

★ ★ ★ ★ Senior Safety & Mobility

FACT SHEET

Select Physical Performance Measures and Driving Outcomes in Older Adults: A LongROAD Study

Background

- Driving exposure (meaning driving distance and trips taken), driving cessation, crashes, citations, and poor driving ability are all factors that can have significant implications for safety and health among older adults and identifying measures associated with these factors is important for preventing negative driving outcomes
- Current physical functioning measures that are regularly employed are the Short Physical Performance Battery (SPPB), the Timed Up and Go Test (TUG), and the Rapid Pace Walk (RPW)

Objective

- To assess the evidence in the research literature on the association between three well-validated lower extremity physical functioning measures (SPPB, TUG, and the RPW) with driving outcomes in older adults

Methods

- Systematic review of studies published between 1994 and 2015 that included the SPPB, TUG, or RPW as a measure of physical functioning and included a driving-related outcome
- Thirteen studies involving 5,313 older adults met the inclusion criteria

Key Findings

- Lower SPPB scores were associated with reduced driving exposure and increased cessation
 - Avg. frequency of trips driven per week decreased from 5.1 for those with high SPPB scores to 1.0 for those with low SPPB scores
- Poorer RPW scores are associated with decreased driving ability in some studies and reduced driving exposure
 - RPW may be useful in studies related to driving ability and exposure
- TUG scores are not associated with any driving outcomes, and does not appear to be a useful measure of physical functioning for the included driving outcomes

Conclusions

- The SPPB may be useful as a risk factor assessment for identifying individuals at risk of reducing their driving exposure and driving cessation



Seniors face serious driving safety and mobility issues.