



CLAIMS EVAL

*Utilization Review and
Peer Review Services*

Notice of Independent Review Decision-WC

CLAIMS EVAL REVIEWER REPORT - WC

DATE OF REVIEW: 9-8-09

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE

Inpatient two days with laminectomy, discectomy at L4-L5-S1, arthrodesis with cages, posterior instrumentation and implantation of a bone growth stimulator at L5-S1.

A DESCRIPTION OF THE QUALIFICATIONS FOR EACH PHYSICIAN OR OTHER HEALTH CARE PROVIDER WHO REVIEWED THE DECISION

American Board of Orthopaedic Surgery-Board Certified

REVIEW OUTCOME

Upon independent review the reviewer finds that the previous adverse determination/adverse determinations should be:

Upheld (Agree)

Overturned (Disagree)

Partially Overturned (Agree in part/Disagree in part)

Provide a description of the review outcome that clearly states whether or not medical necessity exists for each of the health care services in dispute.

INFORMATION PROVIDED TO THE IRO FOR REVIEW

- 2-1-07 MRI of the lumbar spine.
- 6-15-07 CT post discogram.
- 7-11-07, MD., performed a Designated Doctor Evaluation.
- 6-5-08 MD., performed a Designated Doctor Evaluation.
- 9-25-08 EMG/NCS performed by DO.
- 10-7-08 MD., office visit.
- 10-1-08 MD., office visit.
- 10-21-08 MD., performed a Per Review.
- 11-4-08 MD., office visit.
- 12-2-09 MD., performed a Peer Review.
- 4-14-09 MD., office visit.
- 6-15-09 MD., office visit.
- 7-1-09 pre-surgical screening.
- 7-29-09 Utilization Review.
- 8-20-09 Utilization Review.
- 8-27-09 MD., Utilization Review.

PATIENT CLINICAL HISTORY [SUMMARY]:

MRI of the lumbar spine dated 2-1-07 showed probable minimal disc bulges at L5-S1 level, but no spinal canal or neural foraminal compromise.

A CT post discogram dated 6-15-07 showed at L4-L5 a shallow posterior disc bulge/protrusion with mild facet arthrosis causing mild deformity of the thecal sac without lateral recess stenosis in the supine position.

On 7-11-07, MD., performed a Designated Doctor Evaluation. He certified the claimant had not reached MMI and estimated-11-07.

On 6-5-08, Dr. performed a Designated Doctor Evaluation. He certified the claimant had reached MMI on this date and awarded the claimant 5% whole person impairment. The claimant was return to work without restrictions.

An EMG/NCS performed by DO., dated 9-25-08 shows evidence of lumbosacral radiculopathy for the S1 nerve root level, more pronounced on the left. There is lumbar nerve root irritation.

An initial orthopedic consultation dated 10-7-08 performed by MD., notes the evaluator would recommend chronic pain clinic evaluation. The claimant should be weaned off the two narcotic medications that she is presently receiving, Norco and Oxycontin.

Pain management report performed by MD., dated 10-1-08 notes the claimant was provided with a refill for Oxycontin 10 mg, Norco 10/325, Rozerem, and Flexeril. The claimant was started back on Cymbalta from 30 mg bid to 1 po qam and 2 po at bedtime. The evaluator requested medial branch blocks bilaterally at L3, L4, and L5.

On 10-21-08, MD., performed a Per Review. It was his opinion that the claimant's MMI should have been at the time of the Designated Doctor initial evaluation, around July 2007. He agreed with the 5% impairment rating awarded.

Follow up with Dr. dated 11-4-08 notes the claimant provided the claimant with her discogram and post CT scan. The evaluator reported that there clinical findings do not confirm radiculopathy. The evaluator recommended chronic pain management.

An addendum Peer Review provided by Dr. on 12-2-08 notes that there was no documented radiculopathy and additional epidural steroid injection were not reasonable at this independent medical evaluation. The evaluator reported that it was not clear what the treatment was targeting. It was certainly not targeting functional improvement. The evaluator felt that the claimant was status post lumbar strain/sprain that was resolved. The evaluator recommended tapering and discontinuing the multiple medications for which the claimant had developed physiologic dependence and returning the claimant to work.

On 4-14-09, the claimant was evaluated by MD., the claimant is a pleasant xx-year-old female with back pain and leg pain with failure of conservative treatment now greater than 2 years and .4 months. She has had workup to include MRI scan, EMG/NCV and provocation discography. Evidently, this shows 2 level pathology at L4-L5 and L5-S1 by

the patient's history but was scheduled for surgery on L5-S1 only for some odd reason. X-rays of her pelvis reveal hips without degenerative joint disease and sacroiliac joints without sclerosis. X-rays of her lumbar spine to include flexion-extension views reveal L5-S1 spondylosis, stenosis, and lateral recess stenosis and pinhole lateral stenosis with a retrolisthesis of 5mm in extension. This meets the clinical instability pattern of the American Academy of Orthopedic Surgeons Instructional Course Lectures volume 30, 1981 for arthrodesis should surgery be entertained at L4-L5 extension angle measures 15 degrees, forward flexion 11 degrees for total change of 4 degrees. This is not clinically unstable according to the parameters. On exam, the claimant has positive spring test to L5-S1. positive sciatic notch tenderness on the left, positive extensor lag. She demonstrates a positive flip test bilaterally. Positive Lasegue's on the left at +45 degrees. Positive Bragard's. Decreased ankle jerk on the left. Absent posterior tibial tendon bilaterally. Paresthesias in the L5-S1 nerve root distribution on the left. Weakness of the gastrocnemius on the left with positive extensor lag. The evaluator recommended a decompression at L4-L5, a decompression and discectomy at L5-S1 with instrumented arthrodesis. I would ask for bone growth stimulator, as she is a smoker.

Pain management progress report dated 6-15-09 notes the claimant continues with severe low back pain, left side greater than right with radiation of pain posteriorly in the legs, all the way down to the left leg, the foot and ankle on the right, just down to the knee area. The claimant reports her pain is becoming progressively worse. The claimant had bilateral transforaminal epidural steroid injection at L5-D1 on 4-12-07 with no improvement. The request for facet injections was not approved. On exam, the claimant has decreased range of motion. She has sciatic notch tenderness bilaterally. She is tender over the facets at L4-L5 and L5-S1. She has SI joint tenderness. Motor exam is 5/5. Sensation is intact to light touch. SLR is positive at 70 degrees bilaterally. The evaluator provided the claimant with a refill for Norco 10/325, Ambien CR, Cymbalta and Oxycontin. The claimant discontinued Baclofen due to secondary effects. The evaluator recommended sacroiliac joint injections. The claimant is to followup with a surgeon. The claimant was seen by LPC for counseling.

The claimant underwent a pre-surgical screening on 7-1-09, which showed the claimant is in fair prognosis for surgical procedure. In addition, the patient's personality, surgical history, and current coping capacity point to a poor prognosis for the intended surgical procedure. Following the outcome of the evaluation, the patient requires individual psychotherapy to address symptoms of depression, anxiety. The requested treatment intervention will be established with six sessions pre-surgical and a review of affective functioning and smoking cessation status before a final psychological surgical clearance.

On 7-29-09, a Utilization Review was performed. It was his opinion that the MR images at L4-L5 and L5-S1 demonstrated disc bulges in the absence of nerve root compromise. Discography did demonstrate annular tears at these levels, more prominent at the latter. No clear-cut lateralization was noted. A 5 mm retrolisthesis at L5-S1 was noted this spring on plain films (in extension). A recent psychologic evaluation suggests a fair

prognosis as well as recommending counseling, including smoking cessation. It is not clear from the current documents reviewed that the L4-5 level plays a role in the patient's current leg complaints.

On 8-20-09, a Utilization Review was performed. It was his opinion that there were no indicator per Official Disability Guidelines for involvement of L4-5 level in decompression or arthrodesis as no documented L5 radiculopathy or instability at that level. No discogram report available to review findings of L4-5 injection which apparently in one report was "not concordant." The reviewer reported that there is no new information to justify the procedure as no involvement of L5 NR or instability at L4-5. Decompression of S1 NR would likely be considered appropriate. No additional information provided or return call received.

On 8-27-09, MD., performed a Utilization Review. The evaluator reported that the performance of an inpatient two days with laminectomy, discectomy at L4-L5-S1, arthrodesis with cages, posterior instrumentation and implantation of a bone growth stimulator at L5-S1 as requested with no evidence of radiculopathy, no nerve root compression, no instability, being a smoker and with a MMPI-2 "produced a seemingly valid profile" is not supported and is not medically reasonable or necessary at this time.

ANALYSIS AND EXPLANATION OF THE DECISION INCLUDE CLINICAL BASIS, FINDINGS AND CONCLUSIONS USED TO SUPPORT THE DECISION.

The request for a posterior interbody fusion at L4-5 and L5/S1 is not medically supported by the medical documentation submitted. There are many concerns in regard to this case. Claimant is a smoker and also has a poor or fair surgical psychological profile.

Diagnostic studies have revealed degenerative changes at multiple levels lumbar spine. The use of lumbar diskography is not supported per the ODG. Lumbar fusions and workers' compensation patient also have poor surgical outcomes.

I would recommend against the requested surgical procedure of posterior interbody fusion at the two lower lumbar spine levels.

ODG-TWC, last update 08-21-09 Occupational Disorders of the Low Back – Lumbar Fusion: Not recommended for patients who have less than six months of failed recommended conservative care unless there is objectively demonstrated severe structural instability and/or acute or progressive neurologic dysfunction, but recommended as an option for spinal fracture, dislocation, spondylolisthesis or frank neurogenic compromise, subject to the selection criteria outlined in the section below entitled, "Patient Selection Criteria for Lumbar Spinal Fusion," after 6 months of conservative care. For workers' comp populations, see also the heading, "Lumbar fusion in workers' comp patients." After screening for psychosocial variables, outcomes are improved and fusion may be recommended for degenerative disc disease with

spinal segment collapse with or without neurologic compromise after 6 months of compliance with recommended conservative therapy. [For spinal instability criteria, see AMA Guides (Andersson, 2000)] For complete references, see separate document with all studies focusing on Fusion (spinal). There is limited scientific evidence about the long-term effectiveness of fusion for degenerative disc disease compared with natural history, placebo, or conservative treatment. Studies conducted in order to compare different surgical techniques have shown success for fusion in carefully selected patients. (Gibson-Cochrane, 2000) (Savolainen, 1998) (Wetzel, 2001) (Molinari, 2001) (Bigos, 1999) (Washington, 1995) (DeBarard-Spine, 2001) (Fritzell-Spine, 2001) (Fritzell-Spine, 2002) (Deyo-NEJM, 2004) (Gibson-Cochrane/Spine, 2005) (Soegaard, 2005) (Glassman, 2006) (Atlas, 2006) According to the recently released AANS/NASS Guidelines, lumbar fusion is recommended as a treatment for carefully selected patients with disabling low back pain due to one- or two-level degenerative disc disease after failure of an appropriate period of conservative care. This recommendation was based on one study that contained numerous flaws, including a lack of standardization of conservative care in the control group. At the time of the 2-year follow up it appeared that pain had significantly increased in the surgical group from year 1 to 2. Follow-up post study is still pending publication. In addition, there remains no direction regarding how to define the “carefully selected patient.” (Resnick, 2005) (Fritzell, 2004) A recently published well respected international guideline, the “European Guidelines,” concluded that fusion surgery for nonspecific chronic LBP cannot be recommended unless 2 years of all other recommended conservative treatments – including multidisciplinary approaches with combined programs of cognitive intervention and exercises – have failed, or such combined programs are not available, and only then in carefully selected patients with maximum 2-level degenerative disc disease. (Airaksinen, 2006) For chronic LBP, exercise and cognitive intervention may be equivalent to lumbar fusion without the potentially high surgical complication rates. (Ivar Brox-Spine, 2003) (Keller-Spine, 2004) (Fairbank-BMJ, 2005) (Brox, 2006) In acute spinal cord injury (SCI), if the spine is unstable following injury, surgical fusion and bracing may be necessary. (Bagnall-Cochrane, 2004) (Siebenga, 2006) A study on improving quality through identifying inappropriate care found that use of guideline-based Utilization Review (UR) protocols resulted in a denial rate for lumbar fusion 59 times as high as denial rates using non-guideline based UR. (Wickizer, 2004) The profit motive and market medicine have had a significant impact on clinical practice and research in the field of spine surgery. (Weiner-Spine, 2004) (Shah-Spine, 2005) (Abelson, 2006) Data on geographic variations in medical procedure rates suggest that there is significant variability in spine fusion rates, which may be interpreted to suggest a poor professional consensus on the appropriate indications for performing spinal fusion. (Deyo-Spine, 2005) (Weinstein, 2006) Outcomes from complicated surgical fusion techniques (with internal fixation) may be no better than the traditional posterolateral fusion. (van Tulder, 2006) (Maghout-Juratli, 2006) Despite the new technologies, reoperation rates after lumbar fusion have become higher. (Martin, 2007) According to the recent Medicare Coverage Advisory Committee Technology Assessment, the evidence for lumbar spinal fusion does not conclusively demonstrate short-term or long-term benefits compared with nonsurgical treatment for elderly patients. (CMS, 2006) When lumbar fusion surgery is performed, either with lateral fusion alone or with interbody fusion, unlike cervical fusion, there is no

absolute contraindication to patients returning even to contact sports after complete recovery from surgery. Like patients with a thoracic injury, those with a lumbar injury should be pain free, have no disabling neurological deficit, and exhibit evidence of bone fusion on x-ray films before returning. ([Burnett, 2006](#)) A recent randomized controlled trial comparing decompression with decompression and instrumented fusion in patients with foraminal stenosis and single-level degenerative disease found that patients universally improved with surgery, and this improvement was maintained at 5 years. However, no obvious additional benefit was noted by combining decompression with an instrumented fusion. ([Hallett, 2007](#)) Discography may be supported if the decision has already been made to do a spinal fusion, and a negative discogram could rule out the need for fusion on that disc (but a positive discogram in itself would not justify fusion). Discography may help distinguish asymptomatic discs among morphologically abnormal discs in patients without psychosocial issues. Precise prospective categorization of discographic diagnoses may predict outcomes from treatment, surgical or otherwise. ([Derby, 2005](#)) ([Derby2, 2005](#)) ([Derby, 1999](#)) New research shows that healthcare expenditures for back and neck problems have increased substantially over time, but with little improvement in healthcare outcomes such as functional disability and work limitations. Rates of imaging, injections, opiate use, and spinal surgery have increased substantially over the past decade, but it is unclear what impact, if any, this has had on health outcomes. ([Martin, 2008](#)) The efficacy of surgery for nonspecific back pain is uncertain. There may be some patients for whom surgery, fusion specifically, might be helpful, but it is important for doctors to discuss the fact that surgery doesn't tend to lead to huge improvements on average, about a 10- to 20-point improvement in function on a 100-point scale, and a significant proportion of patients still need to take pain medication and don't return to full function. ([Chou, 2008](#)) This study showed that fusion for chronic lower back pain was the least successful common orthopaedic surgery. The study compared the gains in quality of life achieved by total hip replacement, total knee replacement, surgery for spinal stenosis, disc excision for lumbar disc herniation, and arthrodesis for chronic low back pain. For chronic lower back pain, improvements were statistically significant but clinically negligible. Although pain was reduced and function improved slightly, outcomes remained in the moderately affected range, quality of life was not improved and rendered worse, on average. While surgery for spinal stenosis and for disc herniation compare well with archetypical orthopaedic operations, the outcomes of surgery for chronic lower back pain do not even approach those of other orthopaedic procedures, and the data show that patients with back pain are rendered worse off by surgery. ([Hansson, 2008](#)) Recent studies document a 220% increase in lumbar spinal fusion surgery rates, without demonstrated improvements in patient outcomes or disability rates. ([Deyo, 2009](#)) In a study of 2,378 Washington State workers' compensation claimants who underwent fusion to assess the frequency, timing, and causes of death, the 3-year cumulative mortality rate post-fusion was 1.93% and analgesic-related deaths were responsible for 21% of all deaths and 31.4% of all potential life lost. ([Juratli, 2009](#)) A study to compare the surgical experience, clinical outcomes, and effect on body weight between obese and morbidly obese patients undergoing lumbar spine fusion surgery concluded that clinical outcomes were independent of the BMI of the patient, but the incidence of postoperative complications was significant in 45% of morbidly obese and 44% of obese patients. The authors

proposed that morbidly obese patients should undergo bariatric surgery before spine surgery in nonemergent situations. ([Vaidya, 2009](#)) For nonradicular low back pain with common degenerative changes, there is fair evidence that fusion is no better than intensive rehabilitation with a cognitive-behavioral emphasis for improvement in pain or function, and less than half of patients experience optimal outcomes (defined as no more than sporadic pain, slight restriction of function, and occasional analgesics) following fusion. ([Chou, 2009](#)) Posterolateral bone-grafting fusion is not necessary when a Denis type-B thoracolumbar burst fracture associated with a load-sharing score of ≤ 6 is treated with short-segment pedicle screw fixation. ([Dai, 2009](#)) Lumbar spinal fusion surgeries use bone grafts, and are sometimes combined with metal devices, to produce a rigid connection between two or more adjacent vertebrae. The therapeutic objective of spinal fusion surgery for patients with low back problems is to prevent any movement in the intervertebral spaces between the fused vertebrae, thereby reducing pain and any neurological deficits. See also [Adjacent segment disease/degeneration \(fusion\) & Iliac crest donor-site pain treatment](#).

Lumbar fusion in workers' comp patients: In cases of workers' compensation, patient outcomes related to fusion may have other confounding variables that may affect overall success of the procedure, which should be considered. Until further research is conducted there remains insufficient evidence to recommend fusion for chronic low back pain in the absence of stenosis and spondylolisthesis, and this treatment for this condition remains "under study." It appears that workers' compensation populations require particular scrutiny when being considered for fusion for chronic low back pain, as there is evidence of poorer outcomes in subgroups of patients who were receiving compensation or involved in litigation. ([Fritzell-Spine, 2001](#)) ([Harris-JAMA, 2005](#)) ([Maghout-Juratli, 2006](#)) ([Atlas, 2006](#)) Despite poorer outcomes in workers' compensation patients, utilization is much higher in this population than in group health. ([Texas, 2001](#)) ([NCCI, 2006](#)) Presurgical biopsychosocial variables predict patient outcomes from lumbar fusion, which may help improve patient selection. Workers' compensation status, smoking, depression, and litigation were the most consistent presurgical predictors of poorer patient outcomes. Other predictors of poor results were number of prior low back operations, low household income, and older age. ([DeBerard-Spine, 2001](#)) ([DeBerard, 2003](#)) ([Deyo, 2005](#)) ([LaCaille, 2005](#)) ([Trief-Spine, 2006](#)) Obesity and litigation in workers' compensation cases predict high costs associated with interbody cage lumbar fusion. ([LaCaille, 2007](#)) A recent study of 725 workers' comp patients in Ohio who had lumbar fusion found only 6% were able to go back to work a year later, 27% needed another operation, and over 90% were in enough pain that they were still taking narcotics at follow-up. ([Nguyen, 2007](#))

Lumbar fusion for spondylolisthesis: Recommended as an option for spondylolisthesis. Patients with increased instability of the spine after surgical decompression at the level of degenerative spondylolisthesis are candidates for fusion. ([Eckman, 2005](#)) This study found only a 27% success from spinal fusion in patients with low back pain and a positive single-level low-pressure provocative discogram, versus a 72% success in patients having a well-accepted single-level lumbar pathology of unstable spondylolisthesis. ([Carragee, 2006](#)) Unilateral instrumentation used for the treatment of degenerative lumbar spondylolisthesis is as effective as bilateral instrumentation. ([Fernandez-Fairen, 2007](#)) Patients with degenerative spondylolisthesis and spinal

stenosis who undergo standard decompressive laminectomy (with or without fusion) showed substantially greater improvement in pain and function during a period of 2 years than patients treated nonsurgically, according to the recent results from the Spine Patient Outcomes Research Trial (SPORT). (Weinstein-spondylolisthesis, 2007) (Deyo-NEJM, 2007) For degenerative lumbar spondylolisthesis, spinal fusion may lead to a better clinical outcome than decompression alone. No conclusion about the clinical benefit of instrumenting a spinal fusion can be made, but there is moderate evidence that the use of instrumentation improves the chance of achieving solid fusion. (Martin, 2007) A recent systematic review of randomized trials comparing lumbar fusion surgery to nonsurgical treatment of chronic back pain associated with lumbar disc degeneration, concluded that surgery may be more efficacious than unstructured nonsurgical care but may not be more efficacious than structured cognitive-behavior therapy. Methodological limitations of the randomized trials prevented firm conclusions. (Mirza, 2007)

Lumbar fusion for Scheuermann's kyphosis: Recommended as an option for adult patients with severe deformities (e.g. more than 70 degrees for thoracic kyphosis), neurological symptoms exist, and pain cannot be adequately resolved non-operatively (e.g. physical therapy, back exercises). Good outcomes have been found in a relatively large series of patients undergoing either combined anterior-posterior or posterior only fusion for Scheuermann's kyphosis. (Lonner, 2007)

Patient Selection Criteria for Lumbar Spinal Fusion:

For chronic low back problems, fusion should not be considered within the first 6 months of symptoms, except for fracture, dislocation or progressive neurologic loss. Indications for spinal fusion may include: (1) Neural Arch Defect - Spondylolytic spondylolisthesis, congenital neural arch hypoplasia. (2) Segmental Instability (objectively demonstrable) - Excessive motion, as in degenerative spondylolisthesis, surgically induced segmental instability and mechanical intervertebral collapse of the motion segment and advanced degenerative changes after surgical disectomy. [For excessive motion criteria, see AMA Guides, 5th Edition, page 384 (relative angular motion greater than 20 degrees). (Andersson, 2000) (Luers, 2007)] (3) Primary Mechanical Back Pain (i.e., pain aggravated by physical activity)/Functional Spinal Unit Failure/Instability, including one or two level segmental failure with progressive degenerative changes, loss of height, disc loading capability. In cases of workers' compensation, patient outcomes related to fusion may have other confounding variables that may affect overall success of the procedure, which should be considered. There is a lack of support for fusion for mechanical low back pain for subjects with failure to participate effectively in active rehab pre-op, total disability over 6 months, active psych diagnosis, and narcotic dependence. [For spinal instability criteria, see AMA Guides, 5th Edition, page 379 (lumbar inter-segmental movement of more than 4.5 mm). (Andersson, 2000)] (4) Revision Surgery for failed previous operation(s) if significant functional gains are anticipated. Revision surgery for purposes of pain relief must be approached with extreme caution due to the less than 50% success rate reported in medical literature. (5) Infection, Tumor, or Deformity of the lumbosacral spine that cause intractable pain, neurological deficit and/or functional disability. (6) After failure of two disectomies on the same disc, fusion may be an option at the time of the third disectomy, which should also meet the ODG criteria. (See ODG Indications for Surgery -- Disectomy.)

Pre-Operative Surgical Indications Recommended: Pre-operative clinical surgical indications for spinal fusion should include all of the following: (1) All pain generators are identified and treated; & (2) All physical medicine and manual therapy interventions are completed; & (3) X-rays demonstrating spinal instability and/or myelogram, CT-myelogram, or discography (see discography criteria) & MRI demonstrating disc pathology; & (4) Spine pathology limited to two levels; & (5) Psychosocial screen with confounding issues addressed. (6) For any potential fusion surgery, it is recommended that the injured worker refrain from smoking for at least six weeks prior to surgery and during the period of fusion healing. (Colorado, 2001) (BlueCross BlueShield, 2002)

A DESCRIPTION AND THE SOURCE OF THE SCREENING CRITERIA OR OTHER CLINICAL BASIS USED TO MAKE THE DECISION:

- ACOEM- AMERICAN COLLEGE OF OCCUPATIONAL & ENVIRONMENTAL MEDICINE UM KNOWLEDGEBASE
- AHCPR- AGENCY FOR HEALTHCARE RESEARCH & QUALITY GUIDELINES
- DWC- DIVISION OF WORKERS COMPENSATION POLICIES OR GUIDELINES
- EUROPEAN GUIDELINES FOR MANAGEMENT OF CHRONIC LOW BACK PAIN
- INTERQUAL CRITERIA
- MEDICAL JUDGEMENT, CLINICAL EXPERIENCE AND EXPERTISE IN ACCORDANCE WITH ACCEPTED MEDICAL STANDARDS
- MERCY CENTER CONSENSUS CONFERENCE GUIDELINES
- MILLIMAN CARE GUIDELINES
- ODG- OFFICIAL DISABILITY GUIDELINES & TREATMENT GUIDELINES
- PRESSLEY REED, THE MEDICAL DISABILITY ADVISOR
- TEXAS GUIDELINES FOR CHIROPRACTIC QUALITY ASSURANCE & PRACTICE PARAMETERS
- TEXAS TACADA GUIDELINES

- TMF SCREENING CRITERIA MANUAL**
- PEER REVIEWED NATIONALLY ACCEPTED MEDICAL LITERATURE
(PROVIDE A DESCRIPTION)**
- OTHER EVIDENCE BASED, SCIENTIFICALLY VALID, OUTCOME
FOCUSED GUIDELINES (PROVIDE A DESCRIPTION)**