# Ethical principles concerning proportionality of critical care during the 2020 COVID-19 pandemic in Belgium: advice by the Belgian Society of Intensive care medicine – update 20-03-2020

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*The Belgian Society of Intensive Care Medicine, has been invited to delineate the ethical principles concerning proportionality of care during the 2020 COVID-19 pandemic. A national ethical guideline for in-hospital triage of COVID-19 patients is not the mandate of the Belgian Society of Intensive Care Medicine. It is recommended that hospitals draft their own ethical guidelines early in the epidemic, to avoid that clinicians will have to take difficult decisions without ethical guidance, leading to arbitrary decisions.*

## Introduction

In the intensive care unit (ICU), invasive life-sustaining and life-saving therapies are applied to patients who would not survive without such aggressive care, because of vital organ failure. In general, intensive care medicine should be reserved for patients in whom a good or at least acceptable outcome can be expected, after hospital discharge. Disproportionate care is defined as the use of such advanced life-sustaining measures in patients with poor long-term expectations secondary to more chronic organ dysfunctions, comorbidities and/or a poor quality of life [1]. Under normal circumstances, even when there is no pressure on ICU beds, disproportionate care should be avoided at all times. Most patients in Europe who die in the ICU, will do so after a decision not to initiate or to withdraw life-sustaining therapies [2]. Such a decision should be openly discussed with patients, or their relatives. In the ICU unit, such ethical considerations are part of routine practice, and the balance between life-supporting therapy and expected outcome is made on a daily basis.

## COVID-19: special considerations

The COVID-19 pandemic poses a major strain on the health care system, because of the absence of herd immunity against this new virus [3]. In a very short time, patients requiring respiratory support present themselves to the hospital. In Italy, the hospital and ICU capacity was insufficient to deal with the huge number of patients, leading to a collapse of the healthcare system. In particular, the amount of critical care beds was a critical bottleneck, and current projections of the trend in Italy in the near future are alarming [4].

Such an extreme overload of the hospital system has important ethical implications, as treating physicians might need to decide which patients to admit, and which patients will be denied critical care. A first priority is to take the right measures to maximize capacity in the ICUs of all hospitals, by postponing non-urgent medical care, and transforming non-critical units into critical care units. However, when in spite of these measures, the health care capacity to treat all presenting patients is still insufficient, there is a need for triage [5]. The timely identification of disproportionate care is extremely important, because in case of hospital overload, it can be imagined that a patient with a good chance of survival is denied critical care, while too many patients with disproportionate care are occupying a bed.

Disproportionate care should be defined on a scientifically founded estimate of the expected outcome, which implies knowledge of an advanced care plan, the medical condition of the patient, the antecedents, the acute evolution of his condition, and a founded estimate of his prognosis with and without intensive care. In addition, non-COVID-19 patients should be evaluated according to the same criteria in order to avoid discrimination between both groups. Although an increased age is associated with worse outcomes in COVID-19, age in isolation cannot be used for triage decisions, but should be integrated with other clinical parameters. Frailty and reduced cognition, more than age, are independent predictors of outcome when elderly patients are admitted to the ICU [6].

## The COVID-19 Critical Care Ethical taskforce of the Belgian Society of Intensive Care Medicine proposes the following recommendations:

### 1. Advanced care planning before ICU admission

Elderly residents in retirement homes often suffer from severe cognitive, physical, or social disabilities that are incompatible with an independent life at home. Many of these patients suffer from moderate to severe frailty [7]. In view of the predicted acute overload of the Belgian healthcare system during the COVID-19 epidemic, the Belgian Society of Intensive Care Medicine recommends that patients for whom critical care would be disproportionate, are identified early, to avoid that they are sent to an overcrowded hospital unnecessary. Hence, an advanced care plan should be discussed with residents of retirement homes, or their relatives, in advance. In the acute phase, this is no longer possible because of the medical condition of the patient. In addition, it would be ethically and emotionally undesirable to request families to make such a difficult decision in the acute setting.

The Belgian Society of Intensive Care Medicine recommends that this care plan pre-specifies which interventions are considered, or which interventions would be undesirable, for a particular patient. We would recommend that this advanced care plan contains, at least, statements whether or not it is desirable to initiate:

- cardiopulmonary resuscitation
- admission to the hospital
- admission to an intensive care unit
- endotracheal intubation
- non-invasive mechanical ventilation
- pharmacological hemodynamic support
- the initiation of renal replacement therapy.

Extracorporeal Membrane Oxygenation (ECMO) should never be considered in this age group regardless of COVID-19.

If possible and feasible, it is recommended that the general practitioner of the patient pro-actively takes the initiative to discuss advanced care planning with these patients, preferably before they become infected with the SARS-CoV-19 virus or suffer from COVID-19. For most elderly patients who reside in a retirement home with severe cognitive impairment, keeping the patient in the nursing home for symptomatic therapy could be a reasonable and human option. In general, referral of these patients to a potentially overstretched hospital should only be considered with a clearly defined realistic therapeutic goal, and referral to the ICU is not advised.

## 2. Cardiopulmonary resuscitation in the context of the COVID19 epidemic

Out-of-hospital cardiopulmonary resuscitation (CPR) (basic and advanced life support) in elderly patients and nursing home residents should not be initiated in the context of the COVID19 epidemic because of the very poor prognosis, and the risk of infection to the CPR provider.

Out-of-hospital CPR (basic and advanced life support) in younger patients may be initiated on a case by case scenario. The decision to start such therapies should always be balanced against the risk of contamination for the healthcare worker. In all known or suspected COVID19 positive patients, manoeuvers may not be started before the resuscitation team is fully doffed with adequate personal protective equipment (PPE), and mouth-to-mouth breathing is forbidden. In cases where the probability of COVID19 is low or null, we still recommend, in the present situation, that the resuscitation team wears at least a mask, goggles, gown and gloves before initiating CPR, and mouth-to-mouth breathing is not advised.

For in-hospital cardiac arrest, we recommend to follow the advanced care plan described by the physician in charge of the patient. Once again, if resuscitation maneuvers are part of this plan, and in case the patient is known or suspected to be COVID19 positive, manoeuvers should not be started before the resuscitation team is fully equipped adequately. In cases where the probability of COVID19 is low or null, we still recommend, in the present situation, that the resuscitation team wears at least a mask, goggles, gown and gloves.

## 3. Ethical considerations for triage in-hospital

The Belgian Society of Intensive Care Medicine recommends that the following considerations should be taken into account:

- Decisions to deny or prioritize care should always be discussed with at least 2, but preferably 3 physicians with experience in the treatment of respiratory failure in the ICU. In case the doctor is not able to consult with a colleague in the hospital, a teleconsultation with an experienced colleague within the same hospital network could be organized. Consultation with a geriatrician or the general practitioner of the patient could be an option.
- Many COVID-19 patients will be elderly, but age in itself is not a good criterion to decide on disproportionate care.
- It should be assessed upon admission whether a patient has an advanced care plan.
- In elderly patients, frailty, for instance using the Clinical Frailty Score (CFS) [7], should be assessed and taken into account.
- In elderly patients, cognitive impairment should be assessed and taken into account.
- In all patients, terminal oncological disease, and severe chronic co-morbidity such as end-stage organ failure (dialysis, heart failure, liver cirrhosis,…), should be assessed and taken into account.
- Priorities should be decided based on medical urgency.
- In case of comparable medical urgency, and comparable age , frailty, cognitive decline, and severe co-morbitity, the “first come first serve” principle, and the “random” criterion, are the most useful and fair criteria [8].
- A register of triage decisions is kept for transparency and evaluation, during or after the pandemic.
- The impact of the COVID-19 epidemic on triage decisions of non-COVID patients should be addressed.
- Physicians involved in triage should be offered psychological support. This support should continue until after the crisis, and involve an ethical debriefing [9].

References:


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