Decisions regarding the admission of patients to intensive care and critical care units, within the context of the COVID-19 epidemic.

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Background

The backdrop is one of a **worldwide pandemic, unprecedented in size, scale, severity and mortality.** The influx of patients in a severe or even life-threatening condition raises the question of **where the breaking point is between medical need and the available resources.** Such patients in a severe condition can arrive at the emergency department without notice, deteriorate after a period of hospitalisation or even call emergency care doctors away from long-stay care units for extensive periods of time.
Under such exceptional circumstances, where human, therapeutic and material resources could be or suddenly become limited, practitioners in excessive demand, called away for long periods of time, are forced to make **difficult decisions and urgently prioritise** admissions to intensive care. The ethical principles of distributive justice, non-maleficence, respect for patients' autonomy and dignity - regardless of their degree of vulnerability - and the mandatory confidentiality of medical information constitute a fundamental guide not only for the care of patients with severe forms of COVID-19 but also for other patients requiring intensive care for a condition unrelated to COVID-19.

This document acts as a conceptual aid for all medical teams currently working on the front line of the COVID-19 pandemic. It applies in particular to the doctors who, on account of culture, training or experience, are not necessarily accustomed to having to consider the limitations of treatments.
Its objectives are twofold:

- **To assist doctors with decision-making** concerning admissions to critical care units, which may include situations very familiar to emergency care doctors, involving the limitation and withdrawal of life-sustaining treatment in cases where futility is rejected. Such decisions can present themselves on admission or in the course of hospitalisation.
- **To help doctors continually to provide good-quality care**, especially during end-of-life care. This is best achieved in coordination and collaboration with family and friends. Patients not admitted to intensive care or those subject to decisions to limit treatment must benefit from all available expertise of the hospital (provided by emergency care, medical departments and mobile palliative care units), to the extent that such palliative care ensures comfort for palliative patients and support for their families.

The aspects for consideration include the general case of the patient for intensive care and the particular case of patients affected by the COVID-19 pandemic. These aspects should prompt a personalised decision on a case-by-case basis, be discussed by doctors of all specialities engaged in managing the crisis, and be adapted gradually at local level, according to the healthcare organisation, material and human resources, and the feedback from the medical staff involved. They must also absolutely take into account the resources necessary to care for critical care patients not infected by COVID-19. **Considerations must be open to developments, according to the healthcare situation and feedback. They may also develop according to the patient's response to a maximal treatment, re-evaluations being particularly necessary in the most severe and fragile patients subject to initial decisions made under uncertain circumstances (i.e. "act and re-evaluate" rather than "do not act").**

The general strategy should, as far as possible, anticipate such decisions, regardless of the patient's setting (emergency department, surgical obstetrics, long-stay care, nursing home, etc.), clinical condition (with or without signs of severity) or COVID-19 status. In the emergency department, time constraints make it even more difficult to make this critical medical decision in an ethical manner.

In all situations where patients' destinations are being decided, during the pandemic or not, patients, their relatives and medical staff must all be informed of the extraordinary but patient-centred nature of the measures in place. Relatives' involvement in the processes of decision-making and care-giving risks being undermined by these exceptional circumstances. These issues are ethically and emotionally difficult and a source of stress and anxiety, and support (psychological or spiritual) should therefore be offered to all patients, relatives and medical staff.

The principles of decision-making for admission to a critical care unit.

Irrespective of the urgent health situation, **the collegial procedure**, defined in regulation at the end of the Clayes-Leonetti law, **shall be respected, with an emphasis on the following principles:**

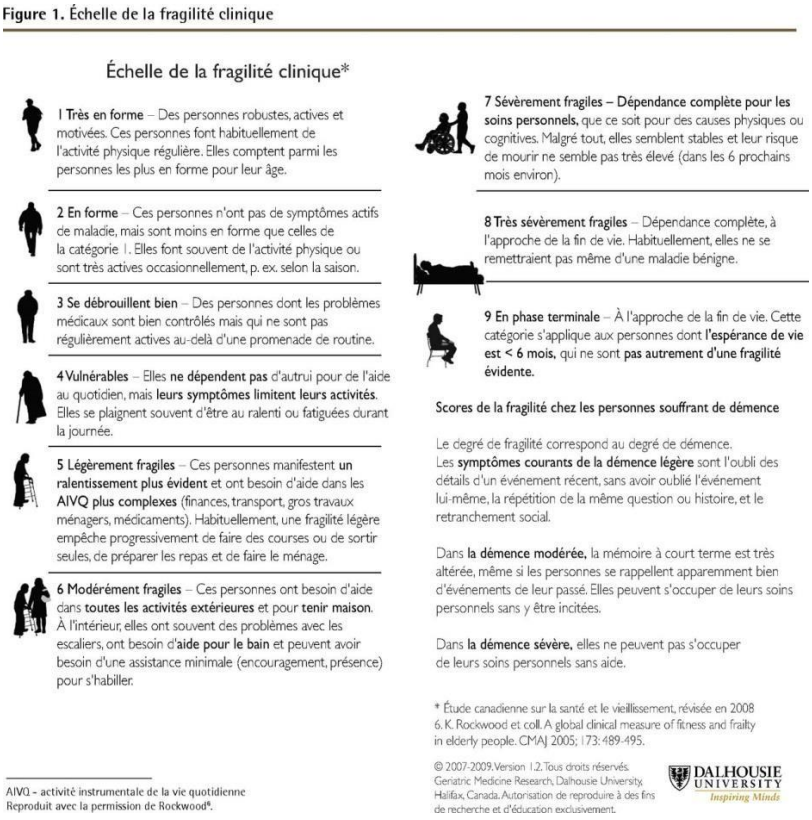
- Collegiality: if the decision rests on a single doctor, it must be taken in the light of a case conference with the medical team (ongoing collegial working should be arranged with at least one other doctor and a representative from the paramedical team).
- Respect for the wishes and values of the patient, expressed directly or indirectly, in advance directives or reported to a healthcare proxy or relative.
- Consideration of the patient's prior condition, consisting of at least:
    - Their frailty, assessed by the CFS (see below)
    - Their age (particularly relevant for COVID-19 patients)
    - Their comorbidities: acute vs stable, one vs several
    - Their neurocognitive status: normal, mildly impaired or highly impaired cognitive functions
    - The rate of deterioration in their general health in previous months
- Consideration of current clinical severity, via an evaluation of the number of organ failures at the time the decision is taken. One of the doctors in the decision must have examined and had a discussion with the patient or their family:
    - Respiration: hypoxaemia (< 6 l/min O_2) or respiratory distress
    - Haemodynamics: Systolic pressure < 90 mmHg
    - Neurology: Glasgow coma score < 12
    - Rate of organ failure deterioration
    - SOFA score, if applicable
- An evaluation of patient comfort: pain, anxiety, agitation, dyspnoea, obstruction, asphyxia, isolation
- The guarantee of care and support for all, being respectful of the person and their dignity

Within this context, these decision-making principles apply to both COVID-19 patients and non-COVID-19 patients. The clinical data within the context in question are not particular to COVID-19 patients (such as age, frailty, comorbidities, etc.) but the extent to which they influence the decision being made could be, depending on the situation.

Let us consider the particular case in which there are no beds available for a patient approved for admission to intensive care. This is a common situation in China, Italy and, more recently, France. This clinical issue is consistent with the issue of having only one bed is available for two patients who both require admission to critical care.

The first logical response is to transfer to another intensive care unit with space available. In this regard, the role of regulating the French emergency medical services and the real-time censuses drawn up by the regional health authority and hospitals are vital.
The second option would be to optimise the patient's supplemental oxygen in medical obstetrics or the emergency department. This imperfect solution creates the issue of sub-optimal care for the patient in terms of treatment and monitoring, as well as overwhelming these units and preventing them from admitting other patients. Ideally, this situation would be pre-empted by creating intermediate units equipped with skilled staff and non-invasive ventilation equipment. However, in a major pandemic, these units would also become overwhelmed, leaving the situation unresolved. The third option that would prevent loss of chance on behalf of a patient requiring admission to intensive care would be to discharge a patient already in the unit to make space (bumping). This solution, which causes patients to be extubated early in order to be transferred to an intermediary unit (including substitutions for high-flow oxygen), is still subject to the time constraints of the decision-making process, the possible introduction of palliative care and the provision of support to families.
With regard to patients hospitalised in long-term care units and nursing homes, self-isolation and quarantine measures must be enforced to the letter in this environment of frail patients at high risk of infection. The regulators of the French emergency medical services must also be given easy access to advance directives and notes written in medical records. Thus, an on-call doctor must be contactable by 24 hours per day to take part, if applicable, in a collegial decision not to admit a patient to intensive care. The best way of informing families should be considered within a context of a visiting ban and taking into account the possibility of a sudden deterioration.

Figure 1. Échelle de la fragilité clinique



In practice

The decision-making process entails, at best (see the flow diagram):

1. **Anticipation of the possible need for critical care during the initial clinical assessment**
2. **Collection of all relevant factors** during a clinical analysis of the situation
3. The nature of the **decision itself**, which could result in:
    a. **Non-admission to critical care:**
        i. Due to refusal by the patient (and/or family); or
        ii. Due to the absence of signs of severity warranting intensive care (with care consisting of, for example, supplemental oxygen in a classic department); or
        iii. Because admission into critical care would constitute medical futility, defined as treatment that has no benefit to the patient, is disproportionate to the expected benefit and serves no purpose other than to artificially - and temporarily - sustain life, at the cost of the suffering of the patient and their relatives and the distress of medical teams. The decision to admit this patient also risks depriving another patient of critical care, even though the second patient may be more likely to benefit from it. Therefore, we believe it is lawful not to admit a patient into critical care, from the moment the situation constitutes medical futility, even if there is a space available in critical care.
        iv. The care of patients not admitted to critical care is not suspended, but is provided in collaboration with palliative care specialists, in order to ensure that there is no suffering and that the end of life is dignified and painless, in the presence of the patient's relatives.
    b. **Admission to critical care:**
        i. Involving periodic re-evaluations, taking into account the response to the treatments administered for organ failure.
        ii. Making it possible to monitor improvements while receiving treatment or, on the contrary, to acknowledge the failure of treatments under way and to change the objectives of therapy (switch to palliative care).
4. **In any case, all decisions - regardless of the outcome - and the subsequent aftercare must:**
    - Be recorded and justified in the patient's medical records, communicated to the medical teams and quickly accessible in case of emergency.
    - Be re-evaluated regularly, in light of possible new factors affecting the decision and the patient's clinical development, with the survival of patients being dependent on their ability to respond to a symptomatic critical care treatment, given the absence of a validated aetiological treatment.
    - Be communicated clearly, faithfully and honestly to family and friends, which is the first step in supporting them (the value of family gatherings and mental health support groups).
    - Take into account the ongoing requirement to limit stress for both care providers and recipients.

1- ANTICIPER
Le recours aux soins critiques pour les patients COVID+ sous Oxygène
Dans les EHPAD ET LES USLD, Au SAU, en MCO - Avant la gravité clinique + Traçabilité

2- RECUEILLIR
Les éléments décisionnels

VOLONTES DU PATIENT
→ Exprimée
→ Directives anticipées
→ P. de confiance / Proches

SINGULARITE CLINIQUE
→ Respiratoire
→ Hémodynamique
→ Neurologique
→ Score SOFA

SINGULARITE DU PATIENT
→ Fragilité = CFS
→ Comorbidités
→ Age
→ Neuro-Cognitif

S'ADAPTER
Organisations locales
Situation sanitaire

SE COORDONNER
Parcours de soins
Expertises

INFORMER- SOUTENIR COMMUNIQUER
Les patients
Les proches
Les soignants
Le grand public

3- DECIDER
Sous la responsabilité d'un médecin après un processus collégial

ADMISSION NON NECESSSAIRE
Hospitalisation MCO
Surveillance
Réévaluation

ADMISSION IMMEDIATE
Sans/avec restriction

Réévaluation

ADMISSION REFUSEE
Hospitalisation MCO
Soins palliatifs

Incorporate end-of-life support.

The decision to limit or withdraw applies to treatment; *care* is always provided.

Caring for patients at the end of their lives and supporting their relatives should continue to be a priority of medical teams, in all settings, and should be upheld by palliative care teams in particular. Since this care takes the form of acute palliative care, it is best delivered in close collaboration with other medical and palliative care specialities.

The right to proportional pain relief, and continuous proportional or deep sedation until death should be guaranteed, in order to prevent any suffering. Pre-emptive prescriptions, overseen by experienced teams, should be available, if necessary, to respond to the urgent need for relief.

The launch of palliative care units tasked with this purpose should be encouraged, as well as expanding critical care capacity.

The ideas presented are more aspects for consideration and proposals than formal "recommendations". They are, by nature, ever-changing and attempt to reconcile the basic ethical imperatives of beneficence and respect for the autonomy and dignity of individuals on the one hand and the efficiency of care, equality, social justice and distributive justice on the other. The objective, explicit aspects influencing decision-making presented here are meant as a tool for communicating with and supporting patients, relatives and medical teams, the foundation of solidarity and trust between everyone during this difficult time.