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EDITORIAL

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Triage: what can we do to improve our practice?

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When necessary, the triage of adult intensive care patients is one of the most difficult challenges to the physician, carrying the risk of inadvertent patient harm and the danger of overuse, underuse or misuse of scarce specialized and costly ICU beds. From this perspective, the paper published by Sprung et al. in the official journal of the European Society of Intensive Care Medicine (ESICM) is very welcome [1]. While rationing appears to be increasing in most countries, the process of triage is often informal and practical aspects are implemented in divergent ways [2]. It could therefore be argued that general organizational and ethical principles are important to share in order to reduce heterogeneity and improve fairness within and between countries. While aspects of a generally accepted ethical framework may guide triage decision making, final clinical decisions are influenced by many additional operational factors. Several parameters may account for discrepancies between units: number of ICU beds [3], type of hospital, case-mix, culture and organization. The type of patient that is proposed for an ICU admission and the size, type and occupancy rate of the unit are important determinants of the final decision. Therefore these consensus opinions should be interpreted in context and with caution when applied to clinical decision making. For example, it is not clear whether the consensus is focused only on severe patients requiring several organ support (level of care III) or if it may encompass less severe patients including intermediate care patients (level of care I).

While a strength of the study was the involvement of non-physicians such as legal representatives and patient advocates, the decision to admit a patient into ICU involves several people and steps: the patient and his/her relatives, general practitioners, emergency and ward physicians. As a consequence the next step in determining points of consensus for triage policy should be to involve all stakeholders in the decision process in future consensus panels [4].

With a general ethical framework as guidance, specific situations should be addressed in order to provide tools on a daily basis. The recommendations should rely on outcome data in order to provide advice based on objective results such as long-term mortality, functional status, quality of life [5] or cost-effectiveness. These parameters are all required to assess the more general principle that the patient should reasonably benefit from ICU admission. For example, we worked in France together with the haematology and ICU scientific societies in order to sort haematological patients into three categories: ICU

admission mandatory, no ICU admission, ICU admission for assessing patient response to treatment with early evaluation to decide whether full code treatment should still apply after a few days [6].

Triaging of elderly patients is particularly difficult given the paucity of data on long-term prognosis. As a consequence, the compliance of emergency physicians with a list of potential ICU admission criteria is weak [7] and the admission rate varied from 1 in 3 to 1 in 18 potential admissions across different hospitals [8]. In this study, prognostic factors for 6-month survival were identified [8], suggesting that at least patients with preserved functional status, no active cancer, and no malnourishment were good candidates for ICU admission. Of course the "holy grail" of triage is the potential development of a prognostic scoring tool that could objectively quantify the benefit from an ICU admission and thus identify appropriate patients for admission. Such scores, based on co-morbidity and acute physiological disturbances, have been proposed [9]; however, they have proved disappointing when applied to models derived from real patient data [10]. Thus we appear currently to be left with a two-step process of adhering to broadly agreed ethical frameworks such as those proposed in the current consensus, and then applying these principles as informed by best available outcome data. Given this circumstance, the need for good quality observational outcome studies is highlighted, and the use of clinical vignettes to establish consensus would seem an appropriate methodology for establishing consensus practice and promoting fairness.

There are several issues concerning the methodology that has been used to reach a consensus in this paper [1]. The authors mention several points: the statement items were based on previous recommendations and not elicited using a normative approach, the delay between study initiation and study completion was very long, and although the 31 members of the panel are distinguished international scientists, consensus results might have been different with another expert panel. There are additional significant issues. For example, the lower limit of the 95 % confidence interval of a proportion of 0.8 observed in 31 independent ratings is around 0.63 [11], and potential multiple comparisons between items also impact corresponding statistical differences. In addition, whereas the stability of the answers from one Delphi round to another was a criterion previously proposed for deciding to resume or to stop the process [12], in the present case, several revised items were only rated in the last round, and the level of stability of the reported rates remains questionable. All in all, the observed differences in the ratings of the items should indeed be considered and discussed with caution.

Another methodological issue concerns the form of the survey for which experts were asked to always provide a binary answer (agree/disagree) to each of the 62 proposed items [12]. One drawback is the resulting simplification for each of the addressed items, many of them becoming "obviously" consensual, e.g. item 26.1 "likelihood of a success outcome should be a factor considered in triage" or item 30 "age should never be the sole determining factor in triage decisions". A second drawback is that the form of the survey leads one to consider triage for admission into ICU as involving several independent criteria, whereas at the present time triage is a complex issue involving the balance of many dependent features. Several studies including some mentioned above [4, 7, 8] attempt to provide evidence-based strategies for triage, but clinical trials in the domain of triage are difficult and limited. When considering the potential helpfulness of Delphi studies, case vignette proposals for which experts would be asked to rate admission appropriateness on a scale of 1–9 might provide a more concrete basis than general and therefore imprecise conditions [13]. In that regard, the proposed updated consensus statement constitutes a very helpful guidance for devising the content of a case vignette study and informing the content of future observational studies. A clearer understanding of the generally acceptable ethical framework within which triage operates is also necessary to inform the development and refinement of scoring systems that may aid more consistent and accurate triage decision making in the future.

Conflicts of interest None of the author has a conflict of interest related to this editorial.

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