

Editorial

The sound of silence: rationing resources for critically ill patients

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Received: 15 April 1998

Accepted: 16 February 1999

Published: ?? March 1999

Crit Care 1999, **3**:R1–R3

The original version of this paper is the electronic version which can be seen on the Internet (<http://ccforum.com>). The electronic version may contain additional information to that appearing in the paper version.

© Current Science Ltd ISSN 1364-8535

Introduction

Thirty years ago, the rationing of healthcare was invisible and silent. Recently, however, healthcare expenditures have become a major focus of public policy. As we look for ways to control spending, we become more aware of the economic trade-offs involved in every healthcare decision. Allocating resources to one service means less left for other services; allocating resources to one patient means less resources available for others. Rationing is becoming more publicly visible and explicit at every level of the healthcare system. However, in many intensive care units (ICUs) rationing still remains silent – implicitly conducted and inadequately discussed.

If we agree that healthcare resources are fixed and the needs and demands for health resources are not [1], then all resource allocation decisions are rationing decisions. Rationing implies that, because of cost constraints, not everyone will get every service they need, want, or even deserve. Encouraging clinicians to become aware of rationing in their own practice [2], Ubel and Goold suggested that three conditions must be met to label an activity as bedside rationing: (1) physicians have control over the use of a beneficial service; (2) they withhold, withdraw or fail to offer a service that is in the patient's best medical interest; and (3) they act primarily to promote the interests of someone other than the patient (this could be either the physician, an organization, or society in general – by reserving healthcare resources for other patients).

This editorial is for intensivists interested in reflecting on the rationing of critical care services. Here we focus on (1) how ICU resources are currently rationed; (2) basic princi-

ples at stake in our rationing decisions; and (3) our multiple roles in the rationing process.

Levels of rationing decisions

Rationing decisions at all levels of healthcare affect who gets what in the ICU. At the national, provincial or state public policy level, investments in tertiary care hospitals weigh against investments in other health and social services such as primary care, education, and transportation. For example, the UK has a relatively small healthcare budget (approximately 6% of its gross national product in 1992 [3]) and allocates only 1–2% of hospital budgets to intensive care. This is in contrast to the USA, where 15% of gross national product is spent on healthcare and 20% of this on intensive care [4]. At the level of healthcare administration, decisions must be made about where to locate ICUs geographically among communities.

At the level of the hospital, resource allocation decisions concern the infrastructure of the ICU (ie the number of beds, staffing, availability of auxiliary services such as diagnostic imaging). Although a given ICU size and structure may be determined at the 'macro' level, the unit of rationing most familiar to clinicians is the ICU bed at the 'micro', or clinical level. Here, rationing decisions concern the allocation of patients to beds (ie admission, discharge) and the allocation of services to patients. At the clinical level, rationed resources may include technology, treatment, ICU bed-days and hospital bed-days.

Macro-level resource allocation decisions create the rationing dilemmas that clinicians face at the micro-level. For instance, the more restricted the number of tertiary hospitals and ICU beds in a community, the more difficult ICU admission and discharge decisions become. If rationing seems unacceptable at the clinical level, one solution is to remove the resource constraint through activism at the administrative or system-wide policy levels [5]. Importantly, this does not obviate rationing, since it simply addresses resources and trade-offs farther away from the bedside.

How might rationing practices and principles be made more conscious and articulate? Articulation (in place of the traditional silence) will allow rationing acts to be better challenged and justified to ourselves, to our colleagues, and to our community. In the remainder of this editorial, we focus primarily on rationing practices which involve making trade-offs based on cost (or other resource) constraints. However, not only are resources being traded off, but principles are being traded off as well. Here we

suggest a modest rationing framework based on three principles: (1) autonomy; (2) utility; and (3) equity. Given the imperative to contain healthcare costs, intensivists are frequently faced with tensions between these three principles and we typically have to compromise one in the service of another.

Autonomy

The principle of autonomy is reflected in the recent trend toward healthcare planning in concert with patients' values and preferences. The advance directives movement exemplifies rationing according to the principle of autonomy. Patients determine their own level of care, and clinicians use these expressed wishes to direct resources toward or away from a given patient.

Given cost control pressures, the principle of autonomy can be most easily upheld if everyone had rather modest wishes. However, in the extreme, autonomy requires that even extravagant wishes be respected and met. Patient autonomy can thus be at odds with physicians' imperative to benefit the patient, as in the case of requests for unproven or useless treatments. Autonomy can also be at odds with the physicians' mandate to do no harm, as in the case of requests for assisted suicide.

Utility

Under the strict principle of utilitarianism, ICU resources would be distributed to individuals in such a way as to maximize the net well-being of all ICU patients. Towards this goal, we can reduce the use of minimally effective tests or treatments, and choose interventions known to be beneficial on the basis of rigorous research. We can also seek the tests and treatments that achieve the diagnostic or therapeutic goal for the least cost. However, utility-based decisions may help or hinder cost control since many very effective interventions are also very expensive (eg treating patients with acute myocardial infarction with tissue plasminogen activator over streptokinase when both are available, when the former is more effective yet more costly).

The principle of utility can conflict with autonomy, in that some patients may prefer less effective treatments. In practice, net population health (ie utility) may be compromised slightly by preventing undue suffering of a few seriously ill individuals. This principle has been described as distributive justice [6], and has been adapted by ethicists to debate health rationing dilemmas [7].

Equity

The third principle of equity relates to the concept of fairness. The basic idea is that burdens (eg morbidity, mortality, costs of healthcare) and benefits (eg health, wellbeing, a chance to recover) are distributed fairly across individuals and groups. As we do not all need an equal level of

intensive care (eg we do not all need maximum advanced life support now, nor do we all want it if we were to become seriously ill), equity is often defined as 'treating equals equally, and unequals unequally with respect to their relevant inequality'. In the case of life support, for instance, morally relevant dimensions of inequality might be considered need or ability to benefit, while irrelevant dimensions might be considered gender or sexual orientation. Fair rationing, then, would operate cognizant of the former criteria and blind to the latter.

Although most communities prohibit discriminatory treatment, evidence of differential healthcare on the basis of age and ethnicity is growing. Different communities also focus on different dimensions of discrimination. In the USA, for example, ability to pay is routinely used as a criterion for access to hospital care. In Canada, this criterion is considered unacceptable. Past or future societal contributions are other morally controversial criteria for rationing ICU services equitably. A 1989 publication on utilization strategies for ICUs declared that rationing as it was then practised was biased and inequitable [8], citing physician self-reports of different care based on patients' contributions to society [9,10]. In a comparison of expenditures on patients who die in neonatal and adult ICUs, care of the non-surviving elderly required a far greater proportion of resources than care of the non-surviving newborns [11]. These investigators suggested that it may be more justifiable to ration intensive care for the very old than the very young.

Professional positions and empiric studies on rationing critical care

The rubric of rationing healthcare is influenced by many disciplines. Foremost among them is ethics. Ethical principles have been previously applied to such complex issues as informed consent, brain death, organ transplantation, organ donation, resuscitation, and the administration, withholding and withdrawal of life support. The prominence of ethical dilemmas as they relate to rationing critical care has been captured in several consensus statements and position papers on futility [12], triaging [13], and the allocation of medical resources [14,15].

Although rationing according to need tends to be professionally comfortable and publicly acceptable, this approach can run counter to utility principles when one very needy patient consumes a disproportionate amount of healthcare resources. The classic 'rule of rescue' when life is threatened [16] represents the founding spirit of intensive care medicine. However, directing ICU resources where they are needed most may not maximize the probability of individual patient benefit. All intensivists who triage have been faced with a choice of whether to give the last ICU bed to a patient who appears most in need (eg the sickest) versus a patient who is most

likely to benefit from treatment (eg not always the sickest). A survey of the Society of Critical Care Medicine suggested that critical care providers were not inclined to make choices about distributing limited resources on the basis of who might benefit most [17].

A slowly growing number of empiric studies are describing healthcare rationing. Under conditions of an ICU nursing shortage in Boston between 1980 and 1981 [18], the active beds decreased from 18 to 8 and monthly admissions decreased from 122 to 95. Following the bed shortage, the proportion of patients admitted for monitoring decreased, the proportion of intubated patients increased, and patients were transferred out of the ICU sooner. Although more patients with acute myocardial infarction were admitted to non-ICU beds during the rationing period, their mortality rates were similar. Another observational study showed that patients who were admitted to the ICU during a bed shortage were sicker than those admitted when there were many beds available [19]. More recently, in a 3-month observational study describing referrals to six ICUs in the UK, 480 patients were admitted and 165 were refused. Although adjustment for case mix was limited for patients who were refused admission, 37% of patients admitted to ICU had died, compared with 46% of patients who were refused entry 90 days after ICU referral [20]. Interpretation of these interesting data is somewhat limited without knowing about illness severity measures for admitted and non-admitted patients or about the utilization of intermediate care units.

Conclusions

While many stakeholders such as clinicians, patients, the public, and administrators, should have a voice in healthcare rationing at the policy level, engaging all relevant parties in a meaningful manner is challenging. To what extent intensivists take a leadership role in the dialogue in such settings is variable. Rationing issues are ideally influenced by interdisciplinary input from diverse perspectives outside of healthcare professions such as epidemiology, economics, ethics, philosophy, law and political science.

Discussion about health resource allocation should not take place only in classrooms and boardrooms. Increasingly, intensivists are called upon to balance their role as patient advocate and health resource manager for society. Although this can create a sense of conflict for us, we are most likely to become aware of our daily rationing decisions if we make them in light of both responsibilities. Whether autonomy, utility and equity (or any other principles for that matter) are consciously considered when we ration is unclear.

The growing number of studies and professional documents on rationing notwithstanding, the extent to which intensivists are actually aware of, or informed by, these

publications is questionable. Understanding ICU resource allocation begins with knowing what goes on today. How do we currently balance patient self-determination with fiscally responsible care? What are the socio-cultural determinants of such decisions? Are we able to recognize the tacit personal beliefs and community values that motivate our rationing decisions? How are we influenced by personal incentives when caring for critically ill patients under conditions of resource constraints? Is life support withdrawn sooner from moribund patients when resources are scarce than when they are not? Investigating the formerly silent problem of rationing is central to understanding the practice of medicine as we approach the next millennium. Modern health service research agendas will find such lines of inquiry enlightening and highly relevant to healthcare policy.

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