

Augmented Feedback for Over Striding & Bounding

Bounding

Indications: Goal -VO = 6-8 cm, > 8 cm consider modifying (note that average is 10 cm) Adams et al, JOSPT, 2015

Intervention:

Auditory verbal commands: “Run Softly”, “Run Quietly”, “Run on hot coals”

Auditory feedback: Metronome (phone) – measure and increase 5 %; Higher cadence decreases VO (~2cm) Adams et al, JOSPT, 2015

Visual: Metronome, Mirror

Technique: Forward trunk lean – consider exaggerated arm movements may facilitate increase rate

Shoe wear: Avoid Cushioned shoes (increase contact time and lower step rate)

Over Striding

Indications: Goal –vertical tibia or flexed at landing, low foot inclination angle

Intervention:

Auditory verbal commands: “Fall from your ankles” (step rate), “shorten your stride” (foot position), bend your knee behind you

Auditory feedback: Metronome (phone) – measure and increase 5 %, Lumo RUN (body wearable technology), Spotify Run : develops play list music songs to set cadence, Rock my run.

Technique: Forefoot (big commitment), incline treadmill (gives patients sense of what a “forced” shortened stride length feels like)

Shoe wear: Avoid over cushioned shoes (increased ground contact time and lower step rate)