



EDITORIAL

The ritual of the lack of beds

El ritual de la falta de camas

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Seventeen years have gone by since Teres¹ pointed to patient admission decision as one of the great ethical dilemmas facing Departments of Intensive Care Medicine (DICMs) when such Departments have come close to their full capacity. He referred to this situation as “the ritual of the last bed” – a very illustrative term that was widely adopted among intensivists, and which underscores the conflict that arises when a newly admitted patient effectively saturates the number of available beds, making it necessary not only to assess the benefit for that particular patient but also the consequences for the next possible, probable or almost certain patient. In effect, in such a situation any additional patient will be affected by delays (in the best of cases) or by transfer to another Intensive Care Unit (ICU) or to some other less specialized and prepared hospital dependency. These considerations gave rise to the need to establish criteria for patient admission to and discharge from Intensive Care. The American Society of Critical Care Medicine was the first to establish a series of recommendations² that have not been updated since 1999.³

Since then the “success” of DICMs has increased in parallel to their established effectiveness and efficiency. In the developed parts of the world the percentage of overall

hospital beds reserved for the ICU is in the order of 5% (2.5% in the case of Spain),^{4,5} with an increasingly varied range of services,⁶ including the admission of patients in earlier and less serious stages, in which the demonstrated benefits are greater. This in many cases has caused ICUs to be at full capacity or even extended beyond their capacity. In the light of this tendency, Rodríguez-Carvajal et al.⁷ in this number of the journal offer a new version of the ethical conflicts found in the intensive care setting. The problem is now seen not as “the ritual of the last bed” but as “the ritual of the lack of beds”, and among the different possible alternatives in such situations, the authors evaluate the impact of the non-programmed discharge of one patient in order to allow the admission of another.

Although any decision implies repercussions for the rest of the subjects affected by the alternatives that have not been selected (opportunity cost), to the effects of classification we will review the decisions taken in the DICM according to whether they preferentially affect the potential patient or the already admitted patient, and lastly those in which there is a direct and close relationship between one and the other.

There are decisions that affect potential patients. Undoubtedly the most important is dimensioning of the DICM, though this aspect is circumscribed to the healthcare policy setting and to the assignment of available resources. Dimensioning is conditioned by a number of factors, including from higher to lower hierarchical order the prosperity of the country and the proportion of its gross

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domestic product assigned to healthcare; the financing model involved (public or private); the model of DICM (open or closed); the type of hospital and patients attended; and the supervising managers (Directors or Heads of Department). Modification of the number of available resources (beds) is usually a slow process that evolves in steps. As a result, to the effects of the day-to-day decisions which intensivists have to take, such modification is not to be taken into account.

Beyond this general setting, we can establish two subgroups. One consists of patients whose admission to the DICM has been requested. The consulted intensivist must evaluate whether this is a patient with a “life-threatening” condition and with “reasonable” possibilities of recovery, or whether in contrast the patient is either “sufficiently well” or “too ill” to warrant access to intensive care. The explanation usually given by intensivists in deciding not to admit a patient who is “too ill” is that “admission to the ICU would offer no benefit in this case”, and that care should be provided in some other hospital dependency. As suggested by the use of the above quotation marks, the admission criteria are not precise. Indeed, they are rather elastic and depend on factors related to the patients and their relatives,⁸ the physicians, and the hospital. As has been commented at the start of this article, there are few updated criteria of the different scientific societies, and those that exist are general statements referred to situations as extreme as brain death (excluding organ donation) or permanent vegetative states. The most operative approach probably would be for each DICM to establish written policies contemplating the functional particularities of each hospital. In turn, the second subgroup consists of patients who while being able to derive benefit from intensive care, are not admitted to the DICM. This may be because such individuals are directly admitted to other units as a result of an active recruitment policy, or because of DICM refusal to admit the patient due to a lack of beds or to individual physician decisions.

Some decisions relate to patients who have already been admitted to the DICM. These are the decisions that have centered most of the debate and structuring efforts. The decisions relating to patients already admitted to the DICM include the limitation of therapeutic effort (LTE),⁹ presently renamed as the limitation of life support treatment (LLST), with the purpose of obviating the negative connotations which the original may term may have.¹⁰ Tied to this question

are the prior instructions, informed consent, non-resuscitation orders¹¹ and end-of-life medical care. Spanish intensivists have been pioneers in the debate of these issues¹² and in establishing recommendations and intervention protocols. Likewise, they have played an important role in the diffusion of training among the implicated professionals in this field of enormous relevance to the patients and their families.

However, the most frequent decisions are referred to patient discharge from the DICM, since eight out of every ten individuals are able to survive the episode leading to admission in the first place. The opportune moment for discharge is difficult to define, and here again we must resort to reasonable clinical criterion and consensus. Discharge would be appropriate either because the patient has “sufficiently” recovered and requires care that can be adequately provided elsewhere, or because it is considered that the patient will not improve, and the support measures offered in the DICM are not needed. Failure to decide discharge at the optimum moment leads to either premature or late discharge –placing the patient at risk and/or making inefficient use of the resources which society places at our disposal.

Lastly, there are decisions that simultaneously affect potential patients and patients who have already been admitted to intensive care. In this case we have the problem of the ritual of the lack of beds, in which the admission to the DICM of a patient directly affects another potential or already admitted patient. The process of establishing patient admission priority has been referred to as *triage*, and is commonly seen in the context of catastrophes, emergencies, and even hospital urgencies. In the DICM this topic has again received attention in the light of the flu epidemics and catastrophes with numerous victims.¹³ Give the lack of beds in the DICM, a number of alternatives can be considered.¹⁴ A first option is to suspend programmed activity –generally high-complexity surgery. Although this apparently constitutes the most intuitive and acceptable option, it faces two major problems: on one hand, the possibility of clinical worsening and even death of a patient on the waiting list, and on the other administrative pressure to meet the response timelines. In addition, the decision is usually the responsibility of the Head of the unit, and is taken first thing in the morning –without implication of the personnel or duty shifts. Another option is transfer of the patient to another DICM, provided this is possible, and with

Table 1 Frequency and impact of the strategies used when DICM capacity is saturated and a new admission is requested

Decision	Frequency (%)	Attributable mortality (RR, 95%CI)
Intensive treatment in ward	(?)	(?)
Stay in emergencies (>8 h)	5.1	1.36 (0-1.56)
Stay in postoperative resuscitation unit	(?)	(?)
Transfer to another ICU	1.8-2.6	1.38 (0-2.2)
Discharge outside normal work hours	18.4-18.8	1.35 (1.28-1.42)
Non-programmed or priority-based discharge*	10.8	2.16 (1.06-4.4)
Cancelled major surgery	3-5.2	(?)

Adapted from Sprung et al.¹³

*Data from Rodriguez-Carvajal et al.⁶

the risks inherent to moving a critically ill patient. A third option is admitting the patient to other areas of the hospital (emergencies, postanesthetic recovery, etc.) until a bed becomes available in the DICM – though this implies admission to areas with comparatively fewer technological and specialized human resources.¹⁵ A fourth time-gaining option only applicable to certain patients with intermediately serious disease and for short and determined time intervals is intensive treatment in the hospitalization ward, establishing close contact with the personnel in the ward. Lastly, another option is to discharge an admitted patient to allow the admission of a new patient who is assumed to be able to derive comparatively greater benefit from admission. This approach is based on the ethical principle of justice – a first order consideration in public healthcare – provided equity is ensured in all cases, and avoiding any kind of discrimination. This is the option examined by Rodríguez-Carvajal et al. in this number of *MEDICINA INTENSIVA*. The variable they analyze is non-programmed or priority-based discharge, this being defined as discharge not decided on a consensus basis by the medical team during the morning shift – such a decision by the team being “obligate” in a given moment to allow the admission of another patient expected to derive greater benefit from intensive care. Unfortunately, very few studies in the English language literature define discharge in this way; rather, the tendency is to include such a measure within the broader concept of discharge decided after hours, whether programmed or otherwise¹⁶ – as a result of which the comparisons have some limitations. In our opinion, a key aspect in the study of this subject is the establishment of precise criteria and definitions for the different types of discharge, since adequate distinction between early and late discharge according to the appropriateness of discharge is more pertinent than the question of whether discharge is programmed or not at the moment in which discharge is decided.¹⁷

In the face of all these possible decisions, at least two relevant questions arise: How often are such decisions taken? What are the resulting patient risks in terms of morbidity-mortality? We do not have information on all the possible alternatives, though the literature does offer the following estimations (Table 1): In terms of frequency, discharge decided after hours (i.e., outside the work shift) is clearly most prevalent, indicating that functioning of the DICM is strongly influenced by the organization of the activities in the hospitalization ward – the patients being unable to leave in the morning because the ward beds are still occupied. This situation influences attributable mortality, with an extra 35% risk, explainable by the lesser care available in the non-morning shifts. Truly early discharge, while infrequent, has the greatest impact in terms of patient mortality (odds ratio (OR) 1.6). We do not know the figures relating to late discharges or their impact upon the potential patients.

The study of Rodríguez-Carvajal et al. offers information on these two variables (frequency and impact) in relation to non-programmed discharges in their center. Based on their reported frequency (10.8%), the situation may be regarded as worrisome. However, taking into account their mean percentage occupation (80%), it can be concluded that the current situation in the DICM of our own setting is very

similar. Equally notorious is the impact of non-programmed discharge, since it raises mortality two-fold (OR = 2.16; 95%CI 1.06-4.41). This result must be viewed with caution, since the study design has important limitations, as pointed out by the authors themselves. In our opinion, the main limitation is that for a good part of the patients discharged from the ICU, in-hospital mortality is not an indicator of healthcare quality, as has been well pointed out by Fernandez et al.¹⁸ There are groups of patients in which life expectancy has already been marked during admission to intensive care, and which probably cannot be changed by prolonging the stay. These patients must be referred to palliative care, without the possibility of readmission to the DICM. It would have been desirable for the analysis to take these different groups of patients into account. It is also possible that categorization would have indicated that patients with a “good prognosis” would not suffer adverse consequences as a result of non-programmed discharge, since the readmission rates are similar to the programmed rates.

Another important reason for addressing these subjects is the impact upon the healthcare professionals that care for critical patients. One of the main reasons underlying professional burn-out syndrome is the fact of having to continuously deal with situations of this kind, where uncertainty together with the pressure of families and other professionals, etc., lead to disinterest and avoidance behavior. These problems in turn are also related to the conflicts that exist among the different groups of professionals attending patients in the DICM.¹⁹

Given the importance of the subject in Intensive Care Medicine, it can be concluded that studies such as that of Rodríguez-Carvajal et al. are welcomed in the pages of this journal, even with the mentioned limitations, since they should serve as a stimulus to generate new knowledge on which to base our difficult daily decisions. We thus could add the best possible scientific evidence to the essential humaneness which all medical acts must contain in order to be regarded as such.

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