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## The Use of Age as a Triage Criterion

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### I. Introduction

There is nothing new about age being relevant for access to certain types of health interventions. For example, some routine health checks are only offered from a certain age, some fertility treatment might not be made available after a certain age. This is usually justified on the basis of clinical benefits or risks associated with a person's age. Different questions arise where decisions on access to health care are being made with the objective of managing a shortage in available resources, that is in situations where more persons need a particular form of treatment than can be treated, for example with regard to organ transplants where demand tends to outweigh supply by far. In that scenario, it is controversial whether age should have a role to play when deciding how to allocate organs.

The current coronavirus pandemic has brought this question to the forefront. In some countries, demand for critical care beds and access to ventilators has by far exceeded supply, which meant that difficult triage decisions on how to regulate access had to be made. In other countries, such as Germany, Switzerland and the UK, similar discussions have been taking place in order to prepare for the possibility of this scenario arising. While clinical guidelines in some countries, e.g., Spain and Italy, regard age to be an acceptable criterion to exclude patients from access to ventilators, other countries, such as Germany, reject such an approach vehemently. But even where age itself is rejected as an access criterion, it might indirectly become relevant, for example where age influences the prognosis of recovery, especially if the prognosis is linked to the likely length of survival.

This contribution will address some of the ethical and human rights considerations that should inform the discussion of whether age can be regarded as a valid criterion to decide who receives life-saving treatment at a time of acute scarcity of medical resources, using the Covid-19 pandemic as a case study.<sup>1</sup>

### II. Different Countries' Reactions to Covid-19 Triage<sup>2</sup>

In some countries, such as Italy and Spain, at the peak of the pandemic not enough critical care beds were available to treat all patients who needed intubation. Difficult decisions on who to include or exclude from access to this particular form of life-saving treatment thus had to be made. Ethical guidelines were hastily drawn up, while hospitals were trying to cope as best as possible with an unmanageable situation.

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<sup>1</sup> This contribution draws on Sabine Michalowski, Beatrice Han-Pile, Beatrice Carniato, Fabio Serôdio Mendes and Wayne, '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://autonomy.essex.ac.uk/covid-19>.

<sup>2</sup> The guidelines referred to in this part of the paper might not be reflective of the official approach adopted in each of the countries, but rather serve as examples to tease out some of the issues around the relevance of age for access to Intensive Care Unit (ICU) beds.

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On 6 March 2020, the Italian Society for Anaesthesia, Analgesia, Resuscitation and Intensive Care issued recommendations,<sup>3</sup> with the purpose of relieving individual physicians from the emotional burden of having to make such difficult decisions and contributing to the transparency of the decision-making process. With regard to age, the document indicated:

It may be necessary to establish an age limit for admission to the ICU [Intensive Care Unit]. It is not a question of making choices merely according to worth, but to reserve resources that could become extremely scarce to those who, in the first instance, have a greater likelihood of surviving and who, secondarily, will have more years of life saved, with a view to maximizing the benefits for the greatest number of people. ...

While age was thus regarded as a legitimate exclusion criterion, no specific age limit was suggested. The justification behind using age as a triage criterion was clearly based on the understanding that health care should be guided by the utilitarian principle of maximising benefits for the greatest number of people and that this was interpreted to mean to maximise not just the number of lives saved, but instead the number of life years saved, based on a prognosis of how many years of life each patient has left. Another consideration referred to in the guidelines was the potential resource intensity when saving those who, because of their age or pre-existing health conditions, would need longer treatment and assistance than younger and healthier persons.

The Spanish Society of Intensive and Critical Medicine and Coronary Units also issued ethical recommendations.<sup>4</sup> Stressing the importance of the principles of maximising the greatest good and of distributive justice, the recommendations suggest that, faced with two patients in similar circumstances, the person with more life years ahead of them, adjusted by the quality of that life be prioritised. According to the guidelines, for older patients this requires taking into account the chances of survival free from disability, not simply survival as such. Nevertheless, the Spanish guidelines suggested a case-by-case approach for decisions about access to mechanical ventilation, even for patients above 80 years of age with relevant co-morbidities, though non-invasive forms of ventilation were recommended as the default for those patients. The recommendations also excluded all patients with cognitive deterioration from access to mechanical ventilation because of dementia or other degenerative diseases.

While both the Italian and Spanish recommendations were issued when a health care emergency was already underway, other countries considered ethical guidelines in preparation for similar crises, as was the case in Germany and Switzerland. Based on the predominance of the principle of human dignity, both the German and the Swiss constitutions attach equal value to each life, whatever its projected duration and its quality. Prioritising access to life-sustaining medical treatment based on age, life years and quality adjusted life years is therefore prohibited and ethical guidelines tend to reject age as a freestanding triage criterion, because of discrimination concerns. While prioritisation criteria that are regarded as permissible in these countries are seemingly based on clinical

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<sup>3</sup> Clinical Ethics Recommendations for Admission to Intensive Care and for Withdrawing Treatment in Exceptional Conditions of Imbalance between Needs and Available Resources, available at: <http://www.siaarti.it/SiteAssets/News/COVID19%20-%20documenti%20SIAARTI/SIAARTI%20-%20Covid-19%20-%20Clinical%20Ethics%20Reccomendations.pdf> (accessed 27 March 2020).

<sup>4</sup> *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](https://semicyuc.org/wp-content/uploads/2020/03/C3%89tica_SEMICYUC-COVID-19.pdf) (accessed 2 April 2020).

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criteria and therefore supposedly age and disability neutral, age often comes into the equation as part of clinical assessments.

The guidelines issued by the Swiss Academy of Medical Sciences<sup>5</sup> explain with regard to age:

**Age in itself is not to be applied as a criterion, as this would be to accord less value to older than to younger people, thus infringing the constitutional prohibition on discrimination. Age is, however, indirectly taken into account under the main criterion «short-term prognosis», since older people more frequently suffer from comorbidity. In connection with COVID-19, age is a risk factor for mortality and must therefore be taken into account.**

This more general, introductory statement thus already suggests that it is not only acceptable, but instead inevitable, that age is an important factor that needs to be taken into account as part of the clinical prognosis. The guidelines go on to set out different criteria according to which to determine the main triage criterion, a person's short-term prognosis. Surprisingly, short-term prognosis is defined differently depending on the level of capacity to provide treatment to all who are in need of it. In the situation where ICU beds are still available, but capacity is limited, patients are excluded from ICU treatment if their predicted survival span is less than 12 months, or where they suffer from a list of pre-existing health conditions, including severe dementia. Where no ICU beds are available and capacity therefore needs to be managed either through decisions not to admit or through discontinuation of treatment to free up beds, the list of pre-existing illnesses that would automatically exclude the patient from treatment is broadened considerably. For example, patients are already excluded from treatment if they suffer from moderate dementia, or if their predicted life span post treatment is less than 24 months. In addition, patients older than 85 years are automatically excluded and those who are older than 75 are excluded if they suffer from liver cirrhosis, stage III chronic kidney disease or a particular form of heart failure. It can thus be seen that clinical criteria are adapted to the availability of resources. Age itself, as well as age related co-morbidities take a more prominent role as scarcity of resources increases.

In Germany, meanwhile, it is maintained more consistently that age is not an acceptable criterion for exclusion from treatment. The German Ethics Council issued a statement in which it insisted that it would be unconstitutional to make triage decisions that do not give equal value to all lives.<sup>6</sup> Regarding the difficulties this could pose for medical professionals having to make frontline decisions in a situation of scarcity, the statement limits itself to suggesting that the responsibility to make such decisions in line with constitutional principles and based entirely on clinical considerations lies with professional bodies and individual health professionals. In making the decision entirely clinical, age nevertheless becomes an indirect factor. This can be seen when looking at the professional guidelines issued by the German Interdisciplinary Association of Intensive and Emergency Medicine,<sup>7</sup>

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<sup>5</sup> 'COVID-19 pandemic: triage for intensive-care treatment under resource scarcity', 24 March 2020, available at: [www.sams.ch/en/Ethics/Topics-A-to-Z/Intensive-care-medicine.html](http://www.sams.ch/en/Ethics/Topics-A-to-Z/Intensive-care-medicine.html), (accessed 15 May 2020).

<sup>6</sup> 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 2 April 2020).

<sup>7</sup> Entscheidungen über die Zuteilung von Ressourcen in der Notfall und der Intensivmedizin im Kontext der COVID-19-Pandemie, 25 March 2020, <https://www.divi.de/aktuelle-meldungen-intensivmedizin/covid-19-klinisch-ethische-empfehlungen-zur-entscheidung-ueber-die-zuteilung-von-ressourcen-veroeffentlicht>, (accessed 15 May 2020).

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which list prioritisation criteria such as the clinical condition of the patient, co-morbidities, score on the clinical frailty scale (a scale that scores patients based on criteria such as general physical fitness, underlying diseases, dependency on others in their daily affairs) and the SOFA (Sequential Organ Failure Assessment) score. This overall evaluation will then be compared with that of other persons competing for the scarce resources, with priority being given to those with the best predicted clinical outcome.<sup>8</sup> Age thus comes in as a criterion that indirectly influences a person's chances to obtain access to a ventilator.

The approaches to age as a triage criterion set out above differ substantially. In some, age is directly referred to as a criterion for triage ethics (Italy and Spain), suggesting age limits or a focus on life years saved which disadvantages older persons over younger persons. Others explicitly reject such an approach as discriminatory (Germany and Switzerland, with the Swiss guidelines making age an exclusion criterion in times of particularly limited resources, despite assurances to the contrary). Nevertheless, in all approaches age plays some role, to the extent that they rely on clinical assessments, given that co-morbidities, frailty etc. are more likely to be present in older than in younger persons.

### III. Reflections on Age as a Triage Criterion

Triage decisions raise difficult ethical issues, because they require a decision on what is the best and fairest way to allocate scarce resources and, as a consequence, whose lives should or should not be saved. These are existential questions that touch upon deeply held ethical values that differ from country to country. Even within most countries, the criteria that should guide such decisions are controversial, as is how they should be reached and who should make them. The ethical debate on triage decisions seems to agree at least on one goal: the maximisation of lives saved.<sup>9</sup> However, as the guidelines introduced in Part II demonstrate, fundamental disagreements exist as to whether this means that all lives need to be given equal value, no matter the person's age, expected life span and quality of life.

#### ***a) Age cut off point for treatment***

Only the Swiss guidelines fixed a clear age limit, above 85 years, as of which patients are automatically excluded from access to a ventilator in times of extreme scarcity, regardless of the individual health and other situation of the person. The Italian guidelines, without actually identifying a particular age limit, considered that '[i]t may be necessary to establish an age limit for admission to the ICU.'<sup>10</sup> A slightly different approach is that of applying age not as a freestanding triage criterion, but to consider age limits for treatment where certain co-morbidities exist, as can be observed in the Swiss guidelines which, in addition to stipulating an absolute age limit of above 85 years, also exclude patients of above 75 years if they have particular health conditions.

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<sup>8</sup> Guidelines in the UK adopt a comparable approach, see 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 6 April 2020) and British Medical Association (BMA), 'Covid-19 – ethical issues: A guidance note,' available at: <https://www.bma.org.uk/media/2226/bma-covid-19-ethics-guidance.pdf> (accessed 1 April 2020).

<sup>9</sup> For a discussion see, for example, WHO, 'Addressing ethical issues in pandemic influenza planning', WHO/HSE/EPR/GIP/2008.2, WHO/IER/ETH/2008.1, p.8.

<sup>10</sup> See supra note 3.

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The main advantage of a blanket cut off point for treatment eligibility in a triage context is clarity and making individual evaluations unnecessary at a moment when decisions need to be made quickly. However, a blanket rule is problematic for various reasons. Whatever age limit is set will necessarily be arbitrary, given how much the health condition of persons in the same age group can differ. There does not seem to be any particular age as of which mechanical ventilation is either futile or too burdensome, so that exclusion based on age can also not be justified in the interests of the patient him/herself. If this was the case, arguably these groups should be excluded from mechanical ventilation, whether or not there is a context of particular scarcity; however, this argument does not seem to have been made by anyone. Indeed, even those who promote a distributive justice argument according to which younger persons should receive priority over older persons when competing for ventilators,<sup>11</sup> do not seem to advocate for a cut-off point based on age. Age thus only comes into the decision-making process where choices need to be made about which of two patients should be given access to a ventilator in priority over the other. The same seems to apply where triage guidelines use the criterion of age combined with particular pre-existing health conditions as an exclusion criterion, as the suggestion is not that the patient would not benefit from the treatment, but rather that other persons would benefit more because of they are younger.

### ***b) Maximising life years***

Another issue often discussed in the context of triage ethics is that of aiming to maximise not just the net number of lives, but the number of life-years. This approach could be seen in the Italian guidelines which justified excluding older patients partly because the limited life span they have left would result in fewer life years being saved if an older person were to be prioritised over a younger. While often linked to age, in the sense that where a choice between a younger and an older patient who compete for a ventilator needs to be made, the argument is that the younger person should be prioritised in order to achieve a maximisation of life years. 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. The approach also raises concerns about discrimination, not just based on age, but also based on pre-existing health conditions and disabilities that might shorten the life prognosis. Indeed, one could, on this basis, potentially discriminate against persons from minorities or deprived backgrounds, given the data according to which they have poorer health outcomes, including with regard to Covid-19, raising serious concerns about race and other forms of discrimination.

Some suggest that age discrimination concerns could to some extent be alleviated by a particular distributive justice approach to triage ethics which focuses not just or even primarily on the life years to be saved, but on the years already lived. This approach which is sometimes also referred to as lifetime justice approach considers that those who have lived a shorter life have a greater entitlement to scarce resources than those who have already lived longer.<sup>12</sup> Such an approach would, of course, run into problems where the

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<sup>11</sup> E.g., Govind Persad, 'Evaluating the Legality of Age-Based Criteria in Health Care: From Nondiscrimination and Discretion to Distributive Justice', (2019) 60 B.C.L. Rev. 889, <https://lawdigitalcommons.bc.edu/bclr/vol60/iss3/4>.

<sup>12</sup> Ibid.

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younger person has much lower chances of surviving the treatment, or a shorter life span prognosis than the older person.

In addition to these more pragmatic considerations, the New York State Task Force on Life and the Law made an interesting point in its ventilator guidelines<sup>13</sup> that were developed to prepare for future pandemics, based on wide interdisciplinary and public consultations. The guidelines highlight 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 if age is considered as an additional factor to clinical considerations.

Just like the approach that uses a specific age as a cut off point for exclusion from mechanical ventilation in times of pandemics, the life years approach, including in its lifetime justice manifestation, would violate the principle stressed by the German and Swiss guidelines, that all lives are of equal value and that a choice between different lives cannot be made based on any inherent characteristics of the person, be they related to age, health, social worth etc. According to this view, choices of who to treat can only be justified based on clinical criteria related to the treatment itself.

### ***c) The relevance of age in clinical triage criteria***

Most guidelines on triage in times of pandemics recommend using clinical considerations focusing on the treatment prognosis as the main criterion. Such an approach is seemingly neutral with regard to characteristics of the individual other than those that are directly related to the treatment itself, including those that influence risks, benefits, futility and overall prognosis. Nevertheless, age and also disability might play a role that needs to be considered in order to determine the acceptability of such approaches. In a recent interview in *The Guardian*, the chair of the BMA Ethics Committee pointed out that, even though age and disability will only be criteria where they have an impact on a patient’s ability to benefit from treatment’ ‘[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.’<sup>14</sup>

A particularly concerning aspect of clinical decision-making in this context is the widespread reliance on clinical frailty scores that are applied, in particular, to elderly dementia patients. The Clinical Frailty Scale (CFS) assesses the overall level of fitness or frailty, ranging 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 and differentiate on the basis of a person’s need for assistance with day to day activities.<sup>15</sup>

In their Covid-19 Guidelines, the National Institute for Clinical Excellence in the UK, NICE differentiates between patients of a frailty score of below 5 and who are on that basis

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<sup>13</sup> Ventilator allocation guidelines, 2015, available at:

[https://www.health.ny.gov/regulations/task\\_force/reports\\_publications/docs/ventilator\\_guidelines.pdf](https://www.health.ny.gov/regulations/task_force/reports_publications/docs/ventilator_guidelines.pdf).

<sup>14</sup> John Chisholm, ‘Doctors will have to choose who gets life-saving treatment. Here’s how we’ll do it’, *The Guardian*. 1 April 2020.

<sup>15</sup> Kenneth Rockwood, Xiaowei Song, Chris MacKnight, Howard Bergman, David B. Hogan, Ian McDowell, and Arnold Mitnitski. ‘A global clinical measure of fitness and frailty in elderly people’, (2005) 173(5) *Cdn Medical Assoc J* 489.

regarded as more likely to benefit from critical care and those who have a score of 5 (moderate frailty) and above, where the benefit of critical care is more uncertain and where a discussion of a do not resuscitate order with the patient is recommended.<sup>16</sup> Originally, the guidelines suggested the use of CFS scores irrespective of the person's age. This provoked significant opposition from civil society organisations which regarded it as potentially discriminating against persons with learning disabilities. In the words of the chair of "Embracing Complexity", a coalition of leading neurodevelopmental and mental health charities: 'There is a risk that the scale does not distinguish clearly enough between those who need support with daily living as they near the end of their lives and those who need support because of neuro-developmental conditions but may otherwise be healthy.'<sup>17</sup> NICE reacted by changing the recommendation that clinicians use CFS scores 'as part of a holistic assessment where appropriate,' also acknowledging that '[t]he CFS should not be used in younger people, people with stable long-term disabilities (for example, cerebral palsy), learning disabilities or autism.' While this addresses discrimination concerns of a particular group of disabled persons, it does not alleviate concerns that a group of persons are likely to be denied treatment based on their age combined with their need for assistance.

To the extent that the CFS score has a bearing on the clinical indication for and success of mechanical ventilation in a patient, this might be an acceptable justification for it to be part of the triage decision-making process. However, where the score, such as that of moderately frail, primarily relates to a person's need for assistance with their daily affairs, the relevance of this for clinical decision-making cannot automatically be assumed, and it is important to distinguish between those factors that influence the outcome and prognosis of treatment and those that mean that the person might need more resources during and after recovery.

#### IV. Conclusions

As this short paper has tried to show, differences exist as to whether age is an acceptable triage criterion, either in the form of a general age limit for treatment eligibility, in the form of setting age limits where certain co-morbidities are present, or hidden behind clinical considerations. With regard to the open use of age as a triage criterion, it needs to be borne in mind that this would amount to direct discrimination based on age resulting in the likely death of the older person. Such an approach would require an ethically and legally sound justification. Its acceptability seems to depend on whether one adheres to consequentialist views that define the greatest good and terms of direct consequences of decisions, in this case in the form of maximisation of life years, or whether one adheres to dignity based ethics that require protecting each life equally, no matter how short its projected duration.

What seems almost more worrying than direct age based discrimination which is out in the open, is indirect discrimination under the guise of clinical criteria, where, as in the Swiss guidelines, lip service is paid to equal dignity and value of all lives, while including age

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<sup>16</sup> National Institute for Health and Care Excellence (NICE), 'COVID-19 rapid guideline: critical care', 2020, available at: <https://www.nice.org.uk/guidance/ng159/resources/covid19-rapidguideline-critical-care-in-adults-pdf-66141848681413> (accessed 11 June 2020).

<sup>17</sup> 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 6 April 2020).

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based exclusion criteria without acknowledging that this violates the basic values upon which the guidelines supposedly rest. Awareness is needed that clinical criteria will often not be as neutral as they might seem, particularly when they are not applied in order to determine, based on each person's individual circumstances, whether or not he or she would benefit from being put on a ventilator, but rather for making choices between different patients in times of acute scarcity. It is all too easy to regard the elderly, if not as less deserving, nevertheless as less able to benefit from treatment.

There are no clear and easy answer to the dilemmas posed by extreme shortages of vital medical treatment during pandemics, but it is important that a transparent and fair decision-making process is in place and that the criteria are not random, discriminatory or based on intuitions and assumptions that are not openly admitted and thoroughly justified. At a minimum, this means that the criteria used are subjected to ethical discussion and scrutiny which ideally should take place outside of emergency situations, when there is time and space for such debate, and with wide consultation with all potentially affected groups.