Kinetic chain assessment of the Throwing Athlete –
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Goals of Presentation – Discuss:
- Force generation in the thrower
- UE/trunk mobility and stability in the thrower
- Lower extremity mobility and stability in the thrower
- Connecting the foot to the hand in the thrower

Throwing mechanics and development of force
- Importance of lower extremity in throwing
- Role of stance limb at set-up and maximum leg lift
- Role of lead limb at stride foot contact

Shoulder ROM and strength in the thrower
- Assessment of shoulder ROM in context of humeral torsion
- GIRD
- TRM
- Rotator cuff strength
- Neural tension

Thoracic mobility and stability in the thrower
- Role of thoracic spine
- Assessment of thoracic spine mobility
- Scapular dyskinesis

Core stability in the thrower
- Transfer of force from the ground to the arm
- Assessment

Hip mobility in the thrower
- Stance limb rotation and extension
- Lead limb rotation and flexion
- How much is appropriate?

Lower extremity balance and neuromuscular control
- Y Balance Test™ assessment on stance and lead limbs

Using the findings to address the deficits
- Where is the breakdown in the chain?
References:

Integration of the Kinetic Chain in the Throwing Athlete Manual Therapy & Functional Exercise Outline
Toko Nguyen

Objectives:
- Discuss the clinical decision in using manual therapy in the thrower
- Discuss the effects of various manual therapy techniques
- Introduce manual therapy techniques specific to the thrower
- Introduce functional exercise prescription for the thrower

Clinical Decision for Manual Therapy
- Mobility – stability marriage
- Risk to benefit ratio in manual therapy selection
- Soft tissue & joint mobilizations

Effects of Manual Therapy
- Mechanical
- Neuromuscular
- Psychological

Technique Demos
- **Shoulder**
  - Pectoralis Minor
  - Subscapularis
  - Latissimus Dorsi
  - Posterior Shoulder
  - Scapular Framing
  - Clavicle
- **Thoracic**
  - Upper Rotation Mobilization
- **Hip**
  - Psoas
  - Anterior Capsule MWM
- **Ankle**
  - Dorsiflexion MWM
  - Subtalar Whip
  - Achilles

Functional Exercise Prescription
- **Shoulder**
  - Wall Slides
  - Subscapular / IR MET
- **Thoracic**
- Oblique Bolster Rotation
- **Hip**
  - Sequential Hip Series

**References**