

Triage in the COVID-19 Pandemic Bioethical and Human Rights Considerations



A Joint Technical Report of
The Essex Autonomy Project
& The Ethics of Powerlessness Project
University of Essex

6 April, 2020
Version 2.0

INTRODUCTION:

The allocation of scarce medical resources during the COVID-19 pandemic will present healthcare providers and clinicians with a host of difficult bioethical and human rights challenges. Most existing guidelines agree on the overarching goal of care in a pandemic situation: *Maximise the number of lives saved*. Accordingly, existing guidelines emphasise the primacy of clinical considerations bearing on prognosis in the allocation of scarce resources.

But the principle of maximisation of lives saved is insufficient in conditions of severe scarcity. Providers eventually have to face the fraught question: *Which lives should be saved?* As the current crisis develops, clinical considerations alone will not be sufficient to answer this question. Clinicians are likely to find themselves facing a large number of patients, all with very similar prognoses, and insufficient resources to treat them all. Faced with such circumstances, clinicians will need to prioritise some patients over others, and will need appropriate criteria and procedures to do so.

This document does not aim to provide a comprehensive overview of the ethical issues involved in making triage decisions; an overview of the relevant ethical principles and a discussion of how they apply in the current scenario is presented, for example, by the BMA. [1] Instead, we limit ourselves to specific points and debates that we regard as particularly relevant when considering prioritisation criteria for triage guidelines and decisions. A number of these issues were raised in an unpublished discussion paper shared with us by Dr Shane Gordon. [2] Even here it is not our purpose to make specific recommendations; this is not a position paper. Our aim has been to provide a survey of existing research and guidance in a form that may be useful to policy makers who are struggling to formulate just and evidence-based principles of triage during the pandemic.

Our report is divided into three sections, in which we consider:

1. Specific clinical criteria for triage;
2. Non-clinical criteria for triage;
3. Procedural Issues.

NICE has emphasised [3] that the difficult decisions in this context need to be made with ‘due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities.’ Similarly, DHSC advises that ethical principles need to be ‘considered alongside

relevant equalities-related legal and policy frameworks’, adding that ‘any disproportionate impacts of a decision on particular people or groups’ need to be considered. Although resources may become stretched, it should be upheld that people with comparable needs should have the same opportunity to have those needs met.’ [4] Thus, utilitarian ethics (maximisation of overall benefits) and equitable ethics (fair distribution of benefits) need to be combined when designing triage criteria [5, 6, 7], and particular care must be taken to avoid practices that unlawfully or unethically discriminate against persons in protected groups, such as persons with disabilities.

1. Specific clinical criteria in triage

Most guidelines on triage in times of pandemics recommend using clinical considerations bearing on the prognosis as the main criterion. The Ventilator Allocation Guidelines [8] recommend assigning patients a colour code which determines their level of access to ventilator therapy: **Blue** (patients who have a medical condition on the exclusion list or have a high risk of mortality); **Yellow** (patients whose likelihood of survival is intermediate or uncertain); **Red** (highest priority: patients who are most likely to recover with treatment and most likely not to recover without it). Access to ventilator therapy is then determined by the colour codes.

Nevertheless, as the chair of the BMA Ethics Committee pointed out [9], even ‘[a]n approach based solely on clinically relevant factors may, statistically, prioritise the younger and, where clinically relevant, it may discriminate against those with underlying health conditions. We need to be alert to this. ... Neither age nor disability in themselves will be criteria – only where they impact on a patient’s capacity to benefit.’

a) Should an age limit be set in order to triage patients?

Recently published recommendations from the Italian SIAARTI [10] highlight the ‘potential necessity to establish an age limit for CCU admissions’. Empirical reports from clinicians on the Italian front line suggest that in practice this age limit is currently being set somewhere between 60 and 65. The Spanish Association for Intensive Medicine also suggests age as a triage criterion [11]. The German Ethics Commission, on the other hand, emphatically rejects age as a criterion [12].

The VAG [8] report that ‘advanced age was rejected as a triage criterion because it discriminates against the elderly’. An additional consideration was that ‘age already factors indirectly into any criteria that assess the overall health of an individual (because the likelihood of having chronic medical conditions increases with age)’. There is therefore a risk that age becomes ‘double-weighted’ in triage decisions.

On the other hand, the VAG did suggest that where two patients are otherwise in the same position, patients aged 17 or below should be prioritised because of a ‘strong societal preference for saving children’. However, in addition to the double-weighting argument, this proposal faces the problem of justifying the cut-off point after which age cannot be taken into account as a triage criterion.

The BMA’s position is that age should not be an exclusion criterion and that ‘triage requires identification of clinically relevant facts about individual patients and their likelihood of benefiting from available resources. Younger patients will not automatically be prioritised over older ones.’ [1] Thus, age as such is not a clinical exclusion criterion and if a solely age-based criterion were to be applied, this must be justified on other than clinical considerations.

b) Should scores on the Rockwood Frailty Scale be used as an exclusion criterion?

The Clinical Frailty Scale (aka ‘The Rockwood Scale’) is a scale for summarising the overall level of fitness or frailty of an older person. It ranges from 1 (‘Very Fit’) to 9 (‘Terminally Ill’). Scores are predicated on an assessment of cognition and mood, mobility, function, social health, co-morbidities, medications and health attitude. [13]

In their original COVID19 Guidelines, NICE [3] suggested the blanket exclusion of patients who score 5 (moderately frail) or higher on the CFS. Reliance on a Rockwood Scale score as an eligibility criterion in the allocation of scarce medical resources would have some obvious potential advantages. With one assessment, the pool of patients eligible for ventilators could be substantially narrowed.

But use of a ‘Rockwood cut-off’ also raises serious ethical and legal concerns and the NICE recommendation provoked significant opposition from civil society organisations. [14] The Rockwood scale is highly sensitive to disability, which is a protected characteristic under the law. This is, in particular, because the rating criteria for the Rockwood scale place significant weight on a patient’s need for support in everyday activities. The risk is that a patient could receive a low score on the scale, and find themselves excluded from consideration for life-saving treatment, primarily on the basis that they are unable to manage their own care without support. This could amount to disability-based discrimination, and risks conveying the impression that the lives of disabled persons are less worth saving. Moreover, the Rockwood scale is only weakly validated for populations under 65.

On 31 March, 2020, NICE revised its COVID19 Guideline. The revised guidance indicates that clinicians should ‘use the Clinical Frailty ... as part of a holistic assessment where appropriate. Be aware of the limitations of using the CFS as the sole assessment of frailty,’ adding that ‘the CFS should not be used in younger people, people with stable long-term disabilities (for example, cerebral palsy), learning disabilities or autism.’ CSF is thus no longer recommended as a freestanding and blanket clinical exclusion criterion.

c) Does extubation raise particular moral and legal issues?

According to the BMA [1], ‘there is no ethically significant difference between decisions to withhold life-sustaining treatment or to withdraw it, other clinically relevant factors being equal – although health professionals may find decisions to withdraw treatment more challenging.’ While the ethical difference between withholding and withdrawing life-sustaining treatment is much more controversial than the BMA suggests, there might nevertheless be good reasons for considering extubation in times of a pandemic.

If giving access to a ventilator to an incoming red-code patient would require extubating another patient, the VAG make the following recommendations:

- a) Extubate a lower access category patient; if there is more than one patient in this category and all prognoses in the lower category are equal and there are no children, use randomisation to determine which patient(s) should be extubated.
- b) If all intubated patients have also been coded ‘red’, then do *not* extubate the patients already receiving care.

The prioritisation of children when making extubation decisions of course raises the same concerns highlighted above under 1.a.

2. Non-clinical inclusion criteria for triage decisions.

a) Should randomisation (e.g. lottery) or first come first served be used in triage?

The VAG [8] and other documents recommend using randomisation when all patients needing access are in the same category, based on considerations of fairness. While in normal times, access to health care is often regulated on the basis of the first come, first served principle, this would raise serious concerns in times of a pandemic, as it might put those who are less mobile, have more limited access to transport, or live at some distance from hospitals into a disadvantaged position. The BMA (1) nevertheless states that ‘the most likely approach in the first instance is a modified queuing system, based on the well established and understood principle of ‘first come, first served’. This would mean that those patients who become critically ill earlier in the pandemic would be more likely to be

admitted to intensive care or receive mechanical ventilation than those who become similarly ill at a later stage, albeit they may only be offered intensive support for a defined but limited period’.

While not ideal, randomisation might be the fairer criterion if a choice between clinically equal cases needs to be made (for further discussion see VAG (8)).

b) Should a larger number of life years, including quality adjusted life years, give priority for treatment?

Another issue often discussed is that of aiming to maximise not just the net number of lives, but the number of life-years [15]. While often linked to age, this criterion can also potentially apply where a choice needs to be made between two patients of the same age, one of whom has a better prognosis to live longer than the other, but where both have a chance to benefit from the treatment. Even though this approach might sound attractive at first sight, it needs to be considered that such prognoses are uncertain and might also often be based on underlying disabilities, which would raise issues of discrimination.

Even those who promote the consideration of life-years in triage seem to reject as a triage criterion the idea of quality-adjusted life-years, i.e., of taking into account the projected quality of life when calculating the life-years to be saved. Not only does this approach raise serious ethical and human right concerns, but, as Emanuel et al point out [15], it is also highly impractical when having to make quick decisions in triage situations.

c) Should health care workers receive priority for treatment?

It is often recommended that priority access to ventilators should be given to front-line health-care workers, in particular those ‘who face a high risk of infection and whose training makes them difficult to replace’. Emanuel et al. [15], for example, insist that these workers should be given priority not because they are ‘somehow more worthy’ but ‘because of their instrumental value: (...) if physicians and nurses are incapacitated, all patients will suffer greater mortality and years of life lost’. However, whether and when health workers who are so sick that they need to be placed on a ventilator will be able to return to work is uncertain. They also suggest that ‘giving health care workers priority for ventilators recognises their assumption of the high-risk work of saving others’ and that ‘it may also discourage absenteeism’. They immediately warn that ‘priority for critical workers must not be abused’ but without indicating how this may be prevented.

A different suggestion has been to prioritise health care workers according to the following considerations:

- ‘1. There is a current or foreseeable shortage of critical workers such that this would impair significantly the Trust's ability to provide lifesaving treatment;
2. The patient falls within that category of critical workers; and
3. There is reasonable evidence that the patient could recover within a reasonable time and rejoin the workforce in a critical role in the foreseeable future.’ (16)

The HHS guidelines (17) recommend taking into account whether a patient became exposed during the course of their professional duties as an essential worker, in other words whether ‘there is evidence that they have worked in a high-risk environment’. This is meant as a ‘supplementary triage criterion’, i.e. a tie-breaker in case all primary considerations are equal for the patients under consideration.

By contrast, the VAG (8) refuse to give priority to ‘health care workers or patients with certain social criteria’ because such approaches ‘are often subjective and/or do not support the goal of saving the most lives’.

d) Prioritisation based on other social worth considerations?

The HHS (17) and the BMA [1] raise the question of whether it might be justifiable to prioritise based on the need to maintain essential services. According to the BMA, ‘[t]his may mean giving some

priority to those who are responsible for delivering those services and who have a good chance of recovery, in order to get them back into the workforce.’ The BMA itself acknowledges that such decisions should not be made by healthcare providers but rather left to Government. Indeed, such decisions would raise very serious ethical and human rights concerns.

3. Procedural Issues.

a) Importance of transparent decision-making

Because there are no easy answers or uncontroversial approaches to many of the pressing issues arising in triage, it is crucial to have clear criteria in place on which decisions are based, as well as procedures that will be followed as part of the decision-making process. [9]

b) Should ‘blinded triage’ be used?

An important procedural issue is whether to use a system of so-called ‘blinded triage’, i.e. a system in which allocation decisions are made by a triage officer or committee without knowledge of the identity of the patients involved, though with knowledge of relevant characteristics on which the triage decisions are being made. The triage process is anonymised and informed by a *triage form* completed by the physician. [18]

Benefits of such a system include: (a) reduction of risk of subjectivity in triage decisions; (b) reduction of psychological burden on frontline clinical team; (c) greater efficiency, consistency and foreseeability regarding the application of triage principles; (d) preservation of the physician’s role as an advocate for the patient.

Costs of blinded triage include: (a) potential disempowerment for frontline care teams; (b) loss of fine-grained clinical information in summaries provided to triage officers; (c) administrative burden.

A ‘hybrid’ system might be to leave decision-making to the treating healthcare professionals, while having a triage officer or committee in place to assist with such decision-making.

* * *

Authors: Prof Sabine Michalowski, Prof Beatrice Han-Pile, Beatrice Carniato, Fabio Serôdio Mendes, Prof Wayne Martin

Correspondence Address: autonomy@essex.ac.uk

To cite this report: Michalowski, S., Han-Pile, B., Serôdio Mendes, F., Carniato, B., Martin W., “Triage in the COVID-19 Pandemic: Bioethical and Human Rights Considerations”; Joint Technical Report of the Essex Autonomy Project and the Ethics of Powerlessness Project. 6 April, 2020. <http://repository.essex.ac.uk/27292>.

For further information about the Essex Autonomy Project, visit: <http://autonomy.essex.ac.uk>.

For further information about the Ethics of Powerless Project, visit: <http://powerlessness.essex.ac.uk>.

Bibliography

1. British Medical Association (BMA). 2020. Covid-19 – ethical issues. A guidance note. Available at: <https://www.bma.org.uk/media/2226/bma-covid-19-ethics-guidance.pdf> (accessed April 1, 2020)
2. Gordon, Shane. “Ethical considerations arising from Covid-19 modelling”, East Suffolk and North Essex NHS FT, 30th March 2020, unpublished.
3. National Institute for Health and Care Excellence (NICE). 2020. COVID-19 rapid guideline: critical care. Available at: <https://www.nice.org.uk/guidance/ng159/resources/covid19-rapidguideline-critical-care-in-adults-pdf-66141848681413> (accessed April 6, 2020)
4. Department of Health and Social Care (DHSC). 2020. Responding to COVID-19: the ethical framework for adult social care. Available at: <https://www.gov.uk/government/publications/covid-19-ethical-framework-for-adult-social-care/responding-to-covid-19-the-ethical-framework-for-adult-social-care> (accessed March 25, 2020)
5. World Health Organization (WHO). 2008. Addressing ethical issues in pandemic influenza planning. Available at: https://www.who.int/csr/resources/publications/cds_flu_ethics_5web.pdf (accessed March 26, 2020)
6. World Health Organization (WHO). 2016. Guidance for managing ethical issues in infectious disease outbreaks. Available at: <https://apps.who.int/iris/bitstream/handle/10665/250580/9789241549837-eng.pdf?sequence=1&isAllowed=y> (accessed April 2, 2020)
7. Baker, R., M. Strosberg. 1992. Triage and equality: an historical reassessment of utilitarian analyses of triage. *Kennedy Institute of Ethics Journal*. 2(2):103-123. <https://doi.org/10.1353/ken.0.0035>
8. New York State Task Force on Life and the Law. 2015. Ventilator allocation guidelines. Available at: https://www.health.ny.gov/regulations/task_force/reports_publications/docs/ventilator_guidelines.pdf
9. Chisholm, J. 2020. Doctors will have to choose who gets life-saving treatment. Here's how we'll do it. *The Guardian*. April 1, 2020. Available at: <https://www.theguardian.com/commentisfree/2020/apr/01/doctors-choose-life-saving-treatment-ethical-rules> (accessed April 1, 2020)
10. Società Italiana di Anestesia Analgesia Rianimazione e Terapia Intensiva (SIAARTI). 2020. Clinical ethics recommendations for the allocation of intensive care treatments in exceptional, resource-limited circumstances. Available at: <http://www.siaarti.it/SiteAssets/News/COVID19%20-%20documenti%20SIAARTI/SIAARTI%20-%20Covid-19%20-%20Clinical%20Ethics%20Reccomendations.pdf> (accessed March 27, 2020)

11. Sociedad Española de Medicina Intensiva, Crítica y Unidades Coronarias (SEMICYUC). 2020. Recomendaciones éticas para la toma de decisiones en la situación excepcional de crisis por pandemia COVID-19 en las unidades de cuidados intensivos. Available at: https://semicyuc.org/wp-content/uploads/2020/03/%C3%89tica_SEMICYUC-COVID-19.pdf (accessed April 2, 2020)
12. Deutscher Ethikrat. 2020. Solidarität und Verantwortung in der Corona-Krise. Available at: <https://www.ethikrat.org/fileadmin/Publikationen/Ad-hoc-Empfehlungen/deutsch/ad-hoc-empfehlung-corona-krise.pdf> (accessed April 2, 2020)
13. Rockwood, K., X. Song, C. MacKnight, H. Bergman, D.B. Hogan, I. McDowell, A. Mitnitski. 2005. A global clinical measure of fitness and frailty in elderly people. *Canadian Medical Association Journal*. 173(5):489-95. <https://doi.org/10.1503/cmaj.050051>
14. Jo Stephenson, Avoid frailty score in Covid-19 guidance when assessing LD patients. *Nursing Times* 24 March, 2020 <https://www.nursingtimes.net/news/policies-and-guidance/avoid-frailty-score-in-covid-19-guidance-when-assessing-ld-patients-24-03-2020> (accessed April 6, 2020)
15. Emanuel, E.J., G. Persad, R. Upshur, B. Thome, M. Parker, A. Glickman, C. Zhang, C. Boyle, M. Smith, and J.P. Philips. 2020. Fair allocation of scarce medical resources in the time of Covid-19. *The New England Journal of Medicine*. <https://doi.org/10.1056/NEJMs2005114>
16. Sokol, D., Gray, B. Should we give priority care to healthcare workers in the covid-19 pandemic? *BMJ* April 1, 2020. Available at: <https://blogs.bmj.com/bmj/2020/04/01/should-we-give-priority-care-to-healthcare-workers-in-the-covid-19-pandemic> (accessed April 2, 2020)
17. Hamilton Health Sciences Corporation. 2009. EDM-Adult Critical Care and Resource Allocation Protocol for Pandemic Influenza. Available at: <https://www.longwoods.com/articles/images/PandemicProtocol.pdf> (accessed April 2, 2020)
18. Okorie, N. Partiality, impartiality and the ethics of triage. *Bioethics* 19(2), 76-85. <http://doi.org/10.1111/dewb.12201>