# 1 Keeping Our Athletes Safe: Functional Assessments

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## 2 Objectives

- Define why functional assessments are useful in conjunction with traditional methods
- Identify "red flags" that may call for a referral to an orthopedist or physical therapist
- Describe three functional assessments that can be used by healthcare professionals, athletic trainers, and coaches to determine functional limitations.

## 3 What is it?

- · Looking at how the athlete moves
- · Quality not quantity
- 4 When would I use these?
- 5 All the puzzle pieces...
- **Subjective Reports** 
  - · Subjective Reports
    - Open to interpretation
- 7 All the puzzle pieces...

## 8 ROM, Strength, Flexibility

- ROM, Strength, Flexibility
  - Isolated to body segment
  - Important to know any major limitations
  - However, do not have strong correlation to functional ability<sup>1</sup>
- 9 All the puzzle pieces...

#### 10 Performance Tests

- Performance Tests
  - Do not evaluate efficiency<sup>4</sup>
- 11 All the puzzle pieces...
- 12 All the puzzle pieces...
- 13 Red Flags
  - · When to refer?
    - Injury or pain
    - Movement abnormalities

#### 14 Functional Assessments

- · Lateral Plank
- Broad Jump
- · Functional Movement Screen

- -7 tests
- Indicative of injury risk<sup>3,8</sup>
  - Deep squat
  - Active SLR

#### 15 Lateral Plank

- Core strength and endurance<sup>9,14</sup>
- · Looking at:
  - Straight body
  - Neutral spine
  - Scapular positioning

## 16 Broad Jump<sup>10</sup>

- · Ability to produce power, absorb force
- · Looking at:
  - Take off position
  - Landing position
  - Control in air

## 17 Deep Squat<sup>4</sup>

 Symmetrical mobility of hips, knees, ankles, thoracic spine, shoulders and

- · Looking for:
  - Upright trunk
  - Past parallel
  - Knees over feet
  - Heels on ground

#### 18 Active SLR<sup>5</sup>

- Ability to maintain trunk stability during leg movement, as well as hamstring and gastrocsoleus flexibility
- · Looking for:
  - Both legs straight
  - Head down

#### 19 More resources?

- Other FMS tests4,5
  - http://www.functionalmovement.com/
- Modified NFL Combine Tests<sup>10</sup>
- Tuck Jumps
- Many, many others!

### 20 Then what?

- Corrective exercise
  - Based on deficits discovered
  - Can use the test position as an exercise
- PEP program
  - Warm up and strength/conditioning injury prevention program
- FIFA 11+
  - Warm up and strength/conditioning injury prevention program

- 21 References
- 22 References, cont'd
- 23 Thank you!