrical Stimulation<br>E.1.c Time Frames for Acupuncture with/without Electrical Stimulation<br>E.1.d Other Acupuncture Modalities | F.1. Acupuncture<br>F.1.a Acupuncture<br>Expanded | 39 |
| | E.2 Biofeedback | F.2 Biofeedback<br>Expanded | 42 |

| | | | |
|---|---|---|---|
| | E.3 Injection – Therapeutic<br>E.3.a Therapeutic Spinal Injections<br>E.3.a.i Cervical Epidural Steroid Injection (ESI)<br>E.3.a.ii Zygapophyseal (Facet) Injection<br>E.3.a.iii Intradiscal Steroid Therapy<br>E.3.b Radio Frequency (RF) Medial Branch Neurotomy/ Facet Rhizotomy<br>E.3.c Occiptal Nerve Block<br>E.3.d Trigger Point Injections and Dry Needling Treatment<br>E.3.e Prolotherapy<br>E.3.f Epiduroscopy and Epidural Lysis of Adhesions<br>E.3.g Botulinum Toxin Injections | F.3 Injection – Spinal Therapeutic<br>Split into two sections<br>General information expanded<br>F.3.a Epidural Steroid Injection (ESI)<br>Significantly expanded<br>F.3.dZygapophyseal (Facet) Injection<br>Significantly expanded | 44 |
| | | F.4 Injections – Other (Including Radio Frequency)<br>Deleted: Occipital Nerve Block<br>F.4 a Botulinum Toxin Injections<br>New section<br>F.4.b Epiduroscopy and Epidural Lysis of Adhesions<br>Expanded<br>F.4.d Radio Frequency Ablation – Dorsal Nerve Root Ablation<br>Added<br>F.4.e Radio Frequency (RF) Denervation – Medial Branch Neurotomy/Facet Rhizotomy<br>Expanded<br>F.4.f Transdiscal Biacuplasty<br>Added<br>F.4.g Trigger Point Injections and Dry Needling Treatment<br>No change | 54 |
| | E. 4 Medications<br>E.4.a Acetaminophen<br>E.4.b Muscle Relaxants<br>E.4.c Narcotics<br>E.4.d Nonsteroidal Anti-Inflammatory Drugs (NSAIDs)<br>E.4.e Oral Steroids<br>E.4.f Intravenous Steroids<br>E.4.g Psychotropic/Anti-anxiety/Hypnotic Agents<br>E.4.h Tramadol | F.5 Medications<br>Reordered alphabetically<br>F.5.a Acetaminophen – smaller dose recommended<br>F.5 b Intravenous Steroids<br>Added<br>F.5 c Muscle Relaxants<br>Modified<br>F.5 e Opioids<br>Modified<br>F.5.f Oral Steroids<br>Modified<br>F.5.g Psychotropic/Anti-Anxiety/Hypnotic Agents<br>Modified<br>F.5.h Tramadol<br>Modified | 60 |

| | | | |
|---|---|---|---|
| | E.8 Personality/Psychological/Psychosocial Intervention | F.9 Personality/Psychological/Psychosocial Intervention<br>Expanded<br>F.9.a Cognitive Behavioral Therapy (CBT) or similar treatment - Added<br>F.9.b Other psychological/psychiatric interventions - Added | 72 |
| | E.9 Restriction of Activities | F.10 Restriction of Activities<br>Revised | 75 |
| | E.10 Return to Work<br>E.10.a Establishment of a Return-to-Work Status<br>E.10.b Establishment of Activity level Restrictions<br>E.10.c Compliance with Activity Restrictions | F.11 Return-to-Work<br>Sections added<br>F.11.a Job History Interview<br>F.11.b Coordination of Care<br>F.11.c Communication | 75 |
| | E.12 Passive Therapy<br>E.12.a Electrical Stimulation (unattended)<br>E.12.b Iontophoresis<br>E.12.c Manipulation<br>E.12.d Manipulation under General Anesthesia (MUA)<br>E.12.e Manipulation under Joint Anesthesia (MUJA)<br>E.12.f Massage – Manual or Mechanical Massage<br>E.12.g Mobilization (Joint)<br>E.12.h Mobilization (Soft Tissue)<br>E.12.i Short-Wave Diathermy<br>E.12.j Subcutaneous Carbon-Dioxide Insufflations<br>E.12.k Superficial Heat and Cold Therapy (Excluding Infrared Therapy<br>E.12.l Traction – Manual<br>E.12.m Traction – Mechanical<br>E.12.n Transcutaneous Electrical Nerve Stimulation (TENS)<br>E.12.o Ultrasound (Including Phonophoresis) | F.12 Therapy – Passive<br>F.13.a Electrical Stimulation (Unattended)<br>F.13.b Iontophoresis<br>Recommendation changed to not recommended<br>F.13.c. Manipulation<br>Modified<br>F.13.l Traction – Mechanical<br>Expanded<br>F.13.n Ultrasound (Including Phonophoresis) – Recommendation changed to not recommended | 79 |
| | F. Therapeutic Procedures – Operative | **G. Therapeutic Procedures – Operative** | 91 |
| | F.1 Acute Fractures and Dislocations | Introductory information expanded<br>G.1 Acute Fractures and Dislocations<br>G.1.c Recombinant Human Bone Morphogenetic Protein (rhBMP-2) - Modified | 93 |

| | | | |
|---|---|---|---|
| | F.2 Disc herniation and Other Cervical Conditions<br>F.2.a Specific Indications Include<br>F.2.b.i Cervical Discectomy with or without Fusion<br>F.2.b.ii Cervical Corpectomy<br>F.2.b.iii Cervical Laminectomy with or without Foramimotomy or Fusion<br>F.2.b.iv Cervical Laminoplasty<br>F.2.b.v Percutaneous Discectomy | G.2 Disc Herniation and Other Cervical Conditions<br>G.2.a Specific Indications<br>Modified<br>G.2.a.i For Patients with Myelopathy<br>G.2.a.ii For Patients with Cervical Radiculopathy<br>G.2.a.iii For Patients with Persistent Non-Radicular Cervical Pain<br>G.2.b Surgical Procedures<br>G.2.b.i Anterior Cervical Discectomy with or without Fusion<br>Modified<br>G.2.b.ii Anterior Cervical Corpectomy<br>Modified<br>G.2.b.iii Posterior Cervical Laminectomy, Foraminotomy, Discectomy With or Without Fusion<br>Modified<br>G.2.b.iv Posterior Cervical Laminoplasty<br>Modified<br>G.2.b.v Percutaneous Discectomy<br>No change | 95 |
| | F.3 Thoracic Discectomy | Deleted | |
| | F.4 Artificial Disc Replacement | G.3 Total Artificial Cervical Disc Replacement (TDR)<br>Modified | 102 |

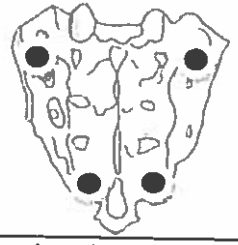
# LOW BACK PAIN
# EXAMINATION OUTLINE

| | **Standing Examination** | |
|---|---|---|
| **Examination**<br>**How to Perform** | **Normal/**<br>***Abnormal*** | **Significance** |
| Observe Gait<br>Observe patient walking back and forth several times in the exam room or hallway. | Normal gait, equal arm swing.<br>*Abnormal gait.* | A leg length inequality may cause a posting gait, with greater arm swing on the side of the short leg. SI joint dysfunction may restrict normal hip swing. Patient may be unwilling to weight bear on side of severe dysfunction. |
| Observe Posture<br>Observe from front, behind and from the side. Observe feet for fallen arches and/or bowing of the Achilles tendon. | Normal upright posture.<br>*Scoliosis, increased or decreased lumbar lordosis or thoracic kyphosis. Fallen arches.* | Forward flexed posture may be due to a posteriorly nutated sacral base, FRS dysfunctions of the spine, tight hip flexors, stenosis or a combination of the above. Scoliosis may be secondary to a leg length inequality. Fallen arches may be a perpetuating factor in low back pain. |
| Examine Iliac Crest Height<br>Bring hands in from the side above the waist and press downward until you contact the iliac crest. | Iliac crests should be absolutely level.<br>*Iliac crests not level.* | If one iliac crest is higher than the other, suspect leg length inequality, symphysis pubis dysfunction, innominate rotation, pelvic subluxation, or a small hemi-pelvis. |
| Standing Flexion Test<br>From behind, examiner places right thumb over right PSIS and left thumb over left PSIS and asks patient to slowly bend forward. | Thumbs move upward in tandem.<br>*One thumb moves upward before the other.* | The thumb that moves upward first indicates the side of abnormal SI joint motion. False positives may be due to hamstring muscle tightness on the opposite side. False negatives are common. |

# LOW BACK PAIN
# EXAMINATION OUTLINE

| | **Standing Examination (cont.)** | |
|---|---|---|
| **Examination**<br>**How to Perform** | **Normal/**<br>***Abnormal*** | **Significance** |
| Stork Test (Gillet Test)<br>Place one thumb in the midline over the sacrum at the level of the PSIS, and the other over the PSIS on one side. Instruct the patient to lift their knee on the tested side "like they are marching". | The thumb on the PSIS should move downward with hip flexion.<br>*Thumb on PSIS moves upward during hip flexion on side of dysfunction.* | If the thumb on the PSIS stays level or moves upward during hip flexion, it indicates abnormal SI joint motion on that side. False negatives are common. The patient may have difficulty balancing on side of dysfunctional joint. |

# LOW BACK PAIN
# EXAMINATION OUTLINE

| | **Seated Examination**<br>(from behind, patient seated on stool) | |
|---|---|---|
| **Examination**<br>**How to Perform** | **Normal/**<br>***Abnormal*** | **Significance** |
| Seated Flexion Test<br>Place right thumb over right PSIS, left thumb over left PSIS, and ask patient tot slowly bend forward. | Thumbs move upward in tandem.<br>*One thumb moves upward before the other.* | Similar to standing flexion test. The thumb that moves upward first indicates abnormal SI joint motion on that side. Seated position removes potential influence of a unilaterally tight hamstring. |
| Sacral Position in Flexion<br>Place thumbs on each side of the sacral base (between the right and left PSIS) and then on each side of the inferior lateral angles (lower corners) of the sacrum. Assess the relative depth of each thumb at the sacral base and inferior lateral angle. | Thumbs should be absolutely level at both locations.<br>*Thumbs not level at either location.*<br>  | Any deviation from absolutely level indicates a sacral malposition. Anterior sacral torsions will appear rotated to the right or left in flexion. Nutations will appear "warped". Posterior sacral torsions will appear level in flexion. |
| Spinal Alignment in Flexion<br>Using both thumbs, assess the relative depth of the transverse processes at each lumbar and thoracic vertebrae. Observe for rotational deviation from the sacral base to L5, and between vertebral levels. | The entire spine should be aligned with the sacral base.<br>*Small right or left rotational changes (approximately 10 degrees) in the orientation of the transverse processes.* | Any alteration in alignment indicates an ERS dysfunction at that vertebral level. The inferior facet joint on the side of the more anterior transverse process does not open normally at that level during flexion. |
| Multifidus Muscle<br>Palpate the multifidus muscles along both sides of the spinous processes in the lumbar region. | Firm, equal muscle mass along both sides of the spinous processes.<br>*Focal areas of muscle atrophy, may feel like soft depressions in the muscle.* | Segmental atrophy of multifidus muscle is common, and can be a risk factor for recurrent back pain if untreated. |

# LOW BACK PAIN
# EXAMINATION OUTLINE

| | **Seated Examination**<br>(from the front, patient seated on exam table) | |
|---|---|---|
| **Examination**<br>**How to Perform** | **Normal/**<br>***Abnormal*** | **Significance** |
| Deep Tendon Reflexes<br>Use reflex hammer to test reflexes at knees (L4) and ankles (S1). | Symmetrical reflexes.<br>*Reflexes not symmetrical from side to side.* | A unilaterally decreased deep tendon reflex at the knee indicates impairment of the L4 nerve; asymmetry at the ankle indicates an impairment of the S1 nerve. |
| Babinski Test<br>Stroke the lateral aspect of the sole from the heel to the ball of the foot with sharp object. | Flexion of toes.<br>*Dorsiflexion of great toe and fanning of the other toes* | Abnormal Babinski response indicates upper motor neuron disease. |
| Sensory Exam<br>Examine autonomous sensory zones for light touch:<br>Lateral foot and lower ½ of lateral calf(S1)<br>Second toe and upper ½ of lateral calf (L5)<br>Knee and supra-patellar region (L4)<br>Anterior mid thigh (L3) | Normal sensation<br>*Alteration in sensation.* | Altered sensation suggests impairment of nerve function at the corresponding level. |
| Motor Testing Ask patient to:<br>Plantar flex ankle (S1) or stand on toes<br>Dorsiflex ankle (L5) or stand on heels<br>Extend great toe (L5)<br>Extend knee (L2, L3, **L4**) or squat and rise<br>Flex knee (S1, S2)<br>Flex hip (L1) | Symmetrical strength<br>*Unilateral or bilateral weakness* | Weakness suggests impairment of nerve function at corresponding level. Pain inhibition may simulate weakness. |
| Measure for Atrophy<br>Measure the circumference of calf at its widest part, measure circumference of thigh 10 cm above superior pole of patella. | Circumference should be roughly equal from right to left.<br>*Difference in circumference of more than 2 cm is significant.* | Atrophy of the calf muscle suggests denervation of the S1 nerve; atrophy of the thigh suggests denervation of the L4 nerve. |

# LOW BACK PAIN
# EXAMINATION OUTLINE

| | Supine Examination | |
|---|---|---|
| **Examination**<br>**How to Perform** | **Normal/**<br>***Abnormal*** | **Significance** |
| Actual Leg Length<br>Use a tape measure to measure from the ASIS to the medial malleolus | Legs should measure the same length.<br>*Legs of different measured length.* | A leg length difference of greater than 4 mm is considered significant and should be treated with a trial of lift therapy. |
| Apparent Leg Length<br>Line the legs up and place your thumbs below the inferior aspect of the medial malleolus. Observe for any apparent difference in length. | Legs should appear the same length.<br>*Legs appear different lengths.* | Causes of apparent leg length differences in a supine position include: a true leg length inequality, innominate rotation, or pelvic subluxation. If leg length is different by measurement, but the legs appear the same length, there must be some compensation in the pelvis (innominate rotation, pelvic subluxation, or small hemipelvis.). |
| Symphysis Pubis Alignment<br>Place index fingers over the right and left pubic tubercles and assess A-P alignment. Hook index fingers over superior aspect of symphysis pubis to assess cephalad-caudal alignment. Ask patient to raise head to assess symmetry of contraction of the rectus abdominus muscle. | Symphysis pubis should be level and rectus abdominus contraction should feel symmetrical.<br>*Asymmetry in pubic tubercles and/or asymmetry in the contraction of the rectus abdominus.* | Symphysis pubis dysfunctions are common in patients with low back pain. A symphysis pubis dysfunction will affect normal gait. Patients with a symphysis pubis dysfunction will rarely have an awareness of, or complain of pubic pain, but there may be tenderness on palpation of the symphysis pubis. |
| Straight Leg Raising (passive)<br>Passively raise patient's leg. | No pain with SLR at 70 degrees or less.<br>*Radiating pain below the knee at 70 degrees or less, aggravated by ankle dorsiflexion (increases neural tension).* | A positive straight leg raising test suggests neural tension from nerve root impingement. Most sensitive for L4, L5, and S1 levels. |
| Active Straight Leg Raising<br>Have patient raise right leg 6" and then left leg 6". Repeat while adding compression to the pelvis anteriorly, and again while adding compression posteriorly. | Patient reports no change in the ease or difficulty of raising legs with or without compression.<br>*Leg raising is easier or harder with pelvic compression in front or back, or both.* | If leg raising is easier with anterior pelvic compression, it suggests weakness of the transverses abdominus; if easier with posterior compression, it suggests weakness of the multifidus. |

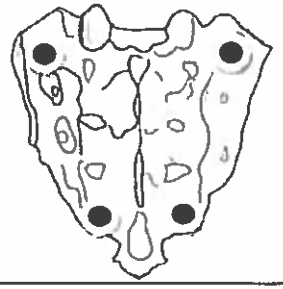
# LOW BACK PAIN
# EXAMINATION OUTLINE

| | **Supine Examination (cont.)** | |
|---|---|---|
| **Examination**<br>**How to Perform** | **Normal/**<br>***Abnormal*** | **Significance** |
| Palpation of Iliopsoas Muscles<br>Palpate deeply lateral to the rectus abdominus at the level of the umbilicus, moving you hand medially until contacting the muscle. Palpate the insertion of the iliopsoas distil to the inguinal ligament. Have the patient raise their leg a few inches to feel the muscle engage. Palpate the iliacus along the inner side of the ilium about one inch medial to and one inch inferior to the ASIS. | No pain, only a sense of pressure.<br>*May be exquisitely tender. Patient often exhibits a "jump sign" when a trigger point is palpated.* | The iliopsoas muscle is frequently tender and shortened in low back pain, and is usually more symptomatic on the same side as an SI joint dysfunction. |

# LOW BACK PAIN
# EXAMINATION OUTLINE

| | Prone Examination | |
|---|---|---|
| **Examination**<br>**How to Perform** | **Normal/**<br>***Abnormal*** | **Significance** |
| Prone Leg Length<br>Bring heels together, place your thumbs below the inferior aspect of the medial malleolus and assess for equality of leg length. | Equal<br>*Not equal* | Differences may be due to: a true leg length inequality, a sacral dysfunction, a pelvic subluxation, or a small hemipelvis (rare). |
| Iliac Crests<br>Bring hands in from the side in the lumbar region and press downward until you contact the iliac crest. | Level<br>*Not level* | Unleveling of the iliac crests strongly suggests a pelvic subluxation. Interpret in the context of other findings. Unilateral tightness in the quadratus lumborum may also cause unleveling of the iliac crests. |
| Ischial Tuberosities<br>Press thumbs upward in gluteal fold until you contact the ischial tuberosities. | Level<br>*Not level* | Unleveling of the ischial tuberosities strongly suggests a pelvic subluxation. Interpret in the context of other findings. |
| Sacrotuberous Ligaments<br>Starting from the ischial tuberosities, move your thumbs superiorly and medially to palpate the tension in the sacrotuberous ligaments (the ligaments run from the sacrum to the ischial tuberosities). | Equal tension in both ligaments.<br>*Unequal tension in the ligaments.* | The sacrotuberous ligament will be slack on the affected side in an upward subluxation because the ilium is shifted superiorly, shortening the distance between the two attachments of the ligament. |
| Gluteus Maximus Inhibition<br>Monitor the hamstring and gluteus maximus, then instruct the patient to raise their leg (extend the hip) at the hip with the knee straight. | Hip extension is initiated by the gluteus maximus.<br>*Hip extension is initiated by the hamstrings and activation of the gluteus maximus is delayed, weak, or absent.* | Most common causes are SI joint dysfunction or reciprocal inhibition. Usually accompanied by trigger points in the gluteus medius and piriformis. May secondarily result in piriformis syndrome, and/or tightening of contralateral lat. dorsi. |

# LOW BACK PAIN
# EXAMINATION OUTLINE

| | **Prone Prop-up Examination** | |
|---|---|---|
| **Examination**<br>**How to Perform** | **Normal/**<br>***Abnormal*** | **Significance** |
| Sacral Position in Extension<br>Place thumbs on each side of the sacral base (between the right and left PSIS) and then on each side of the inferior lateral angles (lower portion) of the sacrum. Assess the relative depth of each thumb at the sacral base and inferior lateral angle. | Thumbs should be level at both locations.<br>*Thumbs not level at either location.*<br>  | Any deviation from level indicates a sacral malposition. Posterior sacral torsions will appear rotated to the right or left in extension. Nutations will appear "warped". Anterior sacral torsions will appear level in flexion. |
| Spinal Alignment in Extension<br>Using both thumbs, assess the relative depth of the transverse processes at each vertebra. Look for any rotational change from the sacral base to L5, and from one vertebral level to the next. | The entire spine should be aligned with the sacral base.<br>*Small right or left rotational changes (approximately 10 degrees) in the orientation of the transverse processes.* | An alteration in alignment indicates an FRS dysfunction at the vertebral level where the transition occurs. The inferior facet joint on the side of the more anterior transverse process is not closing normally during extension. |

# LOW BACK PAIN
# EXAMINATION OUTLINE

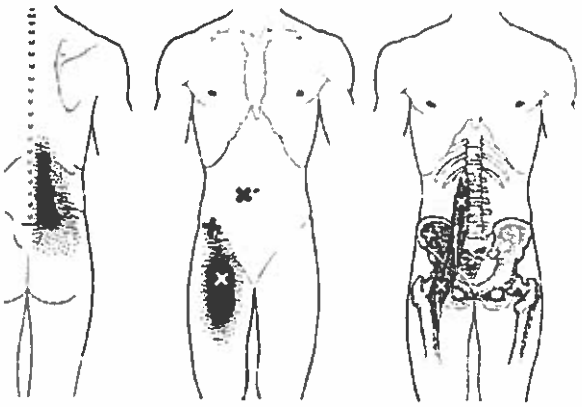
| | **Side-Lying Examination** (examine both right and left sides) | |
|---|---|---|
| **Examination**<br>**How to Perform** | **Normal/**<br>***Abnormal*** | **Significance** |
| Gluteus Medius Inhibition<br>Use both hands to simultaneously monitor three muscles: the gluteus medius (just above the hip pocket), quadratus lumborum (between ribs and pelvis), and tensor fascia lata (between anterior iliac crest and greater trochanter) while instructing the patient to slowly lift the top leg. | Hip abduction is performed primarily by the gluteus medius; a firm contraction should be felt in the gluteus medius.<br>*The gluteus medius contracts only minimally, with stronger contractions felt in the tensor fascia lata and quadratus lumborum.* | Patients will usually complain of hip pain and/or knee pain in the presence of gluteus medius inhibition. The gluteus medius and the substituting muscles (gluteus minimus, TFL, QL, vastus lateralis) will often develop trigger points. Trochanteric bursitis may be present. Gluteus medius (abductor) inhibition may be due to reciprocal inhibition from tightness in the adductors which in turn is often secondary to a symphysis pubis dysfunction, or gluteus medius inhibition may be due to an innominate rotation. |
| Muscle Trigger Point Examination<br>Using firm pressure (enough to blanch the tip of the nail bed on your thumb), palpate for trigger points in the following muscles: gluteus medius, piriformis, gluteus minimus, TFL, vastus lateralis, quadratus lumborum, lat dorsi, infraspinatus). | Sensation of pressure, but no pain.<br>*May be exquisitely tender. Presence of a trigger point often signaled by a "jump sign", causing the patient to jump when you press on a trigger point. Patient may experience local and referred pain from a trigger point.* | Consider trigger points as a marker of muscle overload. Ask yourself, why would this particular muscle be working so hard? Is it compensating for a structural abnormality such as unequal leg length? Stabilizing an unstable structure? Substituting for an inhibited muscle? Over working due to tightness in the muscle's antagonist? Or is the muscle over-stimulated by an irritated nerve? |

# Common Trigger Points in Low Back Pain

## Psoas

Trigger points in the psoas muscle are usually found on the same side as an SI joint dysfunction.

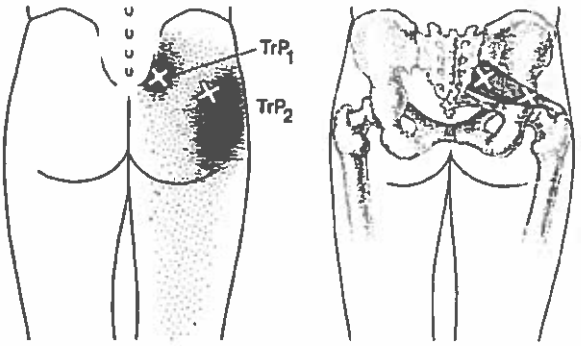
Tightness of the psoas has a strong influence on lumbar spine.



## Piriformis

Trigger points in the piriformis are often found when there is inhibition the gluteus maximus, or on the same side as an innominate upslip.

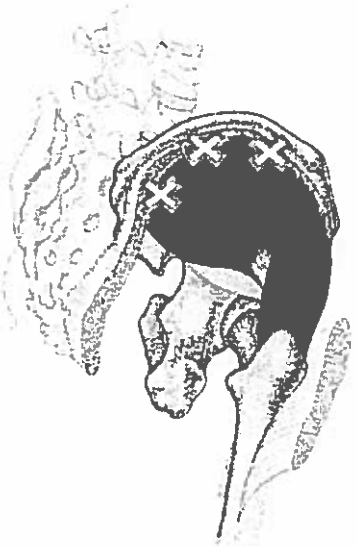
A tight piriformis muscle may entrap the sciatic nerve.




## Gluteus Medius

Usually found on same side as a sacroiliac joint dysfunction, and occurs in presence of gluteus medius or gluteus maximus muscle inhibition.

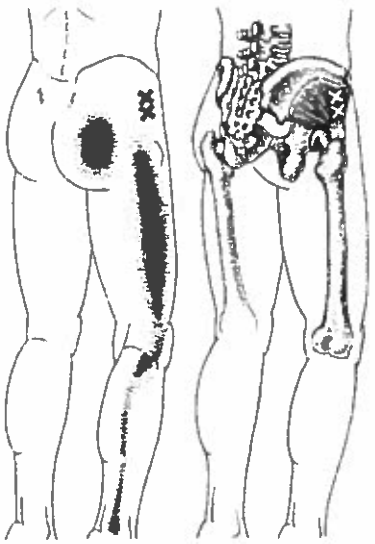
A gluteus medius trigger point refers pain over the sacrum, iliac crest, or gluteal region.



## Gluteus Minimus

Trigger points in the gluteus minimus are usually found in presence of gluteus medius inhibition, or on the side opposite from an innominate upslip.

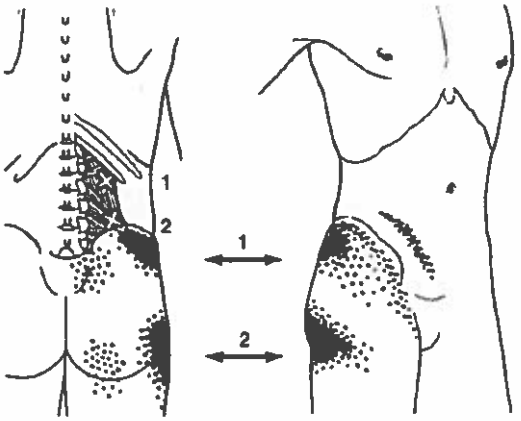
Often refers pain down the side of the leg to the thigh, calf, and ankle and can mimic a radiculopathy.



## Quadratus Lumborum

Trigger points in the quadratus lumborum are often found in the presence of inhibition of the gluteus medius.

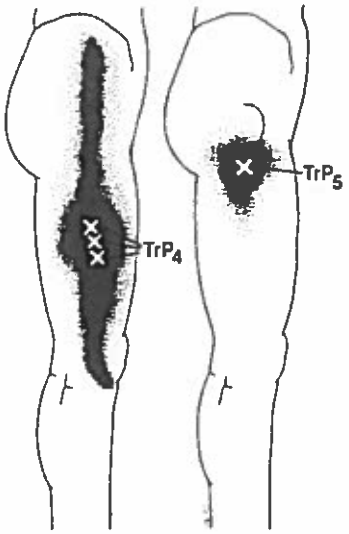
Trigger points and tightness in the quadratus lumborum will further inhibit the gluteus medius muscle.



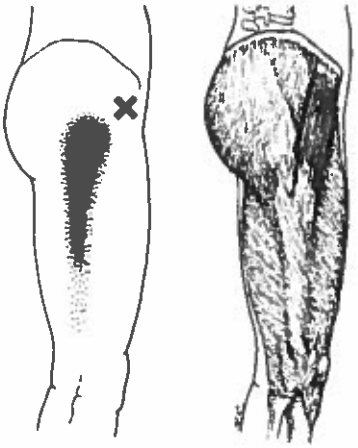

## Vastus Lateralis

Trigger points in the Vastus lateralis are often found in the presence of gluteus medius inhibition and a tight IT band.

Patient may be unable to lie on affected side at night.



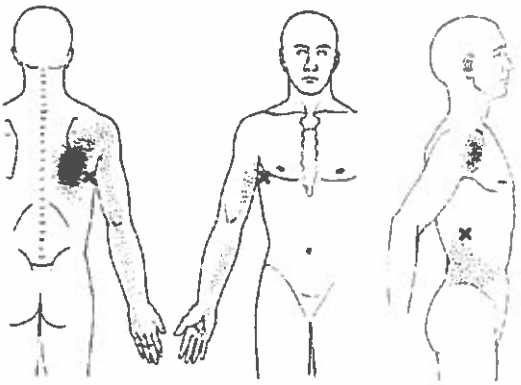
## Tensor Fascia Lata



May be found in the presence of gluteus medius muscle inhibition.

The pain from the tensor fascia lata may prevent the patient from lying comfortably on their side.

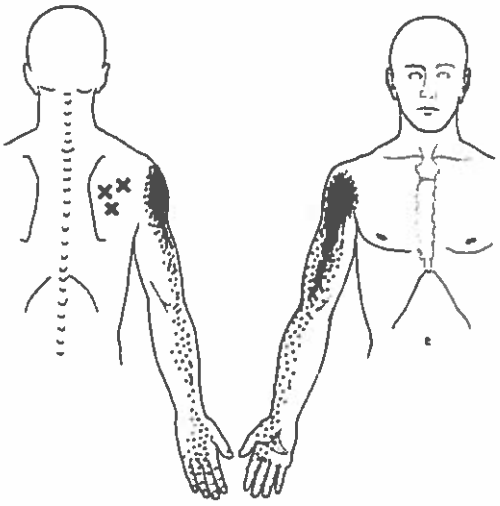
## Latissimus Dorsi



Located in the posterior axial fold, this trigger point often occurs in the presence of gluteus maximus inhibition on the opposite side.

Trigger point may refer down the arm to the ulnar aspect of the hand.

## Infraspinatus



Commonly found on the side opposite from gluteus maximus inhibition, due to tightness of the latissimus dorsi causing internal rotation of the shoulder. Also common in computer users working with their computer mouse on a desktop.

May cause shoulder pain, or mimic CTS or a cervical radiculopathy.

| | Current Montana Low Back Pain Guideline | Proposed Montana Low Back Pain Guideline | |
|---|---|---|---|
| | | **C. Overview of Care**<br>New section added | 10 |
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| | | C.2 Low Back Pain With Radicular and Other Neurological Findings | 13 |
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| | C.1 History-taking and Physical Examination<br>C.1.a History of Present Injury<br>C.1.b Past History<br>C.1.c Physical Examination<br>C.1.d Relationship to Work | D.1. History Taking and Physical Examination<br>D.1.b Past History - Information added<br>D.1.c Physical Examination - Information added<br>D.1.d Relationship to Work and Other Activity - Substantially expanded | 15 |
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| | | | |
|---|---|---|---|
| | | F.4.e Radio Frequency (RF) Denervation – Medial Branch Neurotomy/Facet Rhizotomy<br>F.4.f Radio Frequency Denervation – Sacro-iliac (SI) Joint Cooled - Added<br>F.4.g Transdiscal Biacuplasty - Added<br>F.4.h Trigger Point Injections and Dry Needling Treatment New information added | |
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| | E.11 Therapy – Active<br>E.11.a Activities of Daily Living (ADL)<br>E.11.b Aquatic Therapy<br>E.11.c Functional Activities<br>E.11.d Functional Activities<br>E.11.e Functional Electrical Stimulation<br>E.11.f Neuromuscular Re-education | F.12 Therapy – Active<br>This section very similar to CSI<br>F.12.c Back Schools - Moved here from E.7 Patient Education<br>F.12.f Neuromuscular Re-education - Expanded<br>F.12.g Therapeutic Exercise Expanded | 85 |

| | | | |
|---|---|---|---|
| | E.11.g Spinal Stabilization<br>E.11.h Therapeutic Exercise | | |
| | E.12 Passive Therapy<br>E.12.a Electrical Stimulation (unattended)<br>E.12.b Iontophoresis<br>E.12.c Manipulation<br>E.12.d Manipulation under General Anesthesia (MUA)<br>E.12.e Manipulation under Joint Anesthesia (MUJA)<br>E.12.f Massage – Manual or Mechanical Massage<br>E.12.g Mobilization (Joint)<br>E.12.h Mobilization (Soft Tissue)<br>E.12.i Reflexology<br>E.12.j Neuroflexotherapy<br>E.12.k Short-Wave Diathermy<br>E.12.l Superficial Heat and Cold Therapy (Excluding Infrared Therapy<br>E.12.m Traction – Manual<br>E.12.m Traction – Mechanical<br>E.12.o Interferential Therapy<br>E.12.p Ultrasound (Including Phonophoresis)<br>E.12.q Vertebral Exial Decompression (VAX-D)/DRX, 9000<br>E.12.r Whirlpool/Hubbard Tank | F.13 Therapy – Passive<br>This section very similar to CSI, with addition of low back studies<br>F.13.b Iontophoresis<br>Recommendation changed to not recommended<br>F.13.c Low Level Laser<br>Added<br>F.13.d Manipulation<br>Expanded<br>F.13.h Mobilization (Joint)<br>Modified<br>F.13.m Traction – Mechanical<br>Recommendation changed to not recommended<br>F.13.o Ultrasound (including phonophoresis)<br>Recommendation changed to not recommended | 92 |
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| | F.4 Spinal Fusion | G.4 Spinal Fusions (Usually Combined with Decompression)<br>NOTE: use language from CSI guideline re: Recombinant Human Bone Morphogenetic Protein? | 103 |
| | F.8 Laser Disectomy | G.8 Intradiscal Electrothermal Annuloplasty (IDEA) (More Commonly Called IDET, or Intradiscal Electrothermal Therapy<br>Recommendation changed to not recommended | 109 |

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| | F.3 Laminotomy/Laminectomy/Foramenotomy/Facetectomy | G.3 Laminotomy/Laminectomy/Foramenotomy/Facetectomy for Central or Lateral Spinal Stenosis<br>Surgical indications expanded | 103 |
| | F.4 Spinal Fusion | G.4 Spinal Fusions (Usually Combined with Decompression)<br>NOTE: use language from CSI guideline re: Recombinant Human Bone Morphogenetic Protein? | 103 |
| | F.8 Laser Disectomy | G.8 Intradiscal Electrothermal Annuloplasty (IDEA) (More Commonly Called IDET, or Intradiscal Electrothermal Therapy<br>Recommendation changed to not recommended | 109 |