Title: Beyond Manipulation: Mobilization and manual therapy techniques for the thoracic spine and rib cage

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Course Description: Over the last 5 years there has a plethora of information regarding the efficacy and utilization of manipulation in the thoracic spine for a variety of musculoskeletal conditions. Most of these applications are associated with disorders outside the thoracic spine in proximal regions like the neck, shoulder and lumbar spine. The foundation of clinical efficacy is based upon the concept of regional interdependence. Current evidence supports the role of interventions directed at the thoracic spine influencing centrally mediated changes to facilitate improvement in symptoms remotely. Although manipulation has been shown to be very beneficial there are many patients who cannot tolerate these techniques and might benefit from mobilization instead. Furthermore, primary disorders in the thoracic region are often associated with limited joint mobility of both the vertebral segments and rib cage. This course will review the current evidence for mobilization techniques to the thoracic spine and rib cage as it relates to both regional interdependence and primary thoracic pathologies. Review of the interplay in functional mobility between the thoracic spine, rib cage and lumbar spine will be introduced so the participants will have an understanding how to constrain or enhance mobility through a variety of manual mobilization techniques. Participants will also be introduced to a number of examination and intervention techniques to apply to practice immediately.

Course Learning Objectives
At the completion of this course students will:
1. Describe the role of mobilization of the thoracic spine in pain mediation as it relates to regional interdependence.
2. Describe primary disorders of the thoracic spine based upon a newly proposed impairment based classification system.
3. Identify movement impairments related to mobility deficits in this region.
4. Introduced to joint play assessment using passive motion of the thoracic spine and rib cage as well as differentiation between thoracic spine and rib cage as the source of pain.
5. Introduced to a variety of mobilization techniques of both the thoracic spine and rib cage.

Instructional Level:
Basic_______ Intermediate________ Advanced___________ Multiple____ x _____

Instructional Format (indicate approx. percentage)
☐ Lecture  ☐ Lab  ☐ Combination ___30% lecture 70% lab in demo and practice

Approved by the APTA of MA Board of Directors: Feb 2011
**Tentative Outline of time and content:**
15 min overview of evidence associated with manual therapy and regional interdependence
15 min overview of pathologies of the thoracic spine and impairment based classification
30 min overview and practice of functional mobility thoracic spine and rib cage
30 min overview and practice of mobilization and stretching techniques to address mobility deficit

**Key References:**