

Risk profile is calculated from each positive variable, all patients start with 1 point for Age ≥ 75

Permissions have been granted for the use of the CRISTAL and SPICT tools in this study. Definitions are specific to each tool or general medical definitions

3. Hospital admissions

VARIABLE	DEFINITION (POSITIVE) 1 point for each positive variable, except *	SOURCE
Unplanned hospital admission	Non-elective	Admission Report
Admitted via Emergency Department?		Admission Report
Admitted from nursing home or supported accom	Does not include retirement village or over 50's living	Online address search
Admission date/time to current ward	Time of admission to a bed under clinical team	The Viewer Encounters
Previous hospitalisation	For at least 24 hours in past 12 months	
ICU admission in past 12 months		
*Admitted to ICU during this current hospital admission?		The Viewer ACP tracker / clinical notes
*Presence of a documented care directive	Prior to this hospital admission	
* if YES: List type and year of completion	only documents, does not include discussions	

3.1 Clinical Criteria

VARIABLE	DEFINITION (POSITIVE) 1 point for two or more positive variables	SOURCE
Decrease level of consciousness (LOC)	GCS decrease > 2 compared with baseline or AVPU = P or = U	QAS/ ED notes or admission notes
Systolic Blood Pressure	< 90 mmHg	
Respiratory Rate	< 5 bpm or > 30 bpm	
Pulse Rate	< 40bpm or > 140 bpm	
Oxygen required or O ₂ saturation < 90%	Any record of O ₂ < 90% or at least 6L oxygen required for O ₂ > 90%	
Hypoglycaemia	BGL 1.0 to 4.0 mmol/L	QAS/ ED notes/admission notes/path chem 20
Repeat or prolonged seizures	More than one seizure in last 24hrs or seizure duration > 5 minutes (any type)	QAS/ ED notes or admission notes
Low urine output	< 15ml/hr or < 0.5ml/kg/hr	

3.2 Functional status

VARIABLE	DEFINITION (POSITIVE) 1 point for each positive variable, except CFS (see next page)	SOURCE
Performance status is poor or deteriorating	Patient spends at least half their day in a chair or bed when not in hospital	Social history
Depends on others for care	Due to increasing physical and/or mental health problems, or carer needs more help and support	Social history / Allied health notes
Progressive weight loss; remains under weight; low muscle mass	Unintentional weight loss of more than 5% of body weight over 6 months (non-obese)	Clinical notes / Waterlow tool
Persistent symptoms despite optimal treatment of underlying conditions	Symptoms related to comorbidities that have been ongoing for at least 2 weeks	ED notes / clinical notes
Patient (or family) asks for palliative care,	Chooses to reduce or stop having treatment, or wishes to focus on quality of life	Social history / sometimes reported as CFS
Clinical Frailty score	Rockwood Clinical Frailty Scale, functional status prior to hospitalisation - see next page	

3.3 Comorbidities

VARIABLE	DEFINITION (POSITIVE) 1 point for each positive variable	SOURCE
History of advanced cancer	Stage III or IV for solid tumours; or, metastatic, terminal, incurable written in notes	ED notes / clinical notes
Proteinuria on a spot urine sample	Protein ++ on dip stick or >30mg albumin/g creatinine	ED notes / clinical notes / pathology (urine MCS)
History of Chronic Kidney Disease	Stage IV or V or GFR < 30mL/min	ED notes/ clinical notes/ pathology (GFR)
Abnormal ECG	Current/recent history, acute, chronic or both of; AF, VT other abnormal rhythms or >5 ectopics /min	QAS/ ED notes / clinical notes
New or pre-existing Acute Myocardial Infarction	Documented, AMI (STEMI / NSTEMI) ECG changes, Troponin rise, etc	ED notes / clinical notes
History of Chronic Heart Failure	NYHFC III or IV or documented heart failure w/ shortness of breath with activity (III) or at rest (IV)	
History of Chronic Obstructive Pulmonary Disease	GOLD criteria 3 severe (FEV ₁ 30-40%) or 4 very severe (FEV ₁ <30%)	ED notes / clinical notes / resp function tests
Cognitive impairment	Long term cognitive disorder; dementia; acute or chronic behaviour alterations, incl current delirium or confusion	ED notes / clinical notes
New stroke	New stroke as reason for hospital admission, or new stroke during this hospital admission	
Moderate / severe liver disease	Cirrhosis stage III or IV or liver cancer	

Clinical Frailty Scale*



1 Very Fit – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.



2 Well – 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**, but are **not regularly active** beyond routine walking.



4 Vulnerable – 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 Mildly Frail – These people often have **more evident slowing**, and need help in **high order IADLs** (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.



6 Moderately Frail – People 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 Severely Frail – **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 Very Severely Frail – Completely dependent, approaching the 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 evidently frail**.

Scoring frailty in people with dementia

The degree of frailty 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.

* 1. Canadian Study on Health & Aging, Revised 2008.
2. K. Rockwood et al. A global clinical measure of fitness and frailty in elderly people. CMAJ 2005;173:489-495.