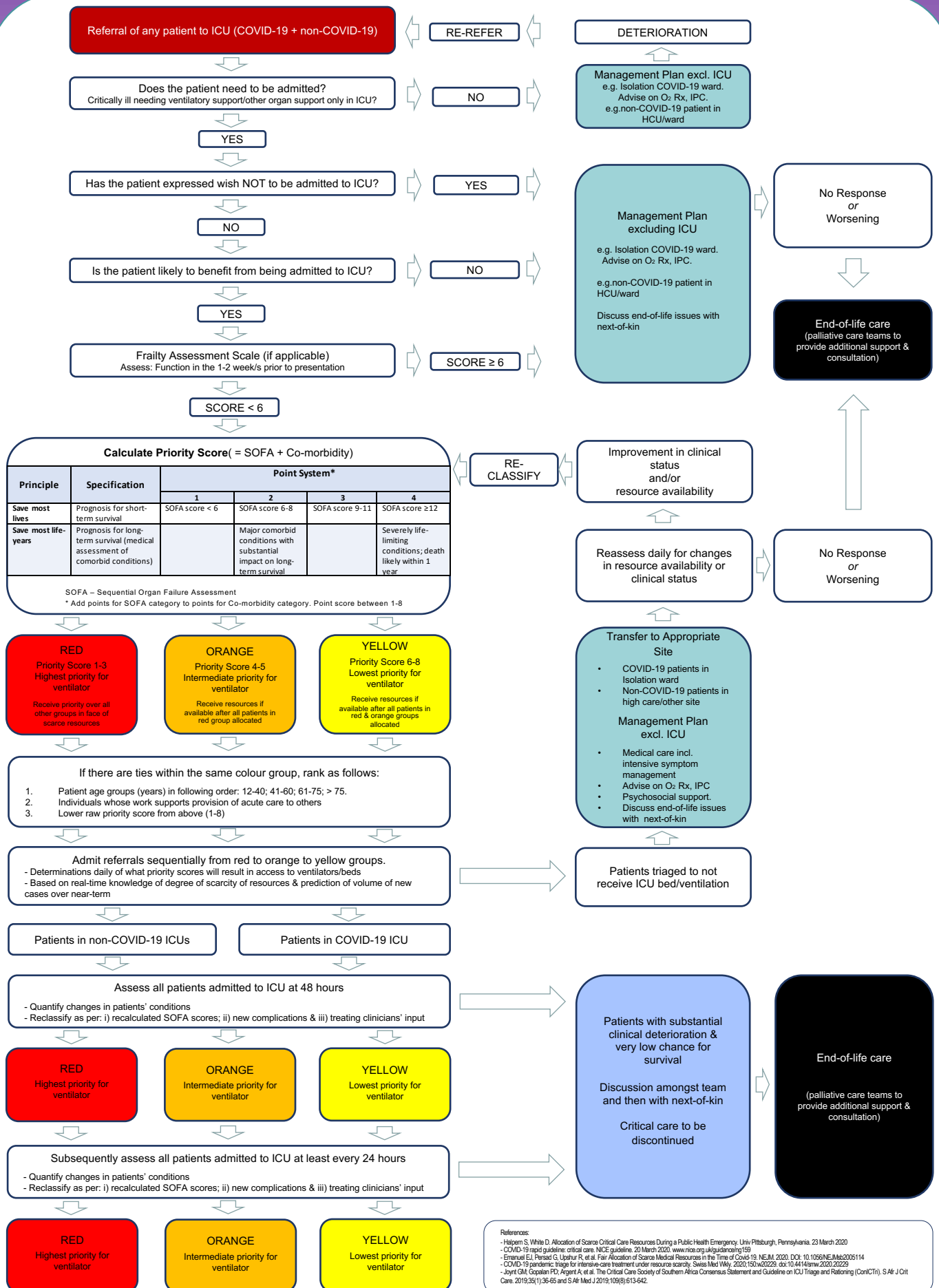


Allocation of Scarce Critical Care Resources During the COVID-19 Public Health Emergency in South Africa



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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.

TABLE. Examples of comorbidities to be used for Priority Scoring

| Examples of Major comorbidities (associated with significantly decreased long-term survival) | Examples of Severely Life Limiting Comorbidities (commonly associated with survival < 1 year) |
|--|---|
| <ul style="list-style-type: none"> Moderate Alzheimer's disease or related dementia Malignancy with a < 10 year expected survival New York Heart Association Class III heart failure Moderately severe chronic lung disease (e.g., COPD, IPF) End-stage renal disease in patients < 75 Severe multi-vessel CAD Cirrhosis with history of decompensation Current AIDS defining illness (or viral load >10000 copies/ml despite Rx or recent HIV diagnosis not on Rx with CD4+ < 50) | <ul style="list-style-type: none"> Severe Alzheimer's disease or related dementia Cancer being treated with only palliative interventions (including palliative chemotherapy or radiation) New York Heart Association Class IV heart failure plus evidence of frailty Severe chronic lung disease plus evidence of frailty Cirrhosis with MELD score ≥20, ineligible for transplant End-stage renal disease in patients older than 75 |

Table 1. Sequential [Sepsis-Related] Organ Failure Assessment Score^a

| System | Score | | | | |
|--|---------------|---|---|--|--------------------------------------|
| | 0 | 1 | 2 | 3 | 4 |
| Respiration | | | | | |
| PaO ₂ /Fio ₂ , mm Hg (kPa) | ≥400 (53.3) | <400 (53.3) | <300 (40) | <200 (26.7) with respiratory support | <100 (13.3) with respiratory support |
| Coagulation | | | | | |
| Platelets, ×10 ³ /μL | ≥150 | <150 | <100 | <50 | <20 |
| Liver | | | | | |
| Bilirubin, mg/dL (μmol/L) | <1.2 (20) | 1.2-1.9 (20-32) | 2.0-5.9 (33-101) | 6.0-11.9 (102-204) | >12.0 (204) |
| Cardiovascular | | | | | |
| MAP ≥70 mm Hg | MAP <70 mm Hg | Dopamine <5 or dobutamine (any dose) ^b | Dopamine 5.1-15 or epinephrine ≤0.1 or norepinephrine ≤0.1 ^b | Dopamine >15 or epinephrine >0.1 or norepinephrine >0.1 ^b | |
| Central nervous system | | | | | |
| Glasgow Coma Scale score ^c | 15 | 13-14 | 10-12 | 6-9 | <6 |
| Renal | | | | | |
| Creatinine, mg/dL (μmol/L) | <1.2 (110) | 1.2-1.9 (110-170) | 2.0-3.4 (171-299) | 3.5-4.9 (300-440) | >5.0 (440) |
| Urine output, mL/d | | | | <500 | <200 |

Abbreviations: Fio₂, fraction of inspired oxygen; MAP, mean arterial pressure; PaO₂, partial pressure of oxygen.

^a Adapted from Vincent et al.²⁷

^b Catecholamine doses are given as μg/kg/min for at least 1 hour.

^c Glasgow Coma Scale scores range from 3-15; higher score indicates better neurological function.