

Supplementary Material

A survey of Australian public opinion on using comorbidity to triage intensive care patients in a pandemic

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- 1 Appendices
- 2 Appendix 1 – The ICU Pandemic Triage Questionnaire

The ICU Pandemic Triage Questionnaire

Thank you for taking the time to complete this questionnaire.

The more people who take part in this study the more confident we can be that our results reflect the true views of the Australian public.

Please answer as many questions as you can.

THIS IS NOT A TEST.
THERE ARE NO RIGHT OR WRONG ANSWERS.

Please return this completed questionnaire using the reply paid envelope to the address below:

ICU Pandemic Study Coordinator
Critical Care Division
The George Institute for Global Health
REPLY PAID 89436
PO Box M201
MISSENDEN ROAD, NSW 2050

Some of the questions that follow may be confronting or cause distress for some people. There is no need to complete this questionnaire if it causes you distress.

If you feel distressed, the following website has the contact details for mental health resources and programmes, one-on-one connections to professionals through webchat, and online counselling and phone services.
<https://www.health.nsw.gov.au/Infectious/factsheets/Factsheets/covid-19-accessing-mental-health.pdf>

PURPOSE OF THIS QUESTIONNAIRE

The purpose of this questionnaire is to determine Australian public opinion on how patients should be selected for treatment in an intensive care unit (ICU) in a future pandemic, if not enough ICU beds are available.

BACKGROUND

Currently, if a person develops severe COVID-19 the only treatments that improve their chances of survival are those given in an intensive care unit (ICU), such as being put on a ventilator (also known as a life support machine or breathing machine).

ICUs in Australia coped well during the 2020 COVID-19 pandemic, however, future pandemics of COVID-19 or other new viruses may be more severe, and there may not be enough ICU beds for all the patients who need one.

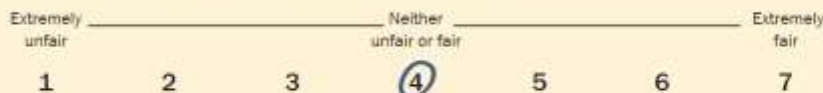
This disaster situation may create an ethical dilemma, because hospitals may need to decide which patients should be treated when it may not be possible to treat everyone.

One of the ways to decide which patients should be treated in the ICU, when there are too many patients and not enough ICU beds, is to use rules or selection criteria (also called triage criteria).

The following questions will ask you about your views on different types of selection criteria that could be used in a future pandemic.

INSTRUCTIONS

Some of the following questions will look like the one below. To answer these questions draw a circle around the number that matches the answer you think is the best, like so



Examples: *If you think the best answer is "extremely unfair" then circle 1.*
 If you think the best answer is "extremely fair" then circle 7.
 If you think the best answer is "unfair", but not "extremely unfair", then circle 2 or 3.
 If you think the best answer is "fair", but not "extremely fair", then circle 5 or 6.

Some of the following questions will look like the one below. To answer these questions place a cross in the box that matches the answer you think is the best, like so

- Choice A
- Choice B

Selection Criteria Based on Long-Term (Chronic) Medical Conditions

One way to decide the priority in which people would be admitted to an ICU in a pandemic disaster, when there are not enough resources to treat everyone, is to give a lower priority to people with certain long-term (also called chronic) medical conditions.

Some examples of long-term medical conditions that could be used as selection criteria:

- Moderate Alzheimer's Disease or moderate dementia (person may forget events or personal history such as address, telephone numbers; they may become confused where they are or what day it is; they may have an increased tendency to wander and become lost)
- Cancer with a less than 10 year expected survival
- Heart Failure with marked limitation of physical activity (person is comfortable at rest, but ordinary physical activity results in fatigue or shortness of breath)
- Moderately severe chronic (long term) lung disease (such as emphysema or pulmonary fibrosis – a person's breathing function tests are about 50% of normal)
- End-stage kidney disease (person is on dialysis or will need dialysis in the near future)
- Severe coronary artery disease
- Cirrhosis (of the liver) with previous episodes of liver failure

There are other examples not listed here.

People who do not have any of these long-term medical conditions would be admitted first. People who have any of these long-term medical conditions would have a lower priority.

Question 1: How fair do you think it is to use a person's long-term (or chronic) medical conditions to decide who gets treated in a disaster, when there are not enough resources to treat everyone?

Extremely unfair _____ Neither unfair or fair _____ Extremely fair

1 **2** **3** **4** **5** **6** **7**


If you have any comments please write them in the space below:

Selection Criteria Based on Predicted Level of Function

One way to decide the priority which people would be admitted to an ICU in a pandemic disaster, when there are not enough resources to treat everyone, is to use a scoring system for a person's predicted level of function at the end of their hospital stay.

Example of a scoring system for function

	Score	
Poor Function	1	Vegetative State - Unaware of self and environment
	2	Needs full assistance in all activities of daily life
	3	Needs partial assistance in some activities of daily life
	4	Independent, but cannot work, cannot go to school/higher education, or cannot go to previous social activities
	5	Independent, with some deficits, but can partly resume work or previous activities
	6	Independent, with only minor physical or mental deficits that affects daily life
Good Function	7	Full recovery or minor symptoms that do not affect daily life



A person who is predicted to have a higher score at the end of their hospital stay (for example, 7) would have higher priority for admission to the ICU. A person with a lower score (for example, 1) would have lower priority.

Question 3A: How fair do you think it is to use a person's predicted level of function at the end of their hospital stay to decide who gets treated in a disaster, when there are not enough resources to treat everyone?

Extremely unfair _____ Neither unfair or fair _____ Extremely fair

1 2 3 4 5 6 7

Question 3B: If this scoring system was used to decide who gets treated in a disaster, when there are not enough resources to treat everyone, what cut-off point do you think is the fairest?

	Score
Point B →	1 Vegetative State - Unaware of self and environment
Point C →	2 Needs full assistance in all activities of daily life
Point D →	3 Needs partial assistance in some activities of daily life
Point E →	4 Independent, but cannot work, cannot go to school/higher education, or cannot go to previous social activities
	5 Independent, with some deficits, but can partly resume work or previous activities
	6 Independent, with only minor physical or mental deficits that affects daily life
	7 Full recovery or minor symptoms that do not affect daily life


- A. I don't think using a scoring system for function is fair.
- or
- B. Point B - A person who scores 2 to 7 should have equal first priority. A person who scores 1 should have lower priority.
- C. Point C - A person who scores 3 to 7 should have equal first priority. A person who scores 1 or 2 should have lower priority.
- D. Point D - A person who scores 4 to 7 should have equal first priority. A person who scores 1 to 3 should have lower priority.
- E. Point E - A person who scores 5 to 7 should have equal first priority. A person who scores 1 to 4 should have lower priority.
- F. I'm not sure.

If you have any comments please write them in the space below:

Selection Criteria Based on Predicted Level of Frailty

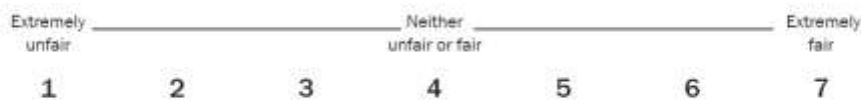
One way to decide the priority which people would be admitted to an ICU in a pandemic disaster, when there are not enough resources to treat everyone, is to use a scoring system for a person's predicted level of frailty at the end of their hospital stay.

Example of a scoring system for frailty

	Score
Very Frail	1 Approaching end of life, with life expectancy less than 6 months.
	2 Completely dependent on others for personal care and approaching end of life.
	3 Completely dependent on others for personal care
	4 Needs help with all outside activities and looking after the house inside. Has problems climbing stairs. May need help with bathing and dressing.
	5 Slowing down and needs help with finances, transportation, medications, shopping, walking outside alone, meal preparation and housework.
	6 Has some symptoms which limit activity. Not dependent on others for daily help.
	7 Only exercise is routine walking. Medical problems are well controlled.
	8 Can exercise or are very active occasionally. Has no active disease symptoms but less fit than category 9.
	9 Active and energetic
	Not Frail

A person who is predicted to have a higher score at the end of their hospital stay (for example, 9) would have higher priority for admission to the ICU. A person with a lower score (for example, 1) would have lower priority.

Question 4A: How fair do you think it is to use a person's predicted frailty at the end of their hospital stay, to decide who gets treated in a disaster, when there are not enough resources to treat everyone?



Question 4B: If this scoring system was used to decide who gets treated in a disaster, when there are not enough resources to treat everyone, what cut-off point do you think is the fairest?

	Score
	1 Approaching end of life, with life expectancy less than 6 months.
Point B →	2 Completely dependent on others for personal care and approaching end of life.
Point C →	3 Completely dependent on others for personal care.
Point D →	4 Needs help with all outside activities and looking after the house inside. Has problems climbing stairs. May need help with bathing and dressing.
Point E →	5 Slowing down and needs help with finances, transportation, medications, shopping, walking outside alone, meal preparation and housework.
	6 Symptoms limit activity. Not dependent on others for daily help.
	7 Not active beyond routine walking. Medical problems are well controlled.
	8 Can exercise or are very active occasionally. Has no active disease symptoms but less fit than category 9.
	9 Active and energetic.

- A I don't think using a scoring system for frailty is fair.
or
- B Point B - A person who scores 3 to 9 should have equal first priority. A person who scores 1 to 2 should have lower priority.
- C Point C - A person who scores 4 to 9 should have equal first priority. A person who scores 1 to 3 should have lower priority.
- D Point D - A person who scores 5 to 9 should have equal first priority. A person who scores 1 to 4 should have lower priority.
- E Point E - A person who scores 6 to 9 should have equal first priority. A person who scores 1 to 5 should have lower priority.
- F I'm not sure.

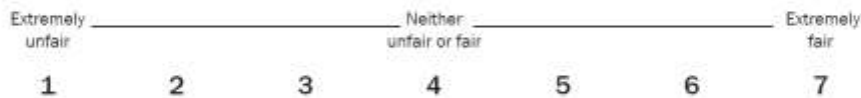
If you have any comments please write them in the space below:

Additional Questions

Certain people in our society are considered vulnerable or disadvantaged.

These people may be more likely to become ill during pandemics. They may have economic hardship or may be homeless. They may have poorer nutrition, may have higher levels of chronic disease, and may not have good access to health care under normal circumstances.

Question 6: How fair do you think it is if vulnerable or disadvantaged people are treated preferentially in the ICU, before the general public, in a pandemic disaster, when there are not enough resources to treat everyone?

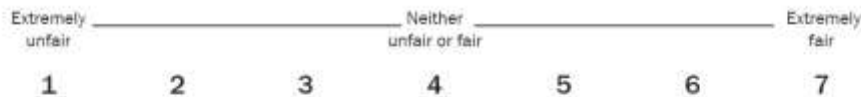


Imagine it is a pandemic disaster and there are not enough resources to treat everyone. The ICU can only take one (1) more patient, but there are two (2) patients (Patient A and Patient B) who are critically unwell. Both patients require admission to the ICU to survive.

A decision needs to be made on which patient will be treated first in the ICU.

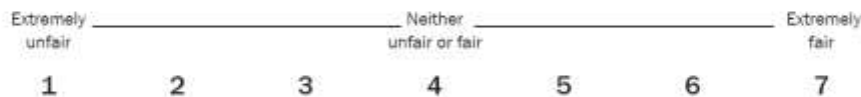
Question 7: Patient A and B are the same age and have the same medical conditions. Patient A is a solo parent and has 2 children, who will be orphaned if Patient A does not survive. Patient B has no children.

How fair do you think it is if Patient A is treated first in the ICU, before Patient B, in a pandemic disaster, when there are not enough resources for everyone?



Question 8: Patients A and B are the same age and have the same medical conditions. Patient A is a frontline healthcare worker and works in a hospital. Patient B is not a frontline healthcare worker.

How fair do you think it is if Patient A is treated first in the ICU, before Patient B, in a pandemic disaster, when there are not enough resources for everyone?



Demographics Questions

For Questions 9 to 13 place a cross in the box, like so that matches your answer.

Question 9: Which state do you live in?

- | | | | |
|---|--|---|-------------------------------------|
| <input type="checkbox"/> Australian Capital Territory | <input type="checkbox"/> New South Wales | <input type="checkbox"/> Northern Territory | <input type="checkbox"/> Queensland |
| <input type="checkbox"/> South Australia | <input type="checkbox"/> Western Australia | <input type="checkbox"/> Victoria | <input type="checkbox"/> Tasmania |

Question 10: Which age group do you belong to?

- | | | |
|---|---|---|
| <input type="checkbox"/> Under 21 years old | <input type="checkbox"/> 41 to 45 years old | <input type="checkbox"/> 66 to 70 years old |
| <input type="checkbox"/> 21 to 25 years old | <input type="checkbox"/> 46 to 50 years old | <input type="checkbox"/> 71 to 75 years old |
| <input type="checkbox"/> 26 to 30 years old | <input type="checkbox"/> 51 to 55 years old | <input type="checkbox"/> 76 to 80 years old |
| <input type="checkbox"/> 31 to 35 years old | <input type="checkbox"/> 56 to 60 years old | <input type="checkbox"/> 81 to 85 years old |
| <input type="checkbox"/> 36 to 40 years old | <input type="checkbox"/> 61 to 65 years old | <input type="checkbox"/> 86 years or older |

Question 11: What is your gender?

- | | | |
|-------------------------------|---------------------------------|--------------------------------|
| <input type="checkbox"/> Male | <input type="checkbox"/> Female | <input type="checkbox"/> Other |
|-------------------------------|---------------------------------|--------------------------------|

Question 12: Do you live in a city, a town, or a country area?

- | |
|---|
| <input type="checkbox"/> City (population more than 10 000 people) |
| <input type="checkbox"/> Town (population between 250 to 10 000 people) |
| <input type="checkbox"/> Country, rural or outback area (population less than 250 people) |

Question 13: What is your current employment status?

- | | | |
|--|--|---|
| <input type="checkbox"/> Retired | <input type="checkbox"/> At school, college, or university | <input type="checkbox"/> Employed full-time |
| <input type="checkbox"/> Not employed in paid work | <input type="checkbox"/> Employed part-time or casual | |

26 **Appendix 2 - Proportion and number of questionnaire respondents and actual proportions of**
27 **Australian population according to state or territory**

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31 **Appendix 2A – Proportion and number of questionnaire respondents according to state or**
32 **territory***

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45 **Appendix 2B – Actual proportion of Australian population residing in state or territory ****

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* p 0.24

** According to Australian Bureau of Statistics data from March 2022.²¹

54 **Appendix 3 - Proportion and number of questionnaire respondents and actual proportions of**
 55 **Australian population according to age band**

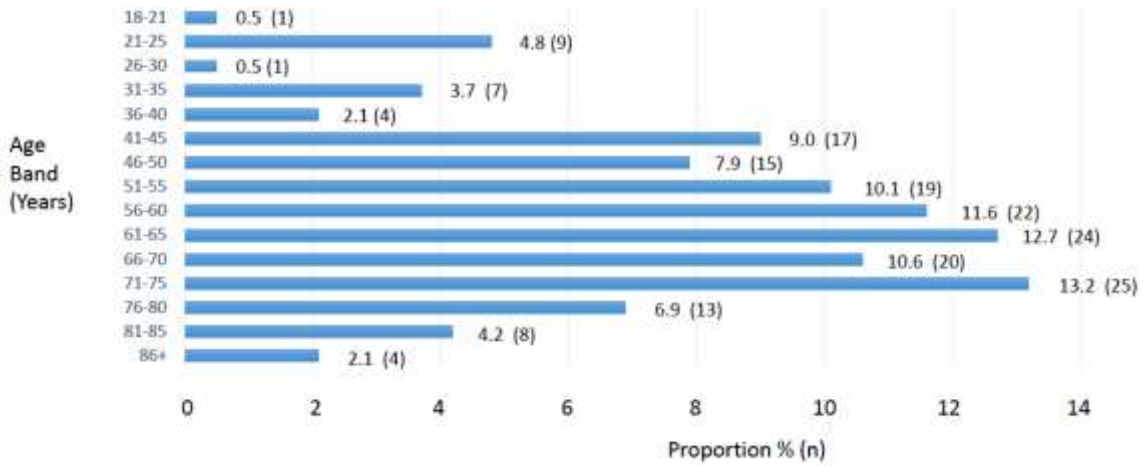
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58 **Appendix 3A - Proportion and number of questionnaire respondents according to age band ***

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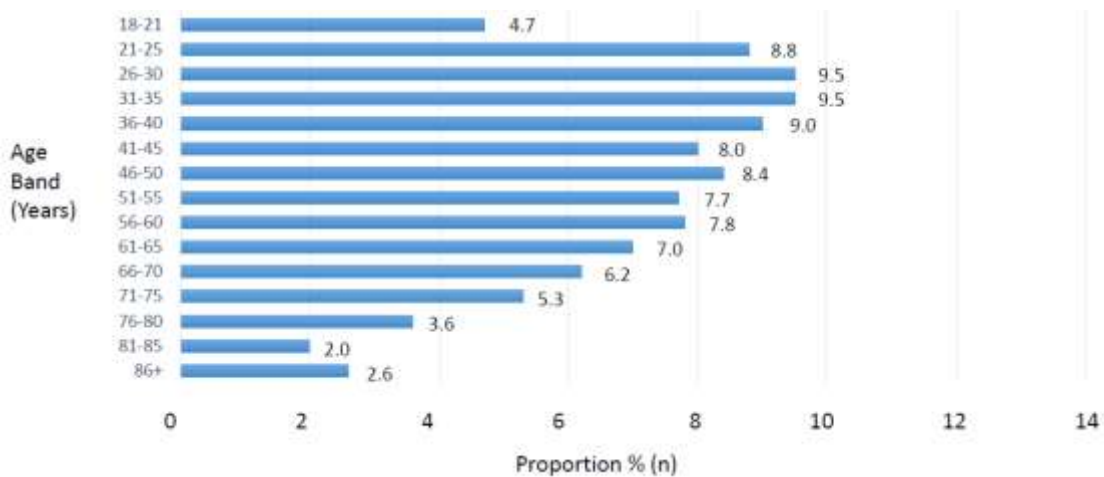
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64 **Appendix 3B – Actual proportion of Australian population according to age band ****

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68 * p<0.001 - calculated on the total of the Chi-Squared Goodness of Fit tests for the age groups in 10-year age
 69 bands.

70 ** According to Australian Bureau of Statistics data from March 2022.²¹

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Appendix 4 - Proportion and number of questionnaire respondents according to region and employment status

Figure 4A – Proportion and number of questionnaire respondents according to region (city, town, or country area)

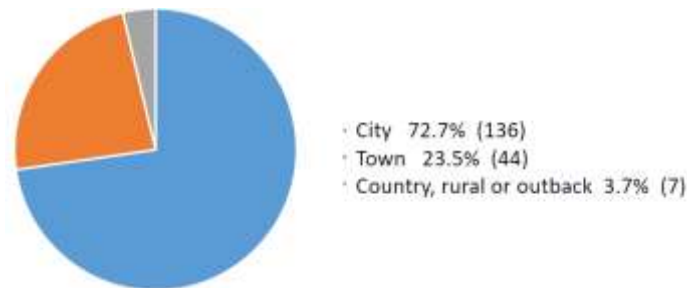


Figure 4B - Proportion of Australian population by suburb of residence*

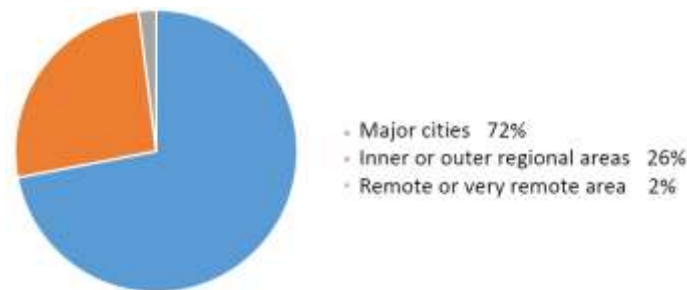
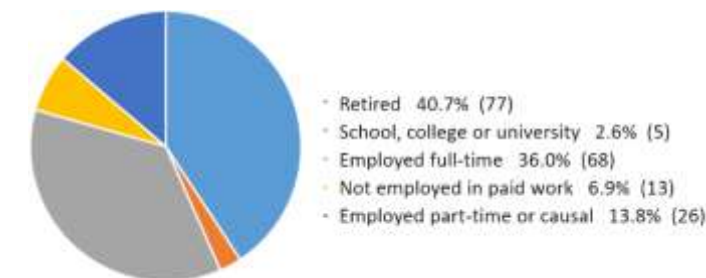


Figure 4C – Proportion and number of questionnaire respondents according to employment status**



*According to Australian Institute of Health and Welfare data from July 2022.²⁸ Proportions were not compared as respondents were only asked whether they resided in a city, town, or country area in the questionnaire, and were not asked to state their specific suburb of residence. This meant that respondent region of residence in the questionnaire could not be corroborated with suburb of residence in the Australian Institute of Health and Welfare definitions of city, regional or remote areas.

**The proportion of the Australian population in actual full time and part-time employment was 36.9% and 16.0%, respectively, according to Australian Bureau of Statistics labour force data from November 2022.²⁹