The Critical Care Society of Southern Africa guidelines on the allocation of scarce critical care resources during the COVID-19 public health emergency in South Africa

To the Editor: We thank Singh and Moodley[1] for their detailed commentary on the Critical Care Society of Southern Africa (CCSSA) guidelines on 'Allocation of scarce critical care resources during the COVID-19 public health emergency in South Africa' (hereinafter 'CCSSA 2020').[2] Their article highlights the lack of a uniform blueprint for triage guidelines across the world. This lack is driven, to a large extent, by clinical ethical decision-making that is confounded by, *inter alia*, varying clinical experience, diverse personal values, differing legal frameworks, a multitude of guidelines from professional organisations, and unique social contexts. Consequently, guidelines may differ between organisations and between countries.

CCSSA 2020 are grounded in ethical obligations that include the duty to care, the duty to steward resources to optimise population health, distributive and procedural justice, and transparency, while attempting to do 'the greatest good for the greatest number' by saving the most lives and most life-years. The approach of using a combination of patients' needs and the probability of successful treatment as part of a utilitarian approach is supported by Childress.[3] Further, CCSSA 2020 are to be applied to all patients presenting with critical illness, and not only COVID-19 critically ill patients. Given the gravity of the COVID-19 pandemic, any ethical framework, including the adopted utilitarian approach, will not be without its own merits and challenges.

Overall, and after careful consideration of the authors' commentary with few tangible suggestions, it appears that they are in agreement with most of the statements in CCSSA 2020. Differences of opinion (rather than shortcomings) among clinicians and among ethicists themselves are expected in academic discussions such as these.

The CCSSA does have a comprehensive triage guideline,[4] and CCSSA 2020 complements this by addressing the unique considerations during a pandemic in the South African (SA) setting. Consequently, a variety of issues addressed in the comprehensive triage guideline are not necessarily covered again in the current guideline. Furthermore, we readily acknowledge that we liberally borrowed from international guidelines and tempered these with local experience. The guideline was prepared by the executive committee of CCSSA and endorsed by the CCSSA Council prior to placement on our website.

The CCSSA believes that debate and commentary on its guidelines are healthy in the quest to ensure the development of the best guidelines possible for our context. To this end, it is the CCSSA's standard practice to invite comments on guidelines via a portal on our website. This was done for CCSSA 2020. Until 24 April 2020, 3 weeks after initial publication on our website, no comments had been received. Additionally, the CCSSA will willingly engage with any official organisation or society, including those representing clinical ethics in the SA context, to enhance the guidelines. We believe that it is beyond this public forum to respond to each assertion made by the authors in any great detail. Instead, we have chosen to respond in a more general manner, and in so doing, to highlight a few specific points.

We appreciate the authors' keen study of our document to highlight a syntax error and will amend this. Their concern with the literal interpretation of 'Assess function 1 - 2 weeks prior to presentation' will be clarified to read: 'Assess: Function in the 1 - 2 week/s prior to presentation'. The authors raise a valid issue of enactment of the triage recommendations in relation to the declaration of a public health emergency. This clause will be deleted from the guideline.

A general point to note is that in the clinical context it is standard practice that, in the absence of required information, data or results, the patient is always given the benefit of the doubt when following guidelines. A lack of information is not used to unfairly discriminate against a patient. With respect to application of CCSSA 2020, this would hold true, for example, with missing information or an inability to fully assess the Clinical Frailty Score (CFS)[5] or the Sequential Organ Failure Assessment (SOFA) score.[6] It is also worth noting that temporary incapacity related to COVID-19 would not constitute frailty, as frailty scoring systems do not take current disease acuity into account. Allowances are generally made for missing parameters in the application of the SOFA score. Additionally, noting the usual clinical progression of COVID-19 disease, most patients referred to the intensive care unit (ICU) are likely already to be within the healthcare system, with most already having many of the blood results needed for the SOFA score.

We are concerned about the authors' call for 'intuitive but reasoned clinical discretion'. This is rather difficult as part of a triage process during a pandemic, especially for junior staff, concern for whom the authors have specifically raised. Hence the need for a guideline based on more objective criteria. Further, the authors appeal for an objective and transparent mechanism for allocating resources, yet they cite random choice or a lottery as a possible means of doing this. The lottery or random selection process is unlikely to meet the desired end of 'greatest good for the greatest number', and would effectively allow inappropriate admission to ICU of a patient highly likely to die regardless of intervention, while a person with potential to survive ICU admission with good function would be arbitrarily denied this benefit. This is fundamentally unjust. Random choice or a lottery may only have benefit when applied to patients assumed to have similar baseline functioning, and to our knowledge are therefore rarely used in clinical decision-making and triage scenarios. International ICU publications have recommended using triage models that accept patients most likely to benefit most from care in an ICU.[7,8]

We have selected a tiered triage process where patients are not purely excluded because of age or comorbidities such as hypertension and diabetes. Our only absolute exclusion is a high CFS score, in line with the National Institute for Health and Care Excellence (NICE) guidelines.[9] Frailty is a well-recognised concept in the critical care domain and is routinely evaluated by critical care practitioners when determining the need for critical care support. All remaining patients referred to critical care will have an opportunity to be listed for admission. When resources are more limited, the waiting list will be longer and those with the least priority will wait longest.

It is unclear whether the authors agree or disagree with our criteria to be considered in the event of ties within a particular priority group. The authors initially acknowledge that our viewpoint is 'ethically defensible', but later highlight that it differs from other guidelines. We believe that this merely illustrates expected differences between guidelines of different countries. The British Medical Association (BMA) 'stresses that younger patients should *not* be automatically prioritised over older ones'.[10] We agree that age should never be used as a solitary exclusion criterion for ICU care. It needs to be emphasised, however, that the age issue is a point of British law and not a position driven primarily by ethics. Our use of age groups as a tiebreaker in patient selection is based on clear evidence of poorer ICU mortality outcomes in older patients.

The authors raise the issue that 'CCSSA 2020 is silent on surrogate decision-making and religious views. This is problematic.' Surrogate

decision-making is a standard part of critical care. We do not see that routine practice should change in the face of COVID-19. Contact with families and next of kin is a routine part of the clinical care of all ICU patients including during the lockdown period in SA. This is immediately familiar to all who work in the critical care environment. Religious views should not have any bearing on triage decisions.

The option of an appeals process was to allow for engagement with decisions at a local level where disagreements or disputes arose. We envisage that local ethics committees would be useful in these situations, as is the current norm. The authors raise concern that CCSSA 2020 'makes no mention of legal implications of withholding or withdrawing potentially life-saving treatment, leaving the possibility open for clinicians following the guidance to doubt their actions on legal grounds'. It would be ideal for clinicians to have certainty in respect of the legal defence of their clinical and ethical decisions. However, the SA legal framework regarding withholding or withdrawing treatment in the COVID-19 pandemic remains untested. It is important to note that practitioners likely to be involved in triage decisions as part of COVID-19 are faced with withholding or withdrawing treatments as part of our normal care of patients with critical illness outside the COVID-19 pandemic. Such decisions are supported by the existing legal framework.[11] The authors' concern that 'CCSSA 2020's recommendation for withdrawal of treatment is not based on such retrospective reflection and reasoning' is seemingly misplaced. Every decision made by clinicians working in critical care has to be, and is always, made with reflection and reasoning. Such an approach is even more thorough where serious decisions on withholding and withdrawal of treatment are made by critical care teams.

The commentary by Singh and Moodley is an academic discussion of ethical issues that have afflicted critical care from its very beginnings. No guideline can possibly cover every possible option. Certainly, now is not the time for a detailed, protracted academic debate; it is a time for the implementation of an approach that supports clinicians in their work environment. The current guideline fulfils this mandate and is likely to lead to more ethical, equitable and consistent triage decisions than in the absence of any local guidelines, or using vague academic considerations. While there may be valid alternatives, none offer any specific compelling advantage over the CCSSA 2020 approach.

This letter is submitted by the CCSSA Council on behalf of the CCSSA.

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Singh and Moodley respond: The CCSSA merits commendation for reflecting on our appraisal[1] of the original iteration of CCSSA 2020, a revised iteration of which has been published.[2]

The CCSSA notes that their standard practice is to invite comments on their guidelines via a portal on their website, and that this was done with regard to CCSSA 2020, and further, that until 24 April 2020, 3 weeks after initial publication on the website, no comments had been received. The lack of response speaks volumes about the effectiveness of a passive (v. active) approach to stakeholder engagement. Critical care clinicians do not serve themselves, they serve society. Members of society, including patients and other interest groups, meet the textbook definition of interested and affected stakeholders. They should be actively engaged. A passive engagement approach (posting guidelines on a low-traffic website and expecting comments) not only wrongfully assumes that stakeholders who are not members of the CCSSA are constantly checking the CCSSA website, it also unfairly places the onus on them to do so, if they want their views to be heard. An active, broad stakeholder engagement process is more apt when there is significant public interest in a subject matter. For instance, in a pandemic context, triage occurs at various levels – primary, secondary and tertiary levels of care. It is unclear whether CCSSA guidance development considered the perspectives of stakeholders at these various levels of care. That aside, one of us (KM) did in fact send feedback to one of the signatories of the CCSSA's letter to us (IAJ) on 3 April 2020, before the stipulated deadline. None of the concerns raised in that feedback were addressed in CCSSA 2020.

We concur with the CCSSA that differences of opinion can be expected between clinicians who draft clinical care guidelines, and ethicists. Such difference is epitomised by the CCSSA's characterisation of our appraisal of the guidelines as an 'academic discussion of ethical issues', with 'few tangible suggestions'. This is disingenuous and trivialises arguably the most profound ethical issues the country's critical care sector has ever faced. The real-world experience of dozens of countries whose critical care sectors have had to manage challenging pandemic-related ethical issues under unprecedented and trying circumstances suggests that the ethical dilemmas clinicians in SA will soon face when the country's health sector experiences COVID-19 'surges' are anything but 'academic' in nature. To underscore that the ethical dimensions implicit in COVID-19 triage decision-making are anything but 'academic' in nature and merit urgent consideration, heavyweight foreign professional associations have demonstrated exceptional leadership in producing thoughtful and reflective guidance to help their members resolve dilemmas that can be expected to arise in the context of the COVID-19 pandemic.[3,4] The popular press, whose mandate includes reporting on matters of considerable public interest, has also afforded prominent coverage of the CCSSA 2020 appraisal,[5,6] undermining the CCSSA's claim that our appraisal amounts to 'academic discussions'. The CCSSA has acknowledged their document's 'syntax error' and its incorrect reference to a 'declaration of a public health emergency'. We are puzzled, however, that these somewhat trivial issues have been characterised as 'shortcomings', while the more substantive issues we raised have been characterised as 'differences of opinion'. We disagree. While some of the concerns we raised about CCSSA 2020 may be attributable to differences of opinion, many also speak directly to shortcomings. It will not be productive to reiterate all the concerns that we previously noted regarding the guidelines. However, we will outline a sample of issues that remain unresolved and/or merit noting.

As we noted in our original appraisal, even if the CCSSA's 'syntax error' is clarified (as is now the case in the revised iteration of the guidance) to read: 'Assess: Function in the 1 - 2 week/s prior to presentation', doing so may not be possible or feasible in an SA context, as it will necessitate interviews with the patient's significant others, or cohabitants (such as hostel roommates), who may not necessarily have seen the patient during the stipulated time period, or due to the family or cohabitants being untraceable or uncontactable. In response to this concern, the CCSSA notes: '… in the clinical context it is standard practice that, in the absence of required information, data or results, the patient is always given the benefit of the doubt when following guidelines. A lack of information is not used to unfairly discriminate against a patient.' We welcome this clarification and recommend that this be explicitly noted in the guidelines. Doing so will ensure uniform clinical decision-making. Another shortcoming is the guidelines' silence on whether 'frailty' relates to age, and/or mental impairment, and/or permanent disability.[7] Since the publication of our appraisal, further concern has been raised in high-profile forums about how critical care triage decision-making can unfairly impact on disabled persons.[8]

The CCSSA has noted that 'most patients referred to the intensive care unit (ICU) are likely already to be within the healthcare system, with most already having many of the blood results needed for the SOFA score'. This is not necessarily true. In a pandemic context, many more patients are likely to be referred from peripheral and field hospitals (which may not have requested such tests or received the results back, because of diagnostic backlogs), or even from care homes or the community (so they would probably not have been subjected to such tests), than from the wards of the same hospital where the ICU is located. The CCSSA noted that they are 'concerned about the authors' call for "intuitive but reasoned clinical discretion". This is rather difficult as part of a triage process during a pandemic, especially for junior staff, concern for whom the authors have specifically raised. Hence the need for a guideline based on more objective criteria.' In response to feedback from one of us (KM) on 3 April 2020, IAJ (a signatory of the CCSSA letter) noted that the CCSSA guidance is not for junior doctors, which contradicts the position now taken by the CCSSA. If 'intuition' means impulsive, subjective and idiosyncratic judgements by doctors, it clearly should not play any role in clinical care decision-making. On the other hand, if it means the experienced perception of those who have engaged with the implementation of triage criteria across a variety of contexts, and whose judgements have been regarded as reasonable over a history of cases, it would be prudent not to sideline such expertise in the process of resource allocation decision-making.[9]

While the CCSSA notes that CCSSA 2020 complement their existing triaging guidelines, 'The Critical Care Society of Southern Africa Consensus Guideline on ICU triage and rationing' (ConICTri), and that 'a variety of issues addressed in the comprehensive triage

guideline are not necessarily covered again in the current guideline', this is not a feasible strategy. Different ICU wards have been allocated to COVID-19 patients and non-COVID patients. As such, clinicians allocated to COVID-19 ICUs will be likely only to consider COVID-19 resource allocation guidance. That said, as ConICTri also does not address the shortcomings we highlighted with regard to CCSSA 2020, it should not be regarded as a panacea to the ethical issues implicit in pandemic 'surge' scenarios.

In our appraisal of CCSSA 2020, we outlined several proposed rationing approaches. The CCSSA single out our mention of 'random choice or lottery', implying that we endorse this approach. We want to be clear: mere allusion to a framework does not signify our endorsement of such approaches. The CCSSA dismiss our concerns about a lack of guidance in the guidelines on surrogate decision-making and religious beliefs on the basis that 'contact with families and next of kin is a routine part of the clinical care of all ICU patients including during the lockdown period in SA. This is immediately familiar to all who work in the critical care environment.' This response misses the point. SA's lockdown – specifically the 'level 5' lockdown between 26 March 2020 and 30 April 2020 – was specifically instituted to allow the country's health system to prepare for a 'surge' scenario. During the country's level 5 lockdown period, its critical care sector did not experience strain. In fact, the country experienced less violent crime[10] and fewer motor vehicle accidents,[11] partially as a result of the government's ban on the sale of alcohol, which alleviated the typical strain such factors ordinarily exert on the country's critical care services.[12] This somewhat atypical situation allowed for the continuity of 'routine practice', including contact with surrogate decision-makers. The CCSSA note that they 'do not see that routine practice should change in the face of COVID-19'. This fails to recognise how different care provision will be during a 'surge' scenario, which, because its lack of precedent in SA's history, will *not* be 'immediately familiar to all who work in the critical care environment', as claimed.

On 29 May 2020, Department of Health officials announced that the country's private and state sector had allocated 27 467 beds for COVID-19 patients, of which 2 309 were critical care beds, and furthermore, that provincial and private sector hospitals had been advised to double their critical care capacity by utilising theatre recovery rooms, certain theatres, treatment rooms and ward space, as part of a 'surge strategy'.[13] But even these laudable efforts will be inadequate if COVID-19 projections for SA materialise, which indicate that between June and November 2020, the country could need 20 000 - 35 000 ICU beds.[14] Projections suggest that even at the start of a surge, the country's ICU bed capacity will be overwhelmed almost immediately. Some of our hospitals are already experiencing unprecedented strain.[15,16] It is therefore naive to believe that such a pressurising context will allow 'routine' contact with families and next of kin, which was easily possible during the first few weeks of the lockdown period, for the reasons outlined above. It is for this very reason that professional associations such as the BMA saw the need to provide guidance on these issues. It is unfortunate that CCSSA have deliberately opted not to do the same.

A critical omission in CCSSA 2020 is guidance on withdrawal of ventilation in the event that patients deteriorate. In response to our raising this concern, the CCSSA notes: '… withholding or withdrawing treatments as part of our normal care of patients with critical illness outside the COVID-19 pandemic. Such decisions are supported by the existing legal framework.' The CCSSA have seemingly misinterpreted the legal position in SA, which supports the removal of ventilation when *further care or treatment is futile*. This is not necessarily the case with all COVID-19 patients, which is why the BMA has noted that doctors could be forced to withdraw lifesaving treatment from stable or improving patients to prioritise those deemed likely to have a better prognosis, if the demand on the health service during the COVID-19 pandemic outstrips the capacity.[3] As we previously noted, the CCSSA's silence on this issue will leave clinicians uncertain about how to proceed in such instances.[17]

In conclusion, we recommend that CCSSA 2020 be a 'living document', amenable to change. COVID-19 is a rapidly evolving pandemic and requires a nuanced, nimble response. All this said, we concur with the CCSSA: now is not the time to engage in protracted debates. Our collective efforts would be better spent prospectively engaging with relevant stakeholders to help prepare for the management of ethical dilemmas, rather than denying, trivialising, and dismissing them.

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