

Supplementary Material to:

Audrey Tham, Magdalene Hui Min Lee, Justin Chew, et al. Validation of clinical frailty scale scoring tools for older adults attending the emergency department of a tertiary hospital in Singapore. Ann Acad Med Singap 2025;54. DOI: <https://doi.org/10.47102/annals-acadmedsg.2025107>

Appendix S1. Clinical Frailty Scale.

CLINICAL FRAILTY SCALE

	1	VERY FIT	People who are robust, active, energetic and motivated. They tend to exercise regularly and are among the fittest for their age.
	2	FIT	People who have no active disease symptoms but are less fit than category 1. Often, they exercise or are very active occasionally , e.g., seasonally.
	3	MANAGING WELL	People whose medical problems are well controlled , even if occasionally symptomatic, but often are not regularly active beyond routine walking.
	4	LIVING WITH VERY MILD FRAILTY	Previously "vulnerable," this category marks early transition from complete independence. While not dependent on others for daily help, often symptoms limit activities . A common complaint is being "slowed up" and/or being tired during the day.
	5	LIVING WITH MILD FRAILTY	People who often have more evident slowing , and need help with high order instrumental activities of daily living (finances, transportation, heavy housework). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation, medications and begins to restrict light housework.

	6	LIVING WITH MODERATE FRAILTY	People who need help with all outside activities and with keeping house . Inside, they often have problems with stairs and need help with bathing and might need minimal assistance (cuing, standby) with dressing.
	7	LIVING WITH SEVERE FRAILTY	Completely dependent for personal care , from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~6 months).
	8	LIVING WITH VERY SEVERE FRAILTY	Completely dependent for personal care and approaching end of life. Typically, they could not recover even from a minor illness.
	9	TERMINALLY ILL	Approaching the end of life. This category applies to people with a life expectancy <6 months , who are not otherwise living with severe frailty . (Many terminally ill people can still exercise until very close to death.)

SCORING FRAILTY IN PEOPLE WITH DEMENTIA

The degree of frailty generally corresponds to the degree of dementia. Common **symptoms in mild dementia** include forgetting the details of a recent event, though still remembering the event itself, repeating the same question/story and social withdrawal.

In **moderate dementia**, recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting. In **severe dementia**, they cannot do personal care without help. In **very severe dementia** they are often bedfast. Many are virtually mute.

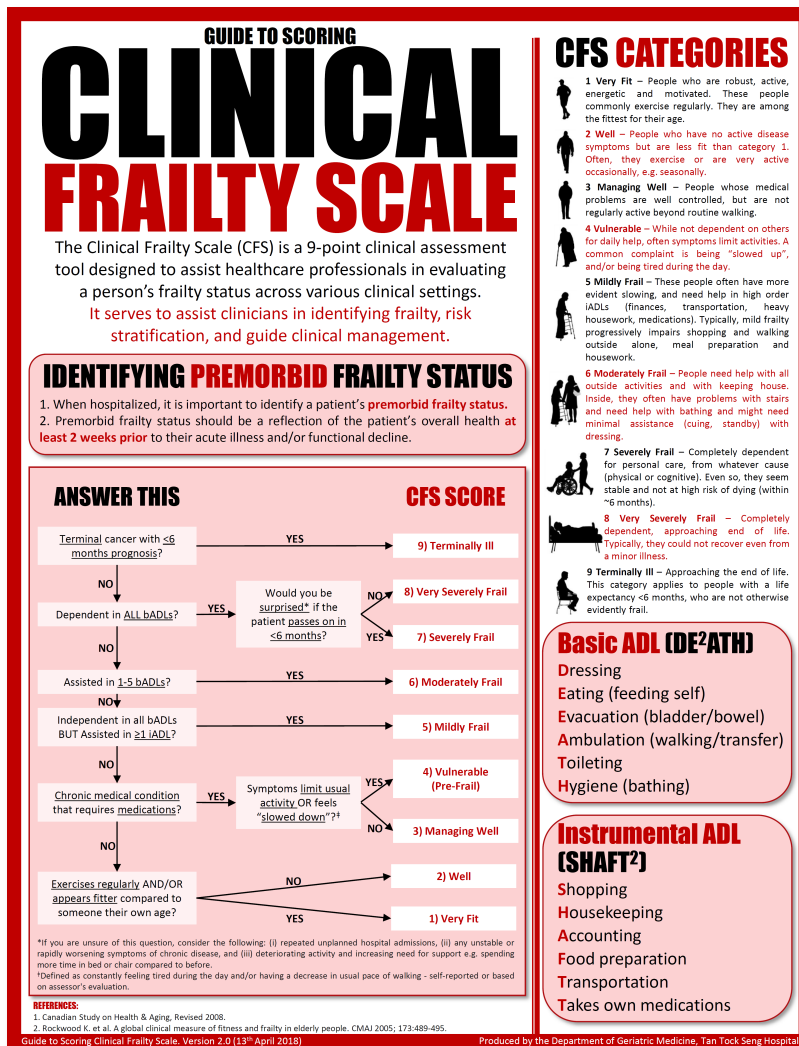


Clinical Frailty Scale ©2005–2020 Rockwood, Version 2.0 (EN). All rights reserved. For permission: www.geriatricmedicine.ca
Rockwood K et al. A global clinical measure of fitness and frailty in elderly people. CMAJ 2005;173:489–495.

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Appendix S2. CFS algorithm (CFS-A).



Appendix S3. CFS-Fast.

 Tan Tock Seng HOSPITAL	CLINICAL FRAILTY SCALE – FAST		
	1 Very fit	Independent outdoors	Exercises daily
	2 Well		Exercises sometimes
	3 Managing Well		Rarely exercises
	4 Vulnerable		Feels fatigued the entire day OR Walking slower than usual
	5 Mildly Frail	Needs help outdoors	Independent at home
	6 Moderately Frail		Needs some help at home
	7 Severely Frail		Constantly needs help at home
	8 Very Severely Frail		Constantly needs help at home AND Mostly bedbound
	9 Terminally Ill		Known terminal illness OR under Palliative/Hospice Care

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Appendix S4. CFS-Self.

FRAILTY QUESTIONNAIRE

For each question, please select all of the options that apply to you

Two weeks BEFORE your current illness...

Q1. Did you need help with any of the following personal care?


☐ Using the toilet


☐ Getting dressed


☐ Bathing/Showering


☐ Walking

*Stop here if you have selected any of the options above.

Q2. Did you need help with any of the following activities?


☐ Going outside


☐ Handling Money


☐ Taking Medications

*Stop here if you have selected any of the options above.

Q3. Did you feel constantly tired throughout the day?


☐ Yes

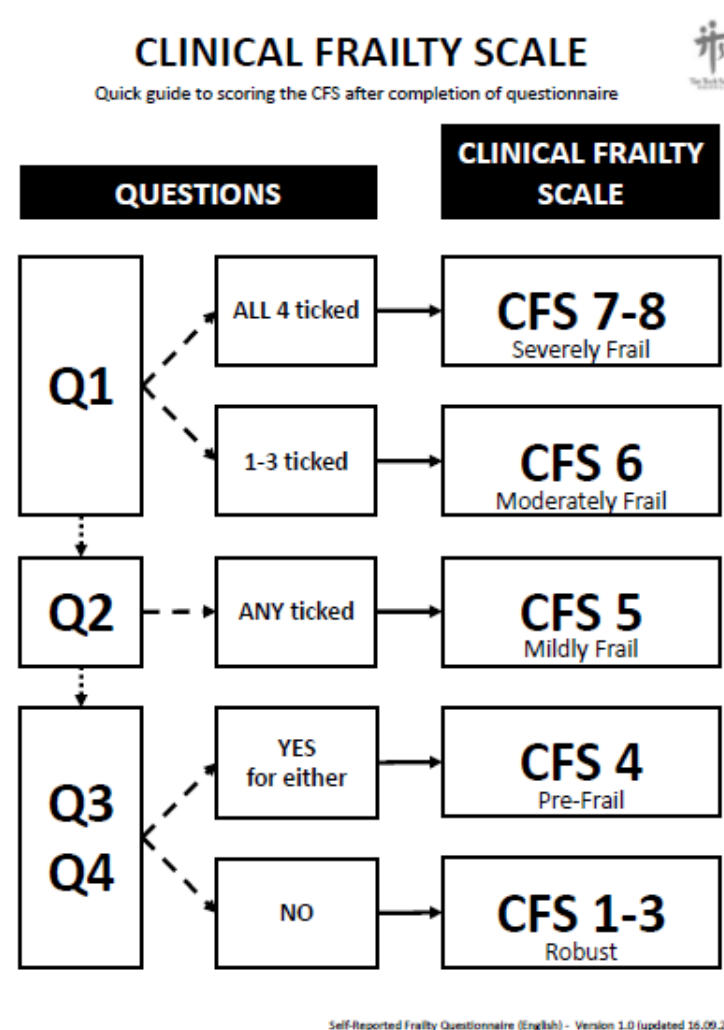

☐ No

Q4. Did you feel that you were walking slower than usual?


☐ Yes


☐ No

Self-Reported Frailty Questionnaire (English) - Version 1.0 (updated 16.09.20)



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Appendix S5. Baseline characteristics of surveyed patients.

		Overall (N=210)	
Demographics		N	%
Age in years	Median (Q1-Q3)	210	73 (69-78)
Gender	Male	120	57.1%
	Female	90	42.9%
Ethnicity	Chinese	171	81.4%
	Malay	10	4.8%
	Indian	23	11.0%
	Others	6	2.9%
Marital Status	Married	135	64.3%
	Single	23	11.0%
	Widowed/Divorced/Separated	52	24.8%
Living Status	Alone	27	12.9%
	With Family/friend/helper	179	85.2%
	Others	4	1.9%
Education level	No formal education	10	4.8%
	Primary	48	22.9%
	Secondary	109	51.9%
	Junior College/University	43	20.5%
Household income	<\$1,000	92	43.8%
	<\$2,500	35	16.7%
	<\$5000	38	18.1%
	>=\$5000	34	16.2%

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	Missing	11	5.2%
Level of Reliance	Self-care	179	85.2%
	Family	13	6.2%
	Maid	16	7.6%
	Others	2	1.0%
Lifestyle			
Smoking Status	Non-smoker	145	69.0%
	Ex-smoker	45	21.4%
	Current	20	9.5%
Average number per day	Median (Q1-Q3)	64	15 (7.5-20)
Duration of smoking (years)	Median (Q1-Q3)	63	20 (10-50)
Alcohol Status	Teetotal	131	62.4%
	Ex-drinker	42	20.0%
	Current	37	17.6%
Function		N	%
Locomotion (in the community)	No assistance required	161	76.7%
	Walking Stick/frame	32	15.2%
	Mobility Scooter/Wheelchair	17	8.1%
Modified Barthel Index Score	Median (Q1-Q3)	210	100 (96-100)
Instrumental Activities of Daily Living	Median (Q1-Q3)	210	7 (6-8)
Sarcopenia			
SARC-F Total Score	Median (Q1-Q3)	208	1 (0-3)
Sarcopenia (score ≥4)		45	21.4%

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Nutritional status			
Short Nutritional Assessment Questionnaire score	Median (Q1-Q3)	210	0 (0-1)
Severely malnourished (Score ≥ 4)		12	5.7%
Health-related quality of life			
EuroQoL-5 Dimension			
Visual Analog Score	Median (Q1-Q3)	210	67.5 (50-80)
Comorbidity			
Charlson Comorbidity Index score	Median (Q1-Q3)	210	2 (1-4)
Charlson Comorbidity Index class	Low	45	21.4%
	Medium	93	44.3%
	High	28	13.3%
	Very High	44	21.0%
Others			
Number of prescribed medications	Median (Q1-Q3)	210	6 (3-9)
Polypharmacy (≥ 5 medications)		137	65.2%
Had a fall in last 12 months		66	31.4%
Had an injurious fall in last 12 months		41	19.5%
Primary care		7	3.3%
Emergency attendance		24	11.4%
Hospitalisation		10	4.8%
Disposition from ED	Discharged	17	8.1%
	Admitted	26	12.4%

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Q1: 25th percentile; Q3: 75% percentile