Short Distance Gait Pace Meter

Gait speed monitor to measure accurate gait speed for determining geriatric health

Georgia Tech researchers have developed an easier way to measure gait speed. By combining feedback from public presentations, measurement observations, and clinician focus groups, they have generated a dependable, easy-to-use and safe way to measure short distance gait speed. The device has six wall-mounted components: two touch-screen displays, two large start/control-buttons, and two sensors-arrays, which are color-coded for easier use. The device can be easily mounted to the wall with standard mounting adhesives or permanently installed. Calculated results are displayed on the screens automatically as a walking test is completed to facilitate recording of the results.

Summary Bullets

- **Accessible** – Large-one-touch buttons, large results font, audible and visible sensor cues
- **Inexpensive** – Device components low-cost, installation standard wall-mount
- **Convenient** – As simple as recording weight or height: Press a button, walk, record speed.

Solution Advantages

- **Accessible** – Large-one-touch buttons, large results font, audible and visible sensor cues
- **Inexpensive** – Device components low-cost, installation standard wall-mount
- **Convenient** – As simple as recording weight or height: Press a button, walk, record speed.
- **Accurate** – Less room for user error

Potential Commercial Applications

- Health clinics
- Senior living homes
- Doctor’s and physical therapist’s offices

Background and More Information

Generally, the health of older adults declines more quickly as they age. Furthermore, some elderly appear physiologically older and more vulnerable than their chronological age. This vulnerability towards disability and disease is termed frailty. Gait speed, which is walking speed over a short distance, is one of five components of frailty. Gait speed also independently predicts poor outcomes, such as falls, physical decline, and years of

remaining life. While this predictive ability has been demonstrated for more than 25 years in research and public health studies, routine collection of gait speed has been rare. Although easily discerned with a tape measure, stop-watch, calculator, and paper and pencil, the proper determination of gait speed is time consuming. An easy, reproducible manner to measure gait speed in clinics, hospitals, and residential settings would be helpful for clinical decision making and population health.

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