## Gait Speed (self-selected): Interpretation and Norms

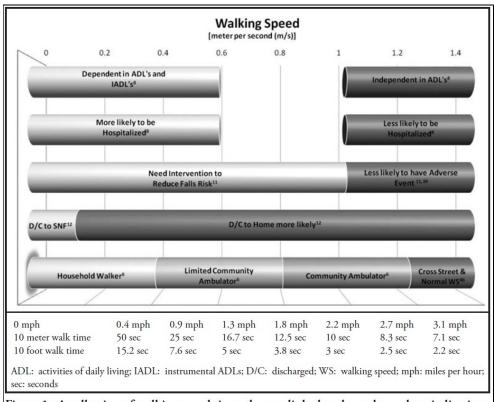


Figure 1. A collection of walking speed times that are linked to dependence, hospitalization, rehabilitation needs, discharge locations, and ambulation category.

Fritz S. Lusardi M. (2010). White Paper: Walking Speed: the Sixth Vital Sign. Journal of Geriatric Physical Therapy 32(2): 2-5. Figure 1.

Table 2. Comfortable Gait Speed: Means, Standard Deviations, and Confidence Intervals by Age, Gender, and Use of Assistive Device (in Meters per Second)

Age (y)	Group	N	Mean	SD	CI
60-69	Male	1	1.26		0.84 - 1.67
	Female	5	1.24	0.12	1.05 - 1.42
	Overall	6	1.24	0.10	1.13 – 1.35
70-79	Male	9	1.25	0.23	1.11 – 1.39
	Female	10	1.25	0.18	1.11 - 1.38
	Overall	19	1.25	0.20	1.15 – 1.34
80-89	Male	10	0.88	0.24	0.75 - 1.01
	Female	24	0.80	0.20	0.72 - 0.89
	No Device	24	0.91	0.16	0.84 - 0.98
	Device	10	0.63	0.17	0.52 - 0.74
	Overall	34	0.82	0.21	0.75 - 0.90
90-101	Male	2	0.72	0.14	0.43 - 1.02
	Female	15	0.71	0.23	0.60 - 0.82
	No Device	7	0.88	0.23	0.76 -1.01
	Device	10	0.59	0.10	0.48 - 0.70
	Overall	17	0.71	0.22	0.60 - 0.82

Table 3. Fast Gait Speed: Means, Standard Deviations, and Confidence Intervals by Age, Gender, and Use of Assistive Device (in Meters per Second)

Age (y)	Group	N	Mean	SD	CI
60-69	Male	1	1.96		1.37 – 2.56
	Female	5	1.81	0.17	1.55 - 2.08
	Overall	6	1.84	0.17	1.67 – 2.02
70-79	Male	9	1.94	0.26	1.74 – 2.14
	Female	10	1.80	0.26	1.61 - 1.99
	Overall	19	1.86	0.27	1.73 – 1.99
80-89	Male	10	1.29	0.38	1.10 - 1.48
	Female	24	1.20	0.29	1.08 - 1.33
	No Device	24	1.38	0.22	1.28 - 1.47
	Device	10	0.88	0.23	0.73 - 1.03
	Overall	34	1.23	0.32	1.12 - 1.34
90-101	Male	2	1.27	0.13	0.85 - 1.69
	Female	15	1.05	0.32	0.90 - 1.21
	No Device	7	1.29	0.33	1.11 - 1.47
	Device	10	0.93	0.20	0.78 - 1.08
	Overall	17	1.08	0.31	0.92 - 1.24

Lusardi, M.M. (2003). Functional Performance in Community Living Older Adults. Journal of Geriatric Physical Therapy, 26(3), 14-22.

<u>Gain of 0.1 m/s</u> is predictor for well-being in those without normal WS. (Purser 2005; Hardy, Perera 2007). Therefore could use a change of 0.1 m/s for patient goal.

Purser, J. L., M. Weinberger, et al. (2005). "Walking speed predicts health status and hospital costs for frail elderly male veterans." *J Rehabil Res Dev* 42(4): 535-46. Hardy, S. E., S. Perera, et al. (2007). "Improvement in usual gait speed predicts better survival in older adults." *J Am Geriatr Soc* 55(11): 1727-34.

## **Interpretation:**

• Less than 0.4 m/sec: Household ambulator

• 0.4 to 0.8 m/sec: Limited community ambulator

• 0.8 to 1.2 m/sec: Community ambulator

• 1.2 m/sec and above: Able to safely cross streets