



## IMED, INC.

11625 Custer Road • Suite 110-343 • Frisco, Texas 75035  
Office 972-381-9282 • Toll Free 1-877-333-7374 • Fax 972-250-4584  
e-mail: imeddallas@msn.com

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### Notice of Independent Review Decision

**DATE OF REVIEW:** 02/10/12

**IRO CASE NO.:**

**DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:**

Item in dispute: 72128 – CT Chest Spine w/o Dye

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

Texas Board Certified Neurosurgeon

**REVIEW OUTCOME**

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

Denial Upheld

**INFORMATION PROVIDED TO THE IRO FOR REVIEW**

1. Pre-authorization determination 01/17/12
2. Multiple imaging studies including cervical spine x-rays 09/08/11, 05/09/11, 08/26/11 and 01/04/12, x-rays thoracic spine 05/09/11 and 01/04/12, MRI cervical spine 05/23/11, 03/22/11, MRI thoracic spine 03/22/11, MRI lumbar spine 03/22/11, CT scan thoracic spine 08/17/11 and 10/17/11
3. Neurosurgical consultation and follow-up notes Dr. 03/22/11-01/04/12
4. Pre-authorization determination 01/10/12
5. Pre-authorization request 01/13/12
6. ***Official Disability Guidelines***

**PATIENT CLINICAL HISTORY (SUMMARY):**

The patient is a male whose date of injury is xx/xx/xx. Records indicate he was involved in a rollover accident.

The patient was seen in neurosurgery consultation on xx/xx/xx with complaints of neck pain and lower thoracic pain. He was noted to move upper and lower extremities with 5/5 strength. He guards both deltoids and biceps due to neck pain, but is able to generate 5/5 strength. Sensation was grossly intact. MRI of the cervical spine was noted to show disc bulging at C4-5 and C6-7, but these are not surgical. There is no surgical stenosis in the central canal and no cord signal change indicative of cord injury. CT of the head did not show fracture, intracranial hemorrhage, hydrocephalous or midline shift. CT of the cervical spine showed C7 spinous process fracture and T1 spinous process fracture. CT of the thoracic and lumbar spine showed T11 and T12 superior endplate fracture which is minimal. There was no canal compromise. Claimant was treated with a hard back brace for T11 and T12 fractures and cervical collar for C7 and T1 spinous process fractures.

Cervical spine x-rays performed 08/26/11 including flexion extension films did not indicate any instability or subluxation. The patient was told to wean from his cervical collar. It was also noted that thoracic fractures appear to be well healed, and the claimant was taken out of the back brace. The patient was also recommended to wean from LSO brace over a two week period and start physical therapy for strengthening exercises.

The patient was seen on 01/04/12 and stated the pain to his back had improved progressively, but in past few months he had not seen any improvement. Examination reported the patient to be 5'7" tall and 226 lbs. There was tenderness with percussion along lower thoracic region. Lateral thoracic spine film was taken and compared with previous exam on 05/09/11 and appeared to be stable. The patient was recommended to undergo CT of thoracic spine to see where fractures have healed.

A preauthorization request for repeat CT scan was reviewed on 01/10/12. The reviewer noted that records included CT of thoracic spine dated 10/17/11 which noted stable appearance of thoracic spine without evidence of new compression deformity or fractures. Fractures at T11-12 as well as spinous process fractures at C7- T1 and T11 are also noted to be stable. There was mild retropulsion seen on superior endplate of T11-12 without canal stenosis. It was determined that repeat CT scan was not indicated as medically necessary as the diagnosis has been established. The claimant was noted to have stable thoracic fractures. There was no evidence of progression of fractures from serial radiographs. There is no evidence the claimant has any evidence of progressive neurologic deficit, and as such, medically necessary for repeat study is not established.

An appeal request for repeat CT scan was reviewed on 01/17/11 and determined as not medically necessary. The reviewer noted that there was no evidence of progression of fractures through serial radiographs and no evidence of progression of neurologic deficit.

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

Based on the clinical information provided, medical necessity is not established for proposed CT scan. The patient is noted to have sustained injury secondary to rollover accident. He had findings of C7 spinous process fracture and T1 spinous process fracture. The patient also had superior endplate fracture at T11 and T12. The claimant was treated with back brace and neck collar. Subsequent imaging indicated that there was no evidence of instability or subluxation, and the patient was weaned from cervical collar. Imaging studies also indicated that both thoracic fractures appeared well healed, and the claimant was again recommended to wean from LSO brace and start physical therapy. The claimant subsequently had subjective complaints of pain, but no evidence of neurologic deficit. CT scan of thoracic spine was performed on 10/17/11 and revealed stable appearance of thoracic spine without evidence of new compressive deformity or fracture. It was noted the fracture to T11 and T12 as well as spinous process fracture to C7-T1 and T11 were also stable. Given the current clinical data, medical necessity is not established for repeat CT scan.

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

### **1. Official Disability Guidelines**

OFFICIAL DISABILITY GUIDELINES Low Back Chapter  
CT (computed tomography)

Not recommended except for indications below for CT. ([Slebus, 1988](#)) ([Bigos, 1999](#)) ([ACR, 2000](#)) ([Airaksinen, 2006](#)) ([Chou, 2007](#)) Magnetic resonance imaging has largely replaced computed tomography scanning in the noninvasive evaluation of patients with painful myelopathy because of superior soft tissue resolution and multiplanar capability. ([Seidenwurm, 2000](#)) The new ACP/APS guideline as compared to the old AHCPR guideline is more forceful about the need to avoid specialized diagnostic imaging such as computed tomography (CT) without a clear rationale for doing so. ([Shekelle, 2008](#)) A new meta-analysis of randomized trials finds no benefit to routine lumbar imaging (radiography, MRI, or CT) for low back pain without indications of serious underlying conditions, and recommends that clinicians should refrain from routine, immediate lumbar imaging in these patients. ([Chou-Lancet, 2009](#)) Primary care physicians are making a significant amount of inappropriate referrals for CT and MRI, according to new research published in the Journal of the American College of Radiology. There were high rates of inappropriate examinations for spinal CTs (53%), and for spinal MRIs (35%), including lumbar spine MRI for acute back pain without conservative therapy. ([Lehnert, 2010](#))

Indications for imaging -- Computed tomography:

- Thoracic spine trauma: equivocal or positive plain films, no neurological deficit
- Thoracic spine trauma: with neurological deficit
- Lumbar spine trauma: trauma, neurological deficit
- Lumbar spine trauma: seat belt (chance) fracture
- Myelopathy (neurological deficit related to the spinal cord), traumatic
- Myelopathy, infectious disease patient
- Evaluate pars defect not identified on plain x-rays
- Evaluate successful fusion if plain x-rays do not confirm fusion ([Laasonen, 1989](#))