ETHICS CASE
What to Do When There Aren’t Enough Beds in the PICU
Commentary by Michael A. Rubin, MD, MA, and Robert D. Truog, MD

Abstract
The concepts of medical futility and rationing are often misunderstood and lead to significant consternation when resources are stretched and pediatric intensive care unit (PICU) beds are unavailable. While the two concepts overlap, each has its own distinct application and moral justification. Most importantly, we should avoid using one to justify the other. Bioethics professionals should assist critical care clinicians in clarifying when each rubric should be applied as well as how to develop policies to standardize the approach.

Case
Dr. A, the attending physician on the pediatric surgical team, calls the pediatric intensive care unit (PICU) to schedule a patient with mitral valve stenosis for admission to the pediatric intensive care unit for monitoring during the surgical stay. The director of the PICU, Dr. L, tells Dr. A that she will have to get back to him about availability because beds are fully occupied.

Dr. L and Dr. A admit to each other being greatly frustrated that this problem has arisen multiple times in the past few years. Dr. L tells Dr. A that a number of patients have been in PICU beds for exceptionally long periods with little chance of recovery and that this has meant that a number of surgeries have been delayed and that a number of nonsurgical cases have been transferred to other facilities. They agree to request an ethics consultation.

At the time of the request, Dr. L expressed her concerns to an ethics consultant that care being provided to long-time PICU patients was often futile, constituted inappropriate uses of clinical resources, and violated clinicians’ professional autonomy. The ethics consultant wondered what constitutes futility and how many PICU patients’ care was futile, and suggested that some of these cases were ones in which “bedside rationing” might be appropriate. At this point, Dr. L became concerned that if long-term care was not futile—if some patients might still benefit from intensive care—then if the hospital and its staff did not provide such care they would be failing to do their best for the patients and might be failing in their professional obligations. However, Dr. L was not sure she felt comfortable creating a rule that forced her PICU staff to withhold potential
benefits from particular patients—even if those benefits were slight. Although she thought this was generally sensible, she was not sure that her role was to make other clinicians act this way in all cases.

The consultant suggested that deliberation upon these cases could be helpful and suggested that a larger group of stakeholders from the hospital be convened with the full ethics committee to draft a PICU policy that would address two elements: (1) guidelines regarding PICU admissions decision making and for establishing a PICU care discontinuation protocol; and (2) guidelines for how such decisions would be made and implemented, who would be involved in such decisions, and how those affected by the decisions—including caregivers, patients, and their families—would be notified. A time for deliberation on these two issues was scheduled.

Dr. A now plans to call his patient and family to deliver the news that they will have to wait until a bed is available. She worries about how she can justify the delay to them and wonders what to say.

**Commentary**

Recently, a multisociety task force published a landmark position paper on potentially inappropriate treatments and medical futility [1]. The task force achieved many goals, including a consensus definition of futility, a demonstration of the need for hospitals to develop processes to address cases of potentially inappropriate treatments, and a call for clinicians to take a leadership position in continuing the discourse. The position paper proposed restricting the term “futility” to its physiological meaning: the inability to achieve the intended biologic goal of a treatment. For example, cardiopulmonary resuscitation of a patient is “futile” when it is physiologically impossible for the procedure to restore a spontaneous perfusing rhythm, as in a patient with a ruptured ventricle. Disputes about treatments that are not futile in this physiological sense are considered “potentially inappropriate treatments.” When treatments are not physiologically futile, clinicians and patients or their families might disagree about whether the goals of treatment are appropriate or whether the chances of success are sufficient to justify the attempt. In these cases, the treatment is considered potentially inappropriate, and a multistep process involving the family, ethics consultants, and others is invoked to help resolve the quandary.

The position paper does not, however, address how treatments denied on the basis of being futile or inappropriate compare with treatments denied on the basis of rationing. As we will show below, rationing, futility, and inappropriate treatments are often interwoven, obscuring an understanding of each. As our ability to prolong life with increasingly sophisticated devices and methodologies improves, and as the cost of these technologies escalates, questions like the ones raised by this case will become more
pressing, making it necessary for us to understand the distinctions among these concepts as well as their correct application.

Unraveling the Concepts
The concept of futility—defined in the multisociety document as treatments that cannot achieve their physiological goals—is perhaps the easiest to address. Unfortunately, a decision about whether to use physiologically futile treatments is rarely of any practical significance; patients quickly die regardless of whether these treatments are used because, by definition, the treatments do not work. Futile treatments thus should never be provided, regardless of the availability of the resources or the values of the clinicians, patient, or family.

More difficult is untangling the concepts of rationing and inappropriate treatments. Treatments deemed to be inappropriate may work in the physiological sense but are judged to be inappropriate either because the goal of treatment is considered unreasonable (e.g., the continued vital existence of a patient diagnosed as brain dead) or the goal is reasonable but the chance of achieving that goal is unreasonably small [1]. Since what is considered “reasonable” in these circumstances is not a question that can be answered by medical expertise alone, we need a dispute resolution process (such as the one described in the multisociety guidelines [1]) for making this determination. In the following discussion, we will lump together treatments judged to be physiologically futile with those that have been determined to be inappropriate, since (according to the guidelines) in neither case should the treatment be initiated or continued.

In the case described, Dr. L and Dr. A are arguing that a significant number of PICU beds are occupied by patients who are receiving treatment that is either physiologically futile or inappropriate. Since there are not enough PICU beds to perform necessary and clearly beneficial surgical cases, they believe a policy should be developed to permit withdrawal of treatment from the former patients to make enough beds for the latter patients.

On the other hand, the ethics consultant seems to be suggesting that it is unlikely that a significant number of beds could be made available by this approach, since continued treatment for most of the patients would not be inappropriate by the standard described in the multisociety document. Therefore, the consultant suggests that more beds could be made available if resources were rationed.

In order to understand how rationing and futile or inappropriate treatments are related, we can analyze the difference in reasoning as follows.

Argument for futile or inappropriate treatments:
- A treatment is futile or inappropriate.
- We have an obligation not to provide futile or inappropriate treatments.
Therefore, we should not offer this treatment.

Argument for rationing:

1. Multiple patients need a treatment that is beneficial and desired.
2. We have a limited amount of resources to provide this treatment.
3. Therefore, we will have to decide between patients so that we make best use of our resources. This necessarily means that some patients will not receive treatment that is both desired and potentially beneficial.

Note that while these are separate concepts with distinct justifications, we do not mean to imply that they both cannot be true in the same situation; it may be true that there is both a need to ration and one option that is futile or inappropriate. We are not claiming that they are mutually exclusive, rather, that they are not mutually necessary.

Comparisons of the Two Concepts

The fundamental difference between rationing and inappropriate treatments is to what a particular treatment is being compared. Rationing requires a selection of the best distribution of limited resources based on a comparison of the needs of two or more patients or populations of patients, in situations in which all of the treatments are desired and may have some value in improving the health of the patients involved. In contrast, considerations of inappropriate treatment are not comparisons to another patient but to a complex and continually evolving standard that is based on accepted medical practice and on cultural, religious, legal, political, and socioeconomic perspectives regarding the appropriate goals of medical care and the corresponding obligations of the medical profession [2]. For example, a rationing decision might involve which patients in an ICU are most likely to benefit when only one unit of blood is available and multiple patients are in need of a transfusion, while a futile or inappropriate treatment decision might involve considering if a particular patient should be receiving any blood—not because another patient in the PICU needs it, but because it might not provide any benefit to that patient.

Moral Justification of Withholding or Withdrawing Futile or Inappropriate Treatments

Withdrawing or withholding futile or inappropriate treatments has a strong foundation in bioethics. Self-determination (autonomy) allows patients to make an informed decision among all medically feasible options. Additionally, beneficence requires physicians to advocate for a care path that they believe is most likely to improve the well-being of a patient. Our need to balance these goals is incorporated into the process of shared medical decision making, in which the patient and physician participate in a multistep, cooperative process [3]. Physicians are not obligated to offer every possible option, however—only those that have some prospect of benefit. If a requested treatment is unable to achieve its physiologic goal, it is futile, and should not be offered. If a treatment
is not physiologically futile but potentially inappropriate, then we should follow a dispute-resolution process to achieve a resolution of the conflict between the patient and the physician.

**Moral Justification of Rationing**

Dr. L and her fellow physician are resistant to the role rationing might play in this case scenario. While many PICU clinicians believe that they should never be involved in rationing decisions, reflection shows that clinicians are continually involved in the process of rationing. Every time we decide to prioritize our time for one patient rather than another, accept the limitations in drug choices that the hospital formulary has made based on the cost effectiveness of the alternatives, or decide where to build a new hospital, we have rationed. The ethical hazard lies not in our decision to ration; as long as the world has finite resources we will ration. Rather, the concern resides in the fact that the criteria for rationing are not solely determined by medical facts or judgments; rationing involves a complex calculus that includes not only medical criteria but also societal decisions about how health care resources should be allocated, including the overall financial resources that should be devoted to this purpose as well as rules about which patients should have priority over others. Unfortunately, given a general reluctance in our society to face up to the reality of the need to ration, these criteria are rarely discussed and hence tend to be poorly defined, vague, and inchoate.

**Is It Rationing or Futile/Inappropriate Treatment?**

A useful way to distinguish if a question is that of rationing or futile or inappropriate treatment is to analyze what happens when moving from the granular to the global. Rationing considerations scale up differently depending on the level investigated. For example, as we move from deciding which patients get a particular treatment, to how to distribute beds in an ICU, to where to build hospitals with large-capacity ICUs, and, finally, to how many hospitals should our society invest in to support our population, the nature of the rationing decision changes in that the options being compared are different in scale and consequence. In contrast, questions of futile and inappropriate treatments do not change when examined on a larger scale—if a particular treatment is futile or inappropriate for one patient, then the same should be true for all patients with the same medical condition in that hospital, region, or political jurisdiction. This is the very reason that landmark legal cases regarding medical ethics have so much influence: when a court rules that a hospital may refuse to provide a treatment to a patient with a particular medical condition because it is ineffective, for the argument to be valid, it would have to apply to all patients with that condition.

**Who Are the Decision Makers?**

The final factor separating futile or inappropriate treatments and rationing concerns who is authorized to make the decision in resolving the dispute. As rationing decisions are a comparison of the needs of two or more patients, each of whom may benefit from the
treatment in question, the patients themselves should not be part of the decision. Each would likely advocate for receiving the needed resource. Rather, rationing decisions ought to be made by those who are most likely able to make an objective, well-informed decision. In emergent bedside rationing, that expert may be the nurse or the physician, while in decisions about pharmacy spending or the location of new hospitals health care economists, hospital administrators, and public health professionals are important stakeholders. In contrast, patients and their surrogates are party to discussions of potentially inappropriate treatments, as value-laden decision making requires a personal knowledge of preferences and culture that only the patient can provide. As we will show below, the relevant stakeholders will affect the development of policy designed to assist the PICU in managing these quandaries.

**Development of Policy**

As our case scenario suggests, two separate policies should be developed based on which rubric is most appropriate for a particular situation: futile/potentially inappropriate treatments or rationing, with the first being based on the multisociety position paper. Each case in question should be evaluated based on its own, without the influence of the available resources driving the decision-making process. Stakeholders would include a multidisciplinary medical team in addition to ethics consultants and the patient or his or her surrogate decision makers [1]. A policy regarding who is admitted to the PICU and how to allocate resources should include a wider group of stakeholders, including representation from the medical profession and from the larger society through the involvement of elected leaders and the political process [1]. As stated previously, however, patients and families would not contribute to these deliberations, since one would not expect them to be able to take a neutral position regarding the decision given their justified self-interest. Ideally, rationing decisions should be as objective as possible, based on maximizing medical benefit within the limitations of resource constraints and following agreed-upon principles of allocation.

**Conclusion**

A most fulfilling aspect of being a physician or surgeon is being able to offer an intervention that might improve the health of a patient. Although we wish to both affect a positive change in patients and provide a sense of satisfaction for them and their families, we often have to communicate that we cannot improve their health or offer a therapy that they are requesting. This can be a grueling process for both patient and clinician and must be done on the basis of sound ethical reasoning and accurate medical knowledge. While we might prefer to turn a blind eye to such quandaries until resource scarcity makes it necessary, we need to be prepared to manage such situations, as they will come to us and decisions must be made.

**References**


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