

TIMED UP AND GO (TUG)

DIRECTIONS:

Starting Position:

- Seat patient in a chair with arm rests.
- Patient is asked to stand from sitting position, walk 10 ft (3m) at their regular comfortable walking pace, turn around and return to the sitting position in the chair.
- Time to complete test is less than one minute.

Evaluator: Stand out of the way with route in full view, record the time taken for patient to push-off chair armrests rising from sit-to-stand, walk to 10 feet (3m), turn around returning to the chair, using the armrests to lower themselves to the chair seat.

Normal Range: Lundin-Olsson, et al (1998) Timed Up & Go (**TUG**) Reported that frail older adults carrying a glass of water who had a time difference of greater than 4.5 seconds between TUG manual and TUG were more prone to falls during the next 6 months.

Podsiadlo and Richardson (1991) Timed Up & Go (**TUG**) **Functional Mobility** is a term to reflect the balance and gait maneuvers used in everyday life such as getting in and out of a chair, walking and turning.

- Need to ambulate at minimum 0.5 m/s sufficient for community mobility
- < 20 seconds **Independent** in transfers and Activities of Daily Living
- > 30 seconds more **Dependent** in Activities of Daily Living and increase in need for assistive devices for ambulation

Shumway-Cook, Brauer and Woollcott (2000) Timed Up & Go (**TUG**)

- TUG no assistive device 9.0 seconds
- TUG with a cane 18.1 seconds
- TUG with a front-wheel walker 33.8 seconds
- TUG cognitive (count backwards by threes from random number 20-100)
- TUG manual (carrying cup full of water)
- TUG time of 13.5 seconds or longer to perform were classified as fallers, prediction rate of 90%
- TUG manual time of 14.5 seconds or longer to perform were classified as fallers, prediction rate of 90%
- TUG cognitive time of 15 seconds or longer to perform were classified as fallers, prediction rate of 87%



- Older adults who take longer than 14 seconds to complete the TUG have a high risk for falls

Wolfson et al (1990) Timed Up & Go (**TUG**)

- Older adults living in the community ambulate 1.0 to 1.2 m/s.
- Community dwelling older adults stride length 66-83 cm, walking speed 100-120 cm/s
- Nursing home residents who have fallen ambulate .53 m/s.
- Nursing home residents stride length 53-82 cm, walking speed 37-64 cm/s

References: Lundin-Olsson L, Nyberg L, Gustafson Y. Attention, frailty, and falls: the effect of a manual task on basic mobility. Journal of the American Geriatric Society, 1998; 46: 758-761.

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Shumway-Cook A, Brauer S & Woollacott M. Predicting the probability for falls in community-dwelling older adults using the timed up & go. Physical Therapy Journal, 2000; 80:896-903.

Wolfson L, Whipple R, Amerman P, Tobin JN. Gait assessment in the elderly: a gait abnormality rating scale and its relation to falls. Journal of Gerontology, 1990; 45(1):M12-19.

