

**BIOMECHANICAL ASSESSMENT & GAIT ANALYSIS**

PATIENT NAME : \_\_\_\_\_ SCAN NUMBER: \_\_\_\_\_

CHIEF COMPLAINT: \_\_\_\_\_

**BIOMECHANICAL ASSESSMENT**

<p><b>FOOT (Type or Appearance)</b></p> <p>High Arch Medium Arch Low Arch</p> <p><i>Important to assess the navicular drop between Non-weight bearing VS. Weight bearing</i> <i>Overview of architecture of MLA can be visual or marked in mm differential</i></p>	<p><b>NWB</b></p> <p>L/R L/R L/R</p>	<p><b>WB</b></p> <p>L/R L/R L/R</p>	<p><b>ANKLE R.O.M.</b></p> <p>Adequate Limited</p> <p><i>Ankle equinus issues can affect the secondary symptoms that patients develop</i> <i>NWB: is there and issue with gastrocnemius tightness or bony end ROM</i></p>	<p><b>NWB</b></p> <p>L/R L/R</p>	<p><b>WB</b></p> <p>L/R L/R</p>
<p><b>SUBTALAR JOINT ROM</b></p> <p>Hypermobile Within Normal Limits Limited/Restricted</p> <p><i>Moving the subtalar joint to assess the range of motion in passive, NWB</i></p>	<p>L/R L/R L/R</p>	<p></p>	<p><b>KNEE POSITION</b></p> <p>Normal Genu Varum Genu Valgum Tibial Varum</p> <p><i>The overall angulation of the lower extremities</i></p>	<p>L/R L/R L/R L/R</p>	
<p><b>MIDTARSAL JOINT ROM</b></p> <p>Hypermobile Normal Restricted</p> <p><i>Assessing the midtarsal range of motion, passive NWB</i></p>	<p>L/R L/R L/R</p>		<p><b>CALCANEAL POSITION NON-WEIGHT BEARING</b></p> <p>Normal Varus Valgus</p> <p><i>The position of the heel, in NWB, Subtalar joint neutral position. This is the “gold standard” i.e. foot’s most stable position and one we are trying to reflect in orthotic therapy</i></p>	<p>L/R L/R L/R</p>	
<p><b>GAIT ANALYSIS</b></p>			<p><b>DIAGNOSIS:</b></p> <p><i>Indicate a diagnosis and often insurance companies want more specific than “pes planus”</i></p> <p><b>NOTES:</b></p>		
<p><b>MIDTARSAL FUNCTION AT MIDSTANCE</b></p> <p>Normal Pronated Supinated</p> <p><i>During dynamic gait cycle, what is happening with the midtarsal joint</i></p>	<p>L/R L/R L/R</p>		<p><b>LEG LENGTH DISCREPANCY</b></p> <p>Short By L ____ mm/inches R ____ mm/inches</p> <p>Functional                          Structural</p> <p><i>Important to note in a biomechanical/gait assessment.</i></p>		
<p><b>1<sup>ST</sup> RAY</b></p> <p><b>Position</b></p> <p>Plantarflexed Normal Extended</p> <p><i>In NWB, STJ neutral what is position of the hallux</i></p>	<p>L/R L/R L/R</p>				
<p><b>HALLUX Range Of Motion</b></p> <p>Average Limitus Rigidus Functional Hallux Limitus</p> <p><i>ROM in Hallux important to assess. Affect on plantar aponeurosis</i></p>	<p>L/R L/R L/R L/R</p>		<p><b>ANGLE OF GAIT</b></p> <p>Within Normal Limits Abducted Adducted</p> <p><i>What is general overall nature of the angle of gait? Is there internal rotation occurring that could impact the torsion of supporting joints</i></p>	<p>L/R L/R L/R</p>	
<p><b>TOE POSITIONS (could be biomechanical in nature/development)</b></p> <p>Hallux Abducto Valgus (i.e. Bunions) Claw/ Hammer Toe Straight (within normal limits)</p>	<p>L/R</p> <p>L/R L/R</p>	<p>L/R</p>	<p><b>CALCANEAL POSITION WEIGHT BEARING</b></p> <p>Normal Varus Valgus</p> <p><i>The position of the heel in a relaxed stance position. Viewed from rear</i></p>	<p>L/R L/R L/R</p>	