Movement System Analysis Framework: Foot and Ankle

Functional Status and Task Analysis

- ❒ Does not stand
- ❒ Stands but does not ambulate
  - ❒ With device (stander or gait trainer)
  - ❒ Stands for transfers or other function
  - ❒ Pre-ambulatory
- ❒ Ambulatory (with or without device)
  - ❒ Stance phase
    - ❒ Loading response
    - ❒ Midstance: self-selected shank angle
    - ❒ ❒1-Shank angle WFL
      ❒2-Excessively inclined shank
      ❒3-Excessively reclined shank
    - ❒ Terminal Stance
    - ❒ Swing phase
      - ❒ Foot clearance
      - ❒ Limb positioning at TS (location of Initial contact)
    - ❒ Transverse and Frontal Plane findings
- ❒ Developmental status

Musculoskeletal Findings

- ❒ Altered joint physiology due to health condition
- ❒ Altered muscle strength or endurance due to health condition
- ❒ Structural variants
  - ❒ Atypical structure
  - ❒ TC Axis test: TC joint alignment
  - ❒ Structural findings:

	Coronal Plane	Transverse Plane
Hip/femur		
Knee/tibia		
Hindfoot		
Midfoot		
Forefoot		

- ❒ Functional Variants
  - ❒ DF Stress test, End feel ❒1-Neutral hindfoot ❒2-Pronated hindfoot ❒3-Supinated hindfoot
  - ❒ Joint function

	Alignment, Joint play, End feel, Arthrokinematics, ROM
Distal tib/fib	
Talo-crural	
Subtalar	
Midtarsals	
Forefoot	
Digits	

  - ❒ Altered relative stiffness/flexibility
  - ❒ Altered line of pull of muscles around joints

- ❒ Soft tissue status

	Superficial	Middle	Deep
Thigh/knee			
Medial calf			
Lateral calf			
Heel cord			
Post Hindfoot			
Ant Hindfoot			
Midfoot			
Forefoot/digits			

- ❒ NWB Corrective force test
- ❒ WB Corrective force test

Neuromotor and Motor Control Findings

- ❒ Neuromotor MSD
- ❒ Muscle activation and timing
  - ❒ Impaired recruiting
  - ❒ Excessive recruiting
  - ❒ Insufficient Force
  - ❒ Insufficient Endurance
  - ❒ Insufficient Range
  - ❒ Impaired Relaxation
    - ❒ Tonic contraction
- ❒ Atypical habitual patterns of movement
- ❒ Inconsistent Motor Patterns
  - ❒ Emerging Motor Control
- ❒ Balance Strategies

Sensory Perception and Pain

- ❒ Sensory perception of the foot/ankle
  - ❒ Hyperperceptive
  - ❒ Hypoperceptive
- ❒ Altered sensory/perception elsewhere in the movement system
- ❒ Pain ❒ In foot/ankle/lower leg
  - ❒ Elsewhere in kinetic chain

Relevant Cardiopulmonary, Integumentary, Endocrine, Neurodevelopmental, Gastrointestinal, Lymphatic System Findings

- ❒ GERD
- ❒ ASD
- ❒ Cardiopulomary
- ❒ Integumentary

Individual Characteristics

- ❒ Sustained alignments based on regular activities
- ❒ Participation interests
- ❒ Structural demands of the regular and goal environments
- ❒ Patient and family goals
- ❒ Engagement with therapy and orthoses

Key Findings

Task Analysis: _____

MS: _____

NM: _____

Sensory and Pain: _____

Other Systems: _____

Individual: _____

Suspected Drivers:

Limiting Factors:

Goals of Intervention: