

# Clinical Gait Analysis Report

Date:

Name:

Patient ID:

Date of Birth:

Age:

Gender:

Referred by:

**Patient Background**

**Past Medical and Developmental History**

**Level of Mobility**

**Current Diagnosis**

## Clinical Evaluation

Height (cm) –

Weight (Kg) –

BMI (kg/m<sup>2</sup>) –

Passive ROM			Special tests		
	RIGHT	LEFT		RIGHT	LEFT
<b>Hip</b>					
Flexion			Thomas Test		
Extension			Ely-Duncan test*		
Abduction					
With hip-knees in flexion					
With neutral hips & knees					
Internal Rotation*					
External Rotation*					
<b>Knee</b>					
Flexion			FFD		
Hyperextension			Popliteal Angle		
			Popliteal Angle with hamstring shift		
			Patella Alta		
			Extensor Lag		
			Genu Varum/Valgum		
<b>Ankle</b>					
Dorsiflexion (knee extended)			Silfverskiöld Test		
Dorsiflexion (knee flexed)			Confusion Test		
Plantarflexion					

Deformities/Measurements			
Joint		RIGHT	LEFT
Spine Alignment	Kyphosis/Lordosis/Scoliosis		
Limb Length (cms)	ASIS to Malleolus		
	Femoral length		
	Tibial length		
	Fibular Length		
Torsional Profile	GT prominence test		
	Thigh Foot Angle*		
	Thigh – Bimalleolar Axis*		
	Heel Bisector*		
Foot position			
Ankle			
Hindfoot/Subtalar			
Midfoot			
Forefoot			
Hallux			
Toes			

\*Evaluated in prone position; Italicized text is tested in side-lying position

### Clinical Evaluation

Spasticity (MAS)			Voluntary Motor Control (Scale)				
	RIGHT	LEFT		RIGHT	Comments	LEFT	Comments
Hip Flexors			<i>Hip</i>				
Hip Adductors			Knee				
Hamstrings			Ankle				
Rectus Femoris*			Subtalar				
Plantar flexors			Toes				
Tibialis Posterior							

**Others:**

**Pain (site/duration):**

**Callus:**

**Ability to perform heel raises:**     Right     Left     Bilaterally with support

**Ability to balance in kneeling:**     Yes     No

**Ability to climb stairs unassisted:**     Yes     No

**Pictures of the feet:**

### 3D Gait Analysis Report

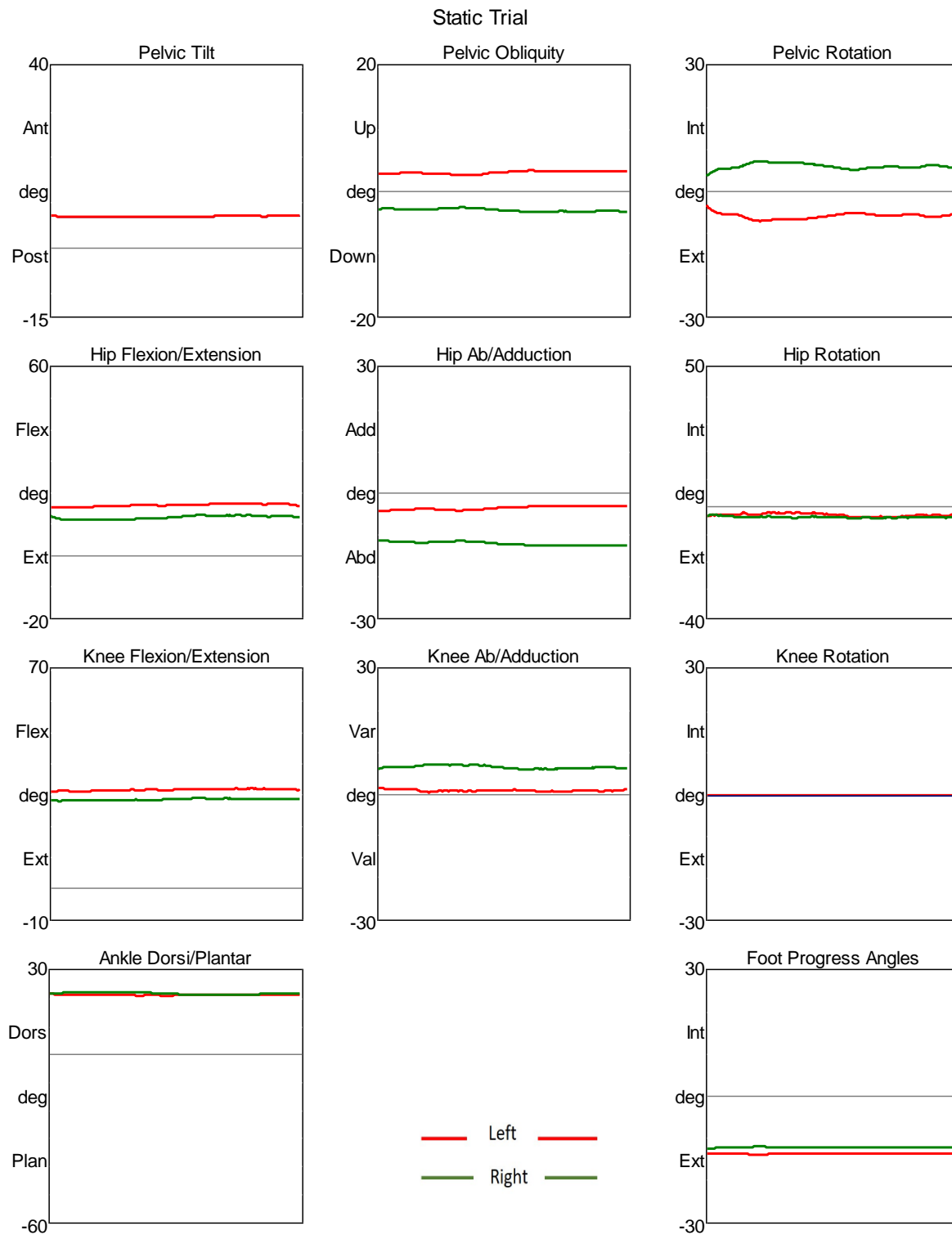
This report presents quantitative 3-dimensional gait analysis data displayed as graphical plots and charts of lower limb segments kinematics and kinetics across gait cycles, with patient findings compared against normative reference data derived from published literature.

#### 1. Spatiotemporal Parameters (self-selected pace)

(Presented as the mean  $\pm$  1 standard deviation (SD) of a number of trials)

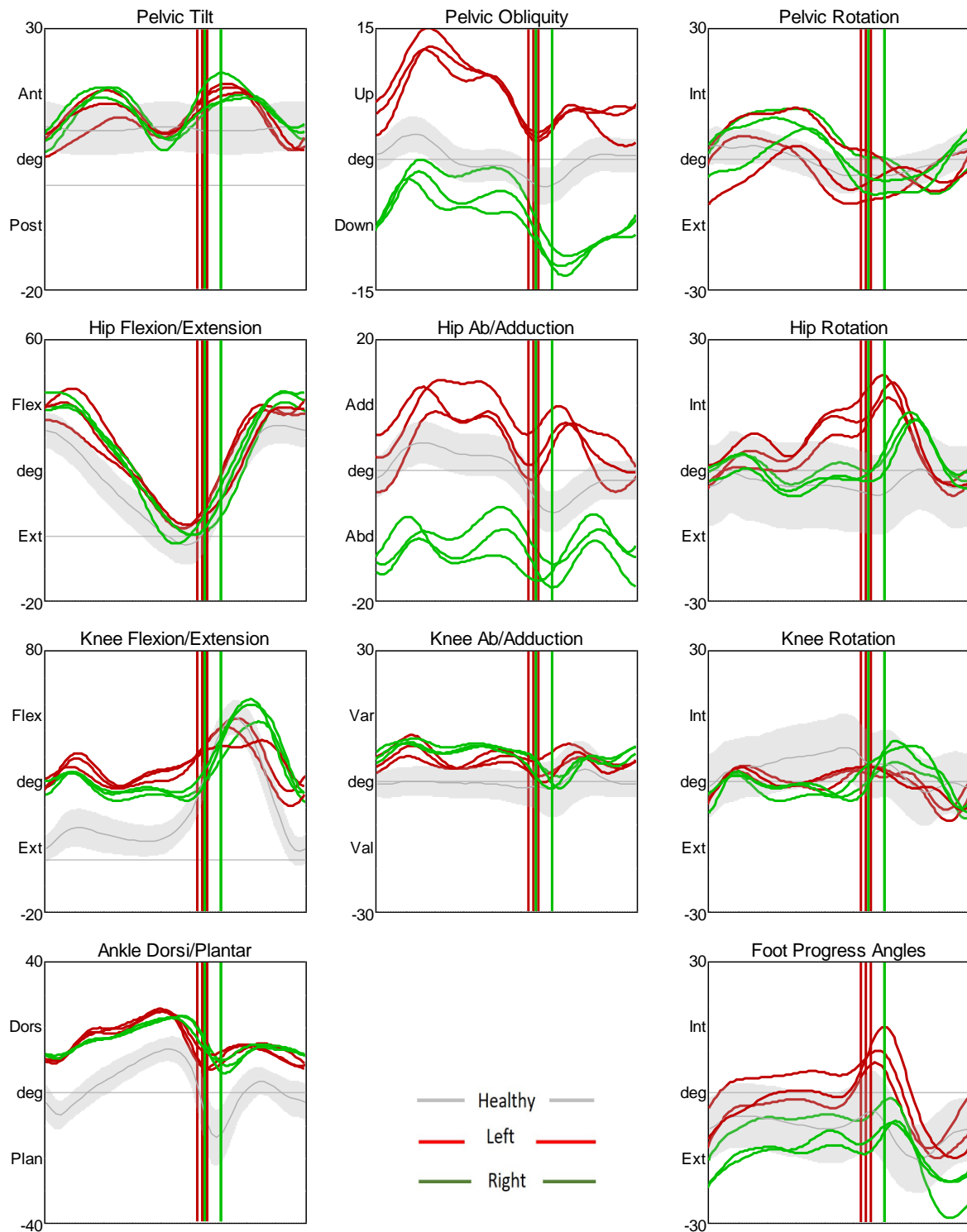
	<b>Left</b>	<b>Right</b>	<b>Normative Data</b>
Cadence	104 $\pm$ 3.35 steps/min	99.6 $\pm$ 2.80 steps/min	129 $\pm$ 16.9 steps/min
Double Support	<b>0.33 <math>\pm</math> 0.037 s</b>	<b>0.32 <math>\pm</math> 0.056 s</b>	0.14 $\pm$ 0.035 s
Foot Off	62.6 $\pm$ 3.14 %	65.4 $\pm$ 2.69 %	57.6 $\pm$ 1.83 %
Limp Index	0.95 $\pm$ 0.072	1.06 $\pm$ 0.043	1.01 $\pm$ 0.044
Opposite Foot Contact	48.5 $\pm$ 2.24 %	51.4 $\pm$ 1.04 %	50.2 $\pm$ 1.53 %
Opposite Foot Off	<b>14.2 <math>\pm</math> 2.40 %</b>	<b>12.9 <math>\pm</math> 2.89 %</b>	7.56 $\pm$ 1.69 %
Single Support	0.39 $\pm$ 0.024 s	0.47 $\pm$ 0.051 s	0.39 $\pm$ 0.038 s
Step Length	0.49 $\pm$ 0.038 m	0.55 $\pm$ 0.044 m	0.56 $\pm$ 0.071 m
Step Time	0.59 $\pm$ 0.041 s	0.58 $\pm$ 0.019 s	0.46 $\pm$ 0.048 s
Step Width	<b>0.18 <math>\pm</math> 0.045 m</b>	<b>0.17 <math>\pm</math> 0.010 m</b>	0.11 $\pm$ 0.032 m
Stride Length	1.01 $\pm$ 0.062 m	1.07 $\pm$ 0.085 m	1.13 $\pm$ 0.14 m
Stride Time	1.14 $\pm$ 0.047 s	1.20 $\pm$ 0.034 s	0.93 $\pm$ 0.092 s
Walking Speed	<b>0.88 <math>\pm</math> 0.055 m/s</b>	<b>0.89 <math>\pm</math> 0.058 m/s</b>	1.23 $\pm$ 0.15 m/s

# 1. Kinematic data from standing trial

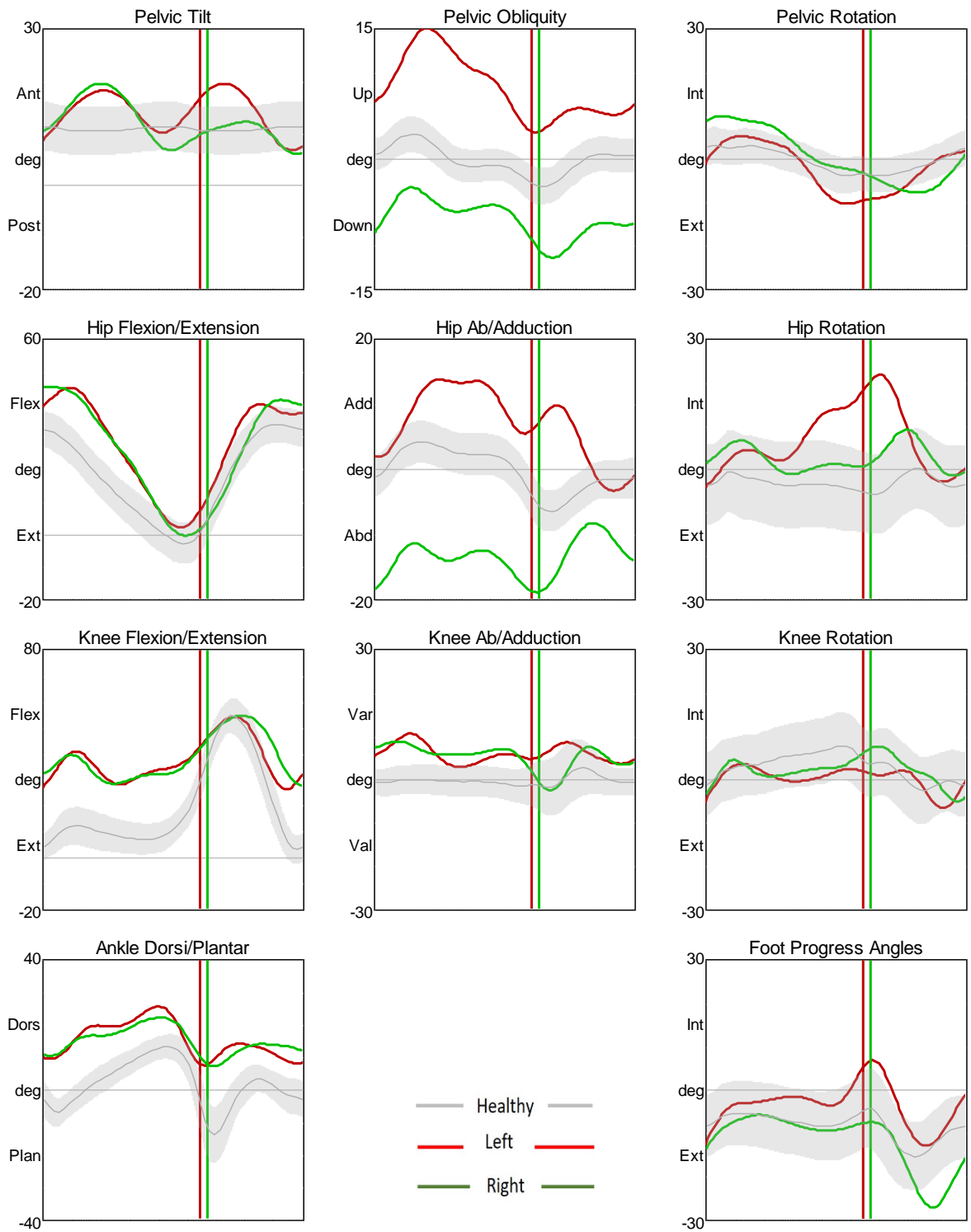


## 2. Kinematic data from selected trials while walking barefoot independently

(Data normalised to the period of the gait cycle and presented as the mean  $\pm$  1SD)

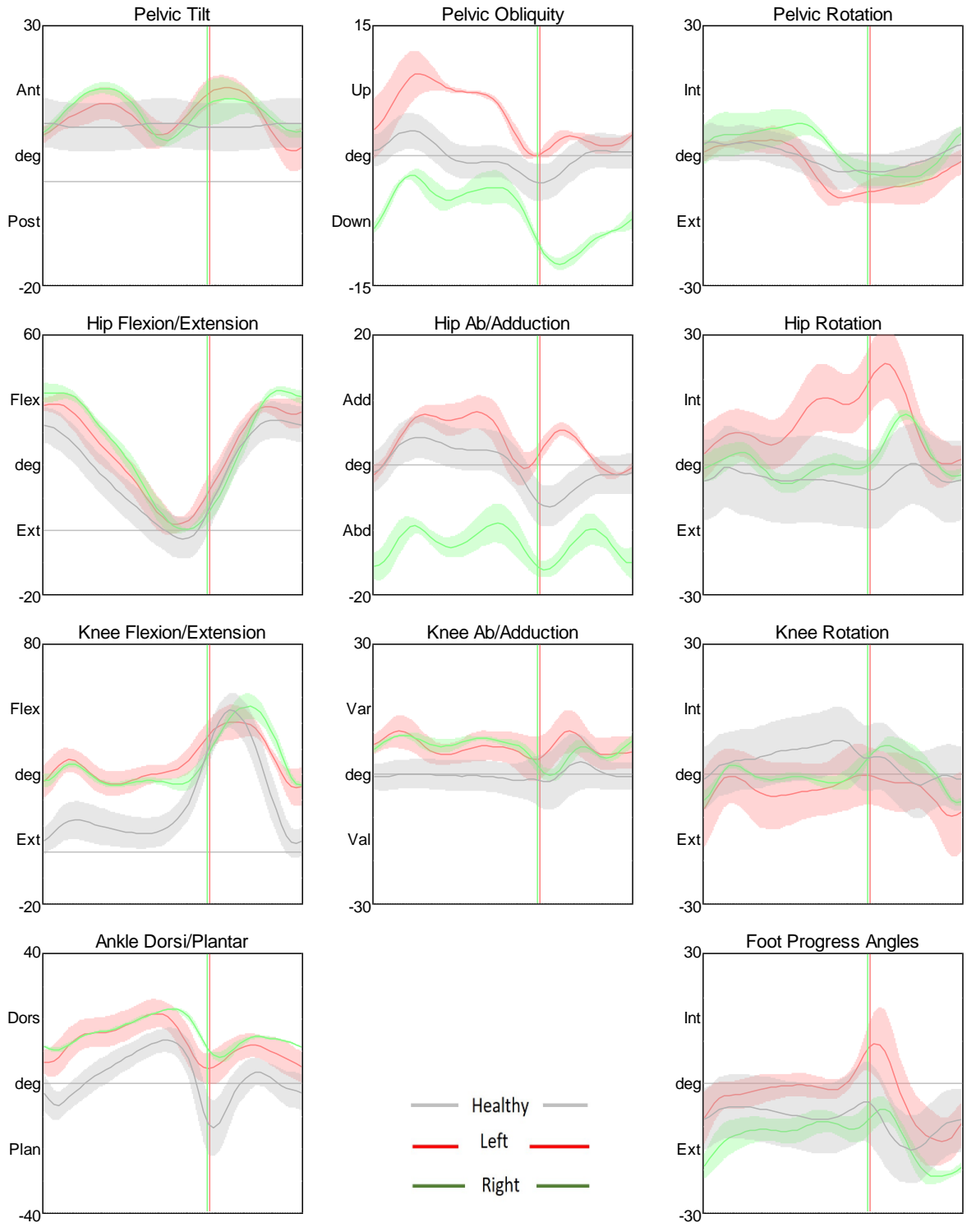


3. **Kinematic data from a representative trial while walking barefoot independently**  
 (Data normalised to the period of the gait cycle and presented as the mean  $\pm$  1SD)



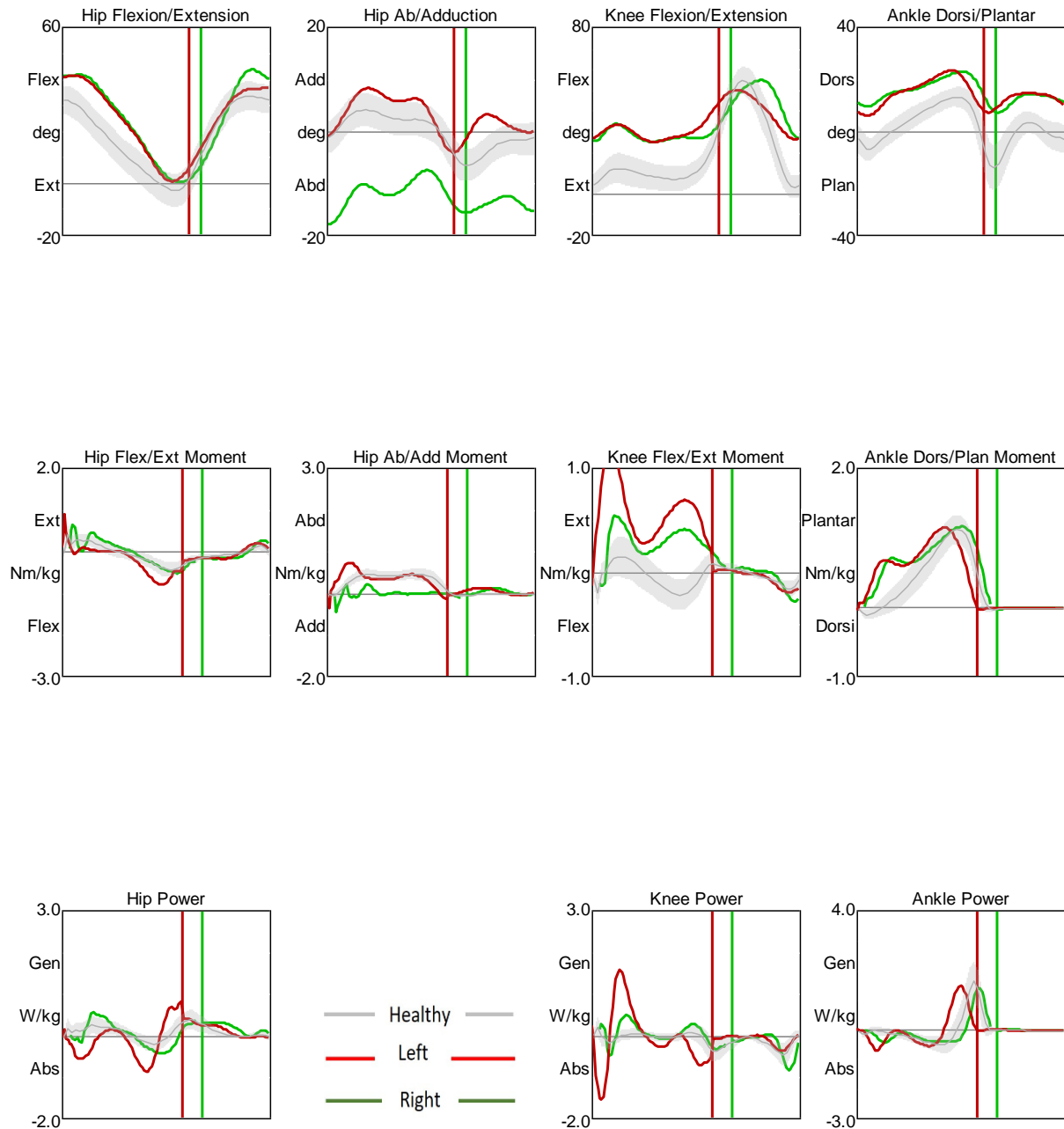
4. **Kinematic data averaged from selected trials while walking barefoot independently**

(Data normalised to the period of the gait cycle and presented as the mean  $\pm$  1SD)



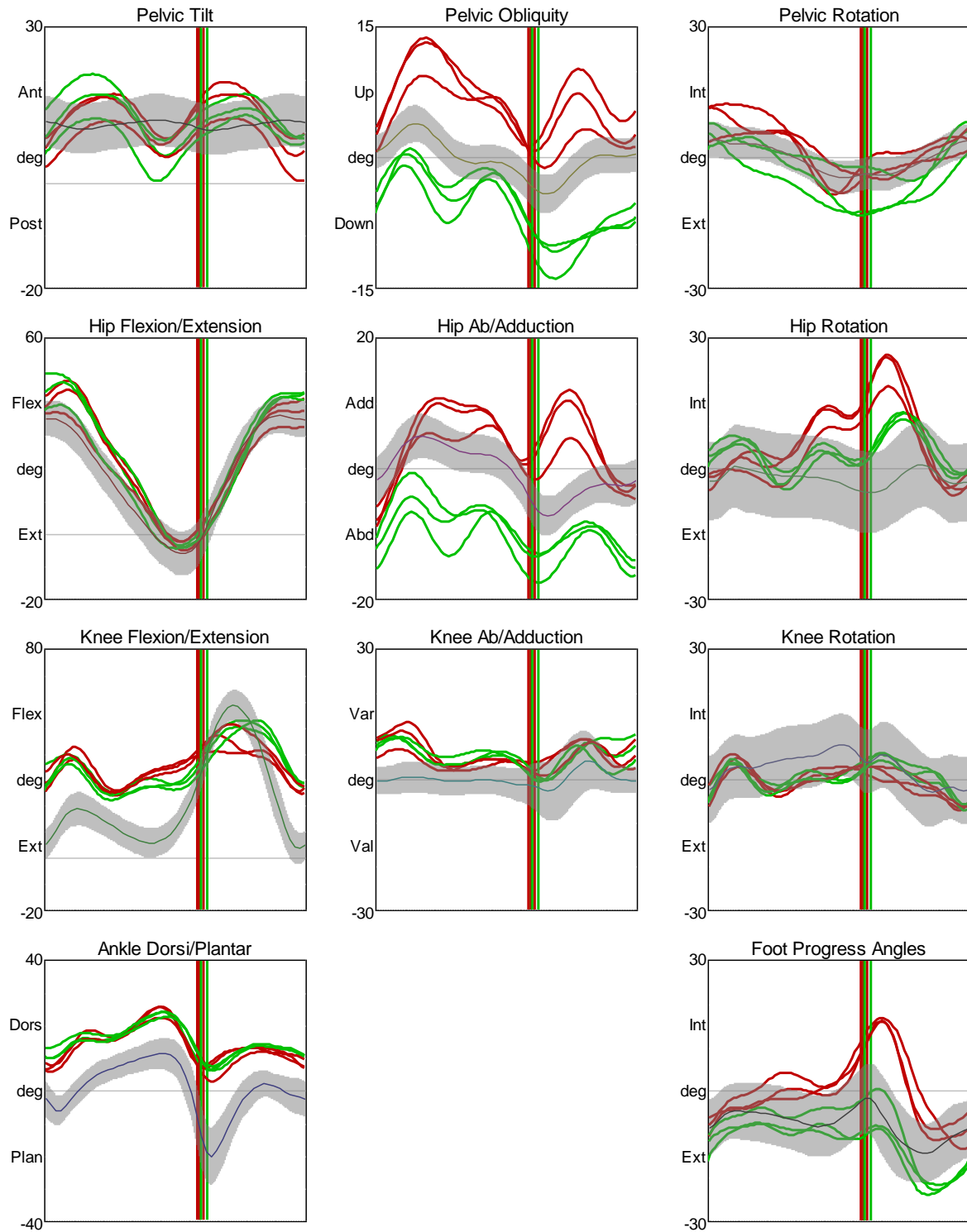
## 5. Kinematic and Kinetic data from a representative trial while walking barefoot independently

(Data normalised to the period of the gait cycle and presented as the mean  $\pm$  1SD.)



## Kinematic data from selected trials while walking barefoot independently at a faster pace

(Data normalised to the period of the gait cycle and presented as the mean  $\pm$  1SD)



## **Interpretations**

3D Instrumented Gait Analysis was performed on the subject using 10 Vicon Vero 2.2 cameras, 2 FLIR video cameras and 2 AMTI Force plates.

## **Recommendations**

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