

Bioethics for clinicians:

13. Resource allocation



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Abstract

QUESTIONS OF RESOURCE ALLOCATION can pose practical and ethical dilemmas for clinicians. In the Aristotelian conception of distributive justice, the unequal allocation of a scarce resource may be justified by morally relevant factors such as need or likelihood of benefit. Even using these criteria, it can be difficult to reconcile competing claims to determine which patients should be given priority. To what extent the physician's fiduciary duty toward a patient should supersede the interests of other patients and society as a whole is also a matter of controversy. Although the courts have been reluctant to become involved in allocation decisions in health care, they expect physicians to show allegiance to their patients regardless of budgetary concerns. The allocation of resources on the basis of clinically irrelevant factors such as religion or sexual orientation is prohibited. Clear, fair and publicly acceptable institutional and professional policies can help to ensure that resource allocation decisions are transparent and defensible.

Résumé

LES QUESTIONS DE RÉPARTITION DES RESSOURCES peuvent poser des dilemmes pratiques et éthiques aux cliniciens. Selon la conception aristotélicienne de la justice distributive, la répartition inégale d'une ressource rare peut être justifiée par des facteurs pertinents sur le plan moral comme le besoin ou les avantages probables. Même si l'on se fonde sur ces critères, il peut être difficile de concilier des demandes rivales afin de déterminer à quels patients il faut accorder la priorité. La mesure dans laquelle le devoir de fiduciaire du médecin à l'égard des patients devrait l'emporter sur les intérêts d'autres patients et de la société suscite aussi la controverse. Les tribunaux ont hésité à intervenir dans des décisions relatives à la répartition dans le domaine des soins de santé, mais ils s'attendent à ce que les médecins fassent preuve de loyauté envers leurs patients sans égard aux problèmes budgétaires. Il est interdit de répartir les ressources en fonction de critères non pertinents sur le plan clinique comme la religion ou les préférences sexuelles. Des politiques institutionnelles et professionnelles claires, équitables et acceptables pour le public peuvent aider à assurer que les décisions relatives à la répartition des ressources sont transparentes et défendables.

Mr. C is a 21-year-old computer programmer with cystic fibrosis. Chronic rejection and poorly controlled fungal infections are destroying the lungs he received 15 months ago. He has intermittently required positive-pressure ventilation to maintain adequate oxygenation during flareups of infection or rejection. Mr. C has been listed as a candidate for a second transplantation. However, given the presence of infection and the risks associated with repeat transplantation, his predicted chance of survival is 65% at 1 month and 38% at 24 months.¹

Mrs. D is a 42-year-old schoolteacher. She has been listed as a candidate for double lung transplantation because of rapidly progressing pulmonary hypertension associated with hemoptysis and hypoxemia. She is unable to manage at home because of decompensated right heart failure unresponsive to maximal therapy. As a first-time lung transplant candidate who is free of infection, Mrs. D has a predicted chance of survival of 82% at 1 month and 62% at 2 years.¹

Education

Éducation

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The surgeon has 1 matching donor organ available for these 2 patients. He knows that the best outcome can be achieved by transplanting both lungs of the donor into the same patient.²

When 63-year-old Mr. E is brought to the emergency department with severe but potentially reversible brain injury after a motor vehicle accident, the attending physician considers going through the charts of each patient in the intensive care unit (ICU) in the hope of finding someone whose need for intensive care is less than that of Mr. E. She also considers sending Mr. E to the floor, but knows that this will overtax the capabilities of the floor staff, who are not prepared to manage the patient's elevated intracranial pressure and seizures. Because of recent hospital closures in the region, no other facility is available to share responsibility for the care of patients with neurosurgical problems of this magnitude.

What is resource allocation?

Resource allocation is the distribution of goods and services to programs and people. In the context of health care, macroallocations of resources are made by governments at the national, provincial and municipal level. Mesoallocations are made at the level of institutions; for example, hospitals allocate their resources to programs such as cancer treatment, cardiology and dialysis. Microallocations are made at the level of the individual patient. Although these 3 levels are interrelated, in this article we focus on resource allocation from the perspective of the practising physician.

Commodity scarcity, illustrated by the lung-transplant case, is a shortage of a finite resource (such as an organ) because of natural limits to the availability of that resource. Fiscal scarcity, illustrated by the intensive care case, is a shortage of funds.³

Why is resource allocation important?

Rising public and professional expectations, an expanding pool of treatable patients and costly new technology must be balanced against tightly monitored health care budgets, competing government priorities and provincial deficits. Ethics, law, policy and empirical studies provide insights that can help clinicians as they try to distribute health care resources fairly.

Ethics

The ethics of resource allocation may be considered in relation to the concept of justice and the physician's fiduciary duty toward the patient.

According to Aristotle's principle of distributive justice,

equals should be treated equally and those who are unequal should be treated unequally. Unequal treatment is justified when resources are allocated in light of morally relevant differences, such as those pertaining to need or likely benefit.⁴ Characteristics such as sex, sexual orientation, religion, level of education or age alone are morally irrelevant criteria for resource allocation. Because there is no overarching theory of justice to balance competing claims between morally relevant criteria such as need and benefit, fair, open and publicly defensible resource allocation procedures are critical.

The lack of a comprehensive theory of justice gives rise to unresolved issues in rationing; these have been categorized by Daniels as follows.⁵

- The fair chances versus best outcomes problem. To what degree should producing the best outcome be favoured over giving every patient an opportunity to compete for limited resources?
- The priorities problem. How much priority should we give to treating the sickest or most disabled patients?
- The aggregation problem. When should we allow an aggregation of modest benefits to larger numbers of people to outweigh more significant benefits to fewer people?
- The democracy problem. When must we rely on a fair democratic process as the only way to determine what constitutes a fair rationing outcome?⁵

These questions help to frame discussions of resource allocation issues and the development of policies and practices that balance the obligations of physicians as citizens in a just society with their obligations to individual patients.

The power imbalance that exists between physician and patient creates a fiduciary duty on the physician's part to promote the patient's best interest. The extent of this ethical duty, which is fundamental to the physician's role in resource allocation, is a matter of controversy. For instance, Levinsky has argued that "physicians are required to do everything that they believe may benefit each patient without regard to costs or other societal considerations."⁶ By contrast, Morreim has argued that "the physician's obligations to the patient can no longer be a single-minded, unequivocal commitment but rather must reflect a balancing. Patients' interests must be weighed against the legitimate competing claims of other patients, of payers, of society as a whole, and sometimes even of the physician himself."⁷

Law

The Canadian Charter of Rights and Freedoms prohibits discrimination on various grounds, including physical or mental disability, but it applies only to government-



tal agencies, not to physicians or hospitals⁸ unless they are under the day-to-day control of ministries of health or other branches of government.⁹

Human rights codes in several provinces prohibit discrimination on the basis of race, ethnicity, place of origin, religion, age, sex, sexual orientation and physical or mental disability. Evidence that resources were allocated purely on such grounds could lead to an inquiry and legal proceedings by a provincial human rights commission. However, if such factors were relevant to a medical prognosis, it is not clear how a human rights commission could challenge a physician's clinical assessment of a patient's eligibility for a particular treatment. Evidence might be needed of a systematic policy of discrimination or bias against a particular group on the part of the practitioner or institution.¹⁰

Because courts have been extremely reluctant to become involved in how physicians, hospitals and health authorities use their resources, the legal review of individual decisions involving resource allocation is improbable.¹¹ As a British judge has observed, "Difficult and agonizing judgments have to be made as to how a limited budget is best allocated to the maximum advantage of the maximum number of patients. That is not a judgment which the court can make."¹²

Nevertheless, the trial judge in a case heard in BC criticized physicians for offering the explanation that they felt too constrained by the provincial medical insurance plan and their provincial medical association's standards to order a diagnostic CT scan. Although a finding of negligence was made on other grounds, the judge noted that while physicians may consider the financial impact of their decisions, financial considerations cannot be decisive. The physician's first duty is to the patient.¹³

It is understood in law that although there is no liability for making a decision that proves to be wrong,¹⁴ there may be liability for making a decision *wrongly*. A decision is made wrongly if demands for economy distort the physician's judgement with respect to the care that is owed to the patient. An error in clinical judgement is not actionable, because the risk of being wrong is inherent in every exercise of judgement. However, to take decisive account of secondary concerns and subordinate the primary concern of care — the patient's well-being — to a budgetary issue is the wrong way for a physician to make a treatment decision.

Policy

Clear, fair and widely accepted institutional or professional policies can provide guidance for physicians who are faced with difficult resource allocation decisions. Policies developed for the allocation of organs have reduced

conflict between teams and helped prioritize recipients within organ transplantation programs, using generally accepted and publicly reviewed principles and guidelines.¹⁵

In Oregon, a priority list of treatments is being developed by citizens' committees with input from physicians. This evolving experiment in public policy ranks health care services on the basis of effectiveness and perceived value to the community. Public funds are assigned by the government to make services "above the funding line" available to citizens "below the poverty line".¹⁶ Public funds assigned by the government to pay for health care are spent on treatments according to their priority on the list. Through multiple iterations and public debate, this experiment is producing a useful model for engaging stakeholders from government, the medical profession and the public in the process of health policy development.^{17,18}

In Canada, the CMA has provided a framework for decision-making on core and comprehensive health care services that incorporates 3 major dimensions: quality, economics and ethics.¹⁹ As well, Deber and colleagues have proposed a "four-screen" model based on effectiveness, appropriateness, informed choice and public provision.²⁰ Finally, the CMA's Code of Ethics states that physicians should "recognize [their] responsibility to promote fair access to health care resources" and should "use health care resources prudently."²¹

Empirical studies

Given the importance of resource allocation decisions in health care today, there is a surprising lack of empirical studies on this topic. In contrast to the hundreds of published studies on advance directives,²² for example, fewer than 2 dozen empirical studies on resource allocation (excluding cost-effectiveness analyses of various diagnostic tests and treatments) came to light in our literature search. In this section we review some of these studies with reference to the primary question they address.

Is resource allocation occurring now? In a study of dialysis referrals, Mendelsohn and associates found that 67% of Ontario physicians believed rationing of dialysis was occurring at the time of the survey and 91% believed that such rationing would occur in the future.²³

How do health care providers make resource allocation decisions? This question has been addressed by survey methods in the context of dialysis,²³ transplantation,²⁴⁻²⁶ rural medicine,²⁷ and critical care.²⁸ For instance, a survey by the Society of Critical Care Medicine found that critical care physicians considered quality of life as viewed by the patient, probability of survival, the reversibility of the acute disorder and the nature of any chronic disorder as important factors in deciding which patients to admit to the intensive care unit.²⁸



Do people consider age a relevant variable in health care resource allocation? In a survey of public opinion in the US, Zweibel and colleagues²⁹ found that most people accept the withholding of life-prolonging medical care from some critically ill older patients, but few would categorically withhold such care on the basis of age alone.

How do decision-makers balance concerns of efficiency and equity? Ubel and collaborators³⁰ surveyed prospective jurors, medical ethicists and experts in medical decision-making to explore the trade-off between cost-effectiveness and equity in the setting of budget constraints. Many respondents said they would choose a less cost-effective test for the entire population over a more cost-effective test for half the population. Similarly, in a survey of public opinion in Australia, Nord and associates³¹ found that a policy of maximizing cost-effectiveness received very limited support when the consequence was a loss of equity and access to services for elderly people and for people with limited potential for improving their health. In other words, equity was valued above cost-effectiveness in both of these surveys.

How should I approach resource allocation in practice?

The clinician's goal is to provide optimal care within the limits imposed by the allocation of resources to health care generally and to the institution, program and specific situation in which an individual patient is treated. The following guidelines may prove helpful in practice.

- Choose interventions known to be beneficial on the basis of evidence of effectiveness.
- Minimize the use of marginally beneficial tests or marginally beneficial interventions.
- Seek the tests or treatments that will accomplish the diagnostic or therapeutic goal for the least cost.
- Advocate for one's own patients but avoid manipulating the system to gain unfair advantage to them.
- Resolve conflicting claims for scarce resources justly, on the basis of morally relevant criteria such as need (e.g., the patient's risk of death or serious harm could be reduced by the treatment) and benefit (e.g., published evidence of effectiveness), using fair and publicly defensible procedures (ideally, incorporating public input).
- Inform patients of the impact of cost constraints on care, but do so in a sensitive way. Blaming administrative or governmental systems during discussions with the patient at the point of treatment should be avoided; it undermines care by reducing confidence and increasing anxiety at a time when the patient is most vulnerable.
- Seek resolution of unacceptable shortages at the level

of hospital management (mesoallocation) or government (macroallocation).

The cases

Mrs. D should receive the double lung. Although her need is approximately equal to that of Mr. C, her ability to benefit is substantially greater. The surgeon knows from sound empirical evidence that repeat lung transplantation has a poor prognosis, particularly when chronic infection exists.¹ He can minimize recriminations related to the team members' feelings of loyalty toward Mr. C if the transplantation program policy clearly spells out specific and fair procedures to follow when difficult allocation decisions must be made involving similarly deserving patients.

The attending physician should provide appropriate care for Mr. E in the emergency department, as this is the only facility available. She should involve the administrator on call to bring in additional skilled personnel to provide interim care in the emergency department and to help her arrange for the patient's transfer to a facility prepared to care for him. In this way, she clarifies the responsibility of the hospital to resolve the mesoallocation problem at an administrative level. The hospital may in turn address the macroallocation of resources at the provincial or regional level through its representatives to the government. The physician should not attempt to resolve problems of this magnitude on her own and should not compromise the care of Mr. E. She may choose to contribute to the resolution of similar problems in the longer term by making suggestions about system reform to the health ministry or helping with appeals for public support of additional facilities.

The views expressed in this article are the authors' and not necessarily those of their supporting groups or employers.

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