Barriers to Integrate Routine Frailty Screening in Clinical Settings

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Background

Frailty is a geriatric syndrome of decreased physiologic reserve and resistance to stressors, which leave patients more vulnerable to poor health outcomes following a clinical intervention. According to outlines from the national Surgical Quality Improvement Program, frailty should be evaluated as part of the pre-operative decision making process for all geriatric patients. Despite this recommendation, frailty is not widely performed in acute and outpatient care settings. The main application of frailty assessment in clinical settings is to empower clinicians to improve the clinical prediction of an intervention's risk to benefit ratio and better inform patients and their families when making medical care decisions. Currently, there is no consensus on an operational definition of frailty. Historically, Fried's full criteria to measure frailty has been the standard and takes approximately 5-10 minutes to administer. Though guidelines recommend frailty screening for adults 70 years of age and older with weight loss $\geq$ 5%, little is known on the adherence and barriers to frailty assessment. The aim of this study was to determine how often clinicians routinely screen for frailty in primary care settings among older adults. This study also identified which frailty assessments are currently used at UTHealth's primary care geriatric settings.
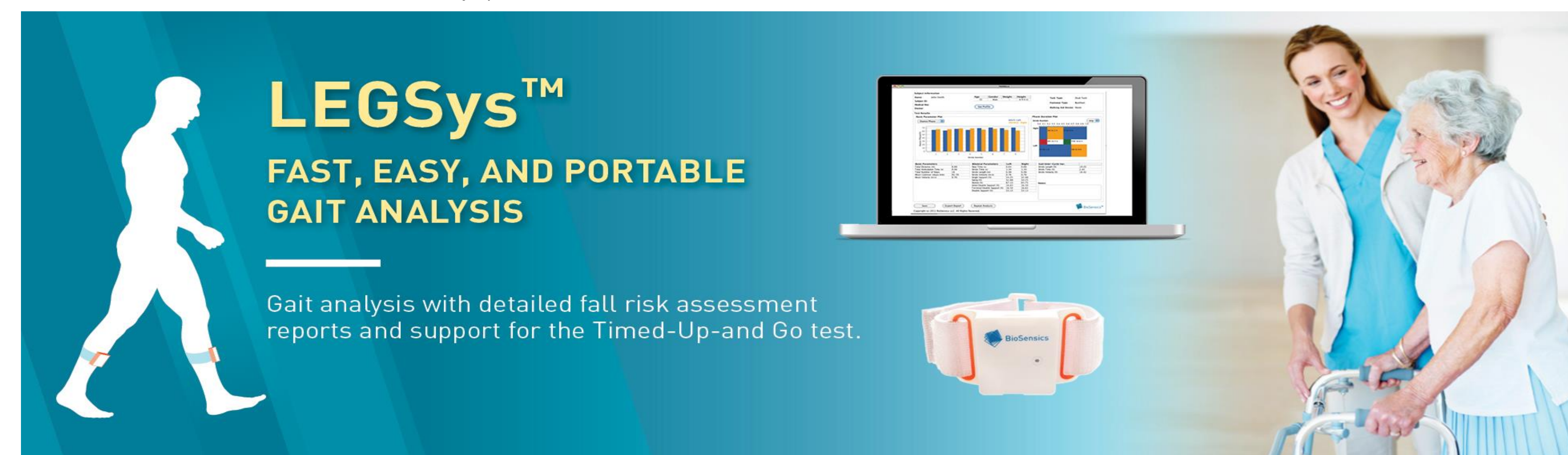
Methods

We developed a 17-item survey on frailty measurement that was administered through Qualtrics. Clinicians (n=184) were identified from internal medicine clinics serving older adults located at UT Health in Houston, Texas. The survey was emailed weekly over an 8 week time period. The sample included 44 primary care providers who completed the on-line survey.

Results

The response rate was 25% (n = 44). Eight-nine percent of the clinicians agreed that frailty could provide them with valuable information for decision making in patient care and 69% felt somewhat confident in assessing frailty. Eighty percent responded they were not aware of the 2012's International Consensus Panel guidelines to screen for frailty and 40% responded they 'never' measure frailty in their practice. Based on a multiple choice selection, for clinicians who do measure frailty, the most common method to assess frailty were falls (91%), weakness (73.9%), inability to perform basic activities of daily living (72.7%), low physical activity (69.6%) and poor cognitive performance (60.9%). The two most common reasons for not measuring frailty were 'my clinic is too busy' (57.1%) and 'I am not familiar with frailty screening' (42.9%). The majority of clinicians (38.1%) selected the maximum duration acceptable to measure frailty is 3-5 minutes followed by 1-3 minutes (23.8%).

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Conclusions

The majority of frailty measures are time consuming and difficult to use in outpatient clinical settings. Measuring frailty can prevent the onset of disability and subsequent adverse outcomes. Clinicians in busy outpatient clinical settings need a quick, objective and reliable measure of frailty. Research using technology such as wearable sensors holds promise to develop brief, feasible and valid measures of frailty. Frailty Meter™ was successfully used in acute care settings and in the homes of community dwelling older adults but has not been employed in outpatient primary care geriatric clinics. As of July 2019, Frailty Meter™ (licensed by Biosensics) was bought by another company and is currently not available. Biosensics company representatives suggested utilizing BalanSens™ or LegSys ™ (pictured above) to assess frailty; however these devices may not be suitable for non-ambulatory/bedbound patients. Because Dr. Najafi and colleagues developed the code for gryosensors, the precursor to Frailty Meter™, to assess frailty in acute care and home settings, we have permission to use his device for future research until the new release of Frailty Meter™.

Acknowledgements