

GAIT RISK OF FALL

THE ISSUE

THE WORLD HEALTH ORGANIZATION CLAIMS THAT FALLS IN THE ELDERLY POPULATION IS AN EPIDEMIC AND PROPER ASSESSMENT AND CORRECTION IS CRUCIAL (4). ACCORDING TO BURT ET. AL. “THIRTY PERCENT OF PERSONS OVER 65 YEARS OLD AND 50% OF PERSONS OVER 80 YEARS OLD EXPERIENCE AT LEAST ONE FALL EACH YEAR” (5). A CONSEQUENCE OF ELDERLY FALLS IS THE INCREASED RISK OF FRACTURE, SPECIFICALLY HIP FRACTURES. FALLS ARE THOUGHT TO BE RESPONSIBLE FOR MORE THAN 90 PERCENT OF ALL HIP FRACTURES (3). ACCORDING TO WEIGELT “ONE-QUARTER OF OLDER PEOPLE WHO SUSTAIN A HIP FRACTURE DIE WITHIN 6 MONTHS OF THE INJURY; HIP FRACTURE SURVIVORS EXPERIENCE A 10–15% DECREASE IN LIFE EXPECTANCY (6).

4. WHO GLOBAL REPORT ON FALLS PREVENTION IN OLDER AGE. [INTERNET] LIFE COURSE UNIT, GENEVA (SWITZERLAND) (2008) [CITED 2014 SEP 1]. [ABOUT 47 P.]. AVAILABLE FROM: [HTTP://WWW.WHO.INT/AGEING/PROJECTS/FALLS_PREVENTION_OLDER_AGE/EN](http://www.who.int/ageing/projects/falls_prevention_older_age/en)

5. BURT CW, FINGERHUT LA. INJURY VISITS TO HOSPITAL EMERGENCY DEPARTMENTS: UNITED STATES, 1992–95. VITAL HEALTH STAT 1998; 13: 1–76.

3. BLACK SE, MAKI BE, FERNIE GR. AGING, IMBALANCE AND FALLS. SHARP JA, BARBER HQ, EDS. THE VESTIBULO-OCULAR REFLEX AND VERTIGO. NEW YORK: RAVEN PRESS, 1993, 317–35.

6. WEIGELT JA. TRAUMA. IN: ADVANCED TRAUMA LIFE SUPPORT FOR DOCTORS: ATLS. 6TH ED. CHICAGO: AMERICAN COLLEGE OF SURGEONS, 1997, 26

THERE IS AN IMMEDIATE NEED FOR AN ACCURATE ASSESSMENT THAT CAN DETERMINE THE FALL RISK BEFORE THE FALL HAPPENS, PREVENTION THROUGH ACCURATE AND OBJECTIVE ASSESSMENT.

THERE IS A LACK OF OBJECTIVE ANALYSIS TOOLS THAT CAN REPRODUCIBLY ANALYZE BALANCE AND SWAY IN THE GERIATRIC POPULATION AND IDENTIFY THOSE THAT ARE AT RISK OF FALLS. CURRENT METHODS OF ASSESSMENT LACK INTER AND INTRA EXAMINER RELIABILITY OR ARE COSTLY AND CUMBERSOME TO USE.



“BALANCE AND GAIT IMPAIRMENTS IN OLDER PEOPLE INCREASE THE RISK OF FALLS, WHICH ARE THE LEADING CAUSE OF ACCIDENTAL DEATH AND INJURY-RELATED VISITS TO EMERGENCY DEPARTMENTS.”

OUR SOLUTION

KINETISENSE IS A PATENTED AND UNIVERSITY VALIDATED MARKERLESS MOTION CAPTURE SYSTEM THAT ANALYZES HUMAN MOVEMENT IN ALL **3** PLANES. THE PROPRIETARY “KINETISENSE MOCAP” ENGINE REMOVES OUTLIER DATA IN REAL TIME AND HAS BEEN VALIDATED TO HAVE SIMILAR ACCURACY TO THE UNIVERSITY GRADE VICON SYSTEM. KINETISENSE IS THE CLINICAL BIOMECHANICS LAB.

THE KINETISENSE RISK OF FALL MODULE ANALYZES KEY VARIABLES OF GAIT AND PROVIDES IMMEDIATE AND VALUABLE INSIGHTS INTO THE INDIVIDUAL’S FALL RISK. THE SYSTEM PROVIDES ADVANCED REPORTING ON THE IMPROVEMENTS AND/OR REGRESSIONS IN GAIT PARAMETERS.

THE KINETISENSE SYSTEM CAPTURES “TRI-PLANAR” BIOMECHANICAL DATA THAT THE EYE SIMPLY CANNOT SEE

ACCURATE

AFFORDABLE

OBJECTIVE

EFFICIENT

INNOVATIVE

KINETISENSE IS YOUR PORTABLE BIOMECHANICS LAB

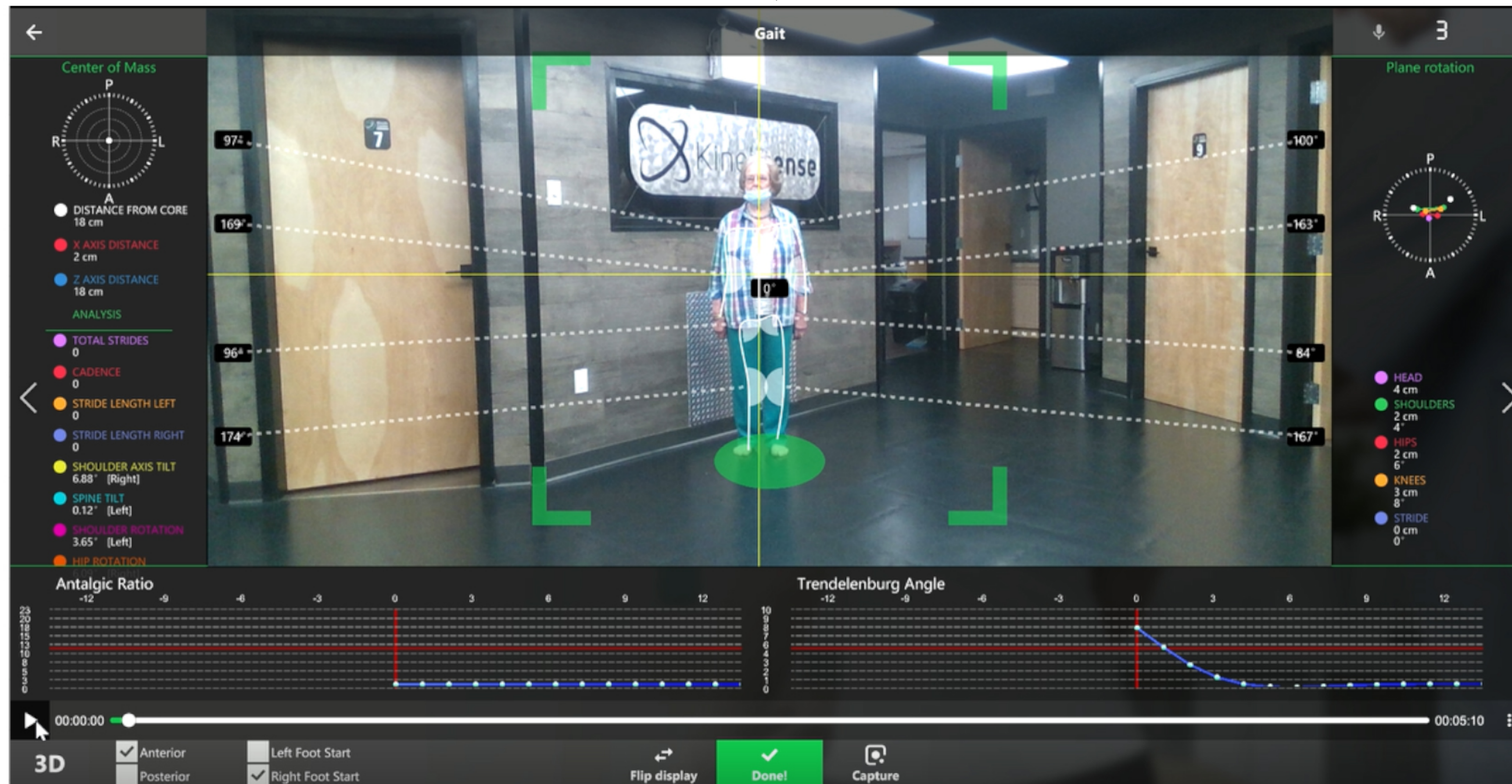


THE KINETISENSE FUNCTIONAL MOVEMENT SCREENING TOOL IS THE SIMPLEST AND MOST ADVANCED TECHNOLOGY AVAILABLE TO ASSESS MOVEMENT QUALITY AND FUNDAMENTAL MOVEMENT PATTERNS

THREE PLANES OF MOTION

ACCURATE 3D MOTION CAPTURE

REAL-TIME BIOFEEDBACK

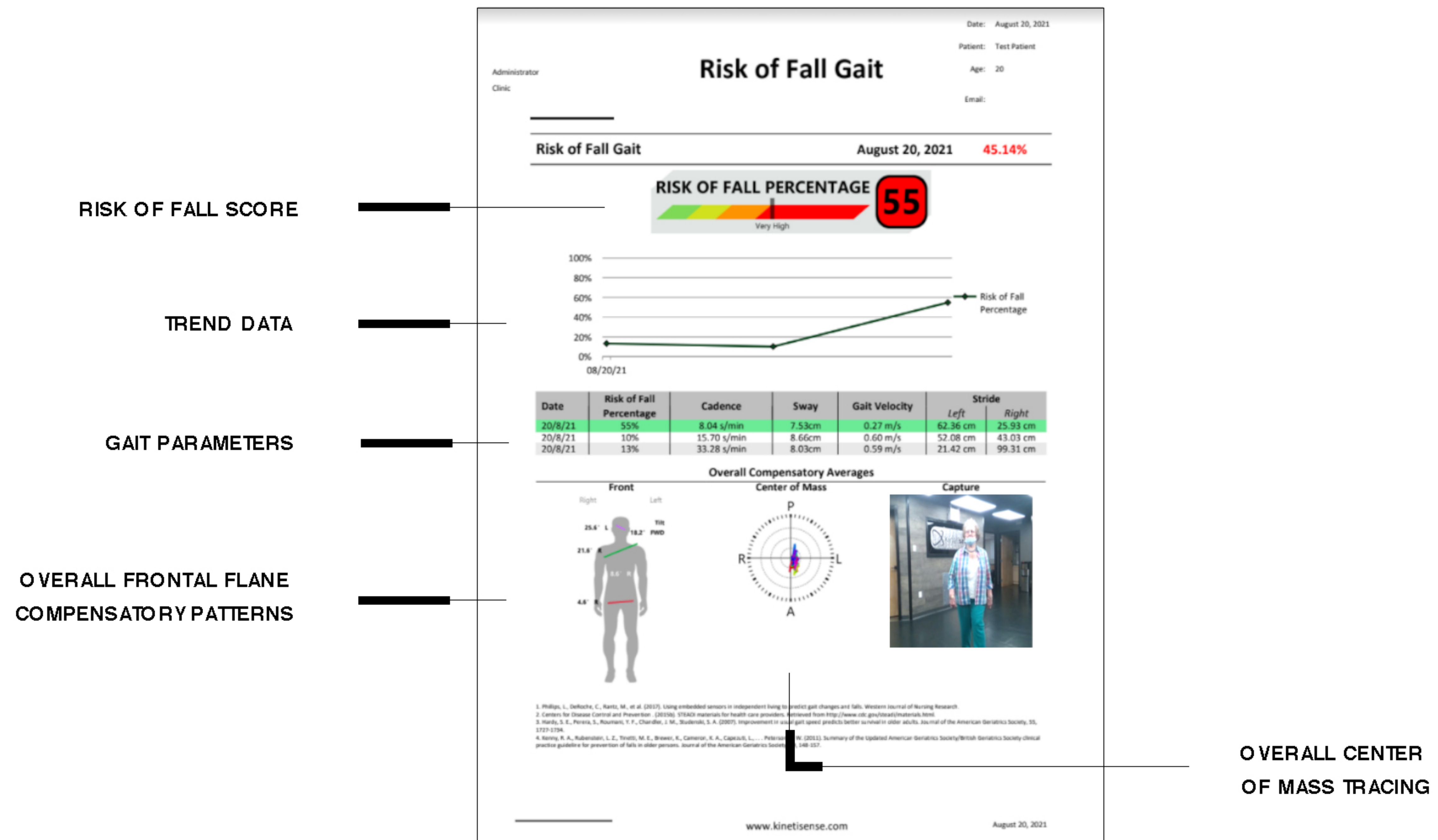


THE KINETISENSE SYSTEM ALLOWS FOR HEALTH CARE PROVIDERS TO QUICKLY IDENTIFY BIOMECHANICAL RISK FACTORS ASSOCIATED WITH FALLS, AND INITIATE THE IDEAL INTERVENTIONAL TRAINING PROGRAM IN A TIMELY MANNER.

REAL-TIME BIOFEEDBACK



OUR REPORTING GIVES INFORMATION ABOUT A PATIENT'S GAIT IN DETAIL SO A PHYSICAL THERAPIST OR CLINICIAN CAN MAKE DIAGNOSES THAT ARE MUCH MORE ACCURATE.





ASSESS WITH CONFIDENCE. SHOW THE DIFFERENCE. CHANGE THE FUTURE.

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