

MOBILITY Lab

BY APDM

Gait and Balance Analysis System



TRUSTED BY THOUSANDS OF RESEARCHERS AND CLINICIANS WORLDWIDE

Mobility Lab provides sensitive, reliable, and valid outcome measures for assessing functional mobility anywhere



GAIT & BALANCE OUTCOME MEASURES

LOWER LIMB

- Cadence
- Gait Cycle Duration
- Gait Speed
- Elevation at Midswing
- Double Support
- Lateral Step Variability
- Circumduction
- Foot Strike Angle
- Toe Off / Toe Out Angle
- Stance / Swing
- Step Duration
- Stride Length

UPPER LIMB

- Arm Swing Range of Motion
- Arm Swing Velocity

TRUNK & LUMBAR

- Coronal/Sagittal/Transverse Range of Motion

POSTURAL SWAY

- Sway Area
- RMS Sway - Coronal/Sagittal
- Centroidal Frequency
- Frequency Dispersion
- Jerk
- Mean Velocity
- Path Length
- Range

TURNING

- Angle
- Duration
- Velocity
- Steps in Turn

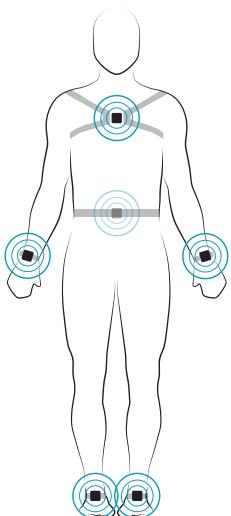
GAIT INITIATION

- APA & First Step Duration
- APA Peak - Forward & Lateral
- First Step Range of Motion

INSTRUMENTED TESTS

- | | | |
|------------------------|-------------------------|--------------------|
| • 2-Minute Walk | • Postural Sway | • CTSIB |
| • Timed Up & Go (TUG) | - Feet Together / Apart | • mBEES |
| • Stand And Walk (SAW) | - Eyes Open / Closed | • Romberg Quotient |
| • 360° Turn | - Surface Firm / Foam | • 5x Sit to Stand |

FULL BODY GAIT + BALANCE



- 2 Wrist • 2 Foot
- 1 Sternum • 1 Lumbar

POPULATIONS ASSESSED

- Parkinson's Disease
- Multiple Sclerosis
- Ataxia
- ALS
- Cerebral Palsy
- Huntington's Disease
- Dementia
- Vestibular Disorders
- Somatosensory Dependence
- Visual Dependence
- Concussion / mTBI
- Fall Risk
- Stroke



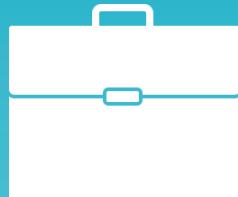
MEASURE OBJECTIVELY

Instrument functional tests for accurate outcome measures



TRACK PROGRESS

Precisely see asymmetries, variability, and improvement over time



EASE OF USE

Within a few minutes, set up, select a test, and get instant results

PORTABLE

Save time and assess more people anywhere with a portable system

PUBLICATIONS



200+

Gait and Quiet-Stance Performance Among Adolescents After Concussion Symptom Resolution

Berkner, et al. Journal of Athletic Training. 2017.

Validation of an Inertial Sensor System for Physical Therapists to Quantify Movement Coordination during Functional Tasks

Tulipani, et al. Journal of Applied Biomechanics. 2017.

Portable Objective Assessment of Upper Extremity Motor Function in Parkinson's Disease

Chahine, et al. Parkinsonism & Related Disorders. 2017.

Objective Biomarkers of Balance and Gait for Parkinson's Disease Using Body-worn Sensors

Horak, et al. Movement Disorders. 2014.

• • • • • • • • • • •

CONTACT US

info@apdm.com

503.445.7757

apdm.com/mobility