Chapter Five

Who Gets What?

You have not yet prepared that report on injuries of the great toe assigned by your attending on this orthopedics clerkship to present at tomorrow's teaching rounds, and you are eager to get over to the library to begin the inevitable long evening of research. And yet you said to yourself earlier today that you would make one more try at adjusting Brokka Legg's traction to relieve the discomfort it has been causing her. But that can really wait until morning, for unless you get busy looking up every arcane detail about the bones of the foot, Dr. Picayune will ask a question you can't answer and then will make a big deal of the gap in your knowledge in front of all your associates.

Here you face one form of a classic and recurrent dilemma: the problem of allocating scarce resources. In this case (as in many such cases), the resource in question is your time. In other cases the resource may be different, e.g., a drug, a technology, an organ. How is it to be decided who gets what when it is impossible for everyone to get everything? Variations on this question are the chief topic of this chapter.

1 Allocation of Resources

1.1 Life and Death Resources

The most gripping form of this dilemma arises when the resource in short supply means the difference between life and death. The classic instance of this, much discussed in the medical ethics literature, arose in the early days of development of renal dialysis when there were only a few machines available in the country.

The long-term solution in the case of kidney dialysis was to increase the availability of the resource to the point that nowadays no one who could benefit from dialysis need be deprived of it. But this does not resolve the short-term problem: how are recipients to be selected until the supply of the resource is increased? And the problem is a recurrent one. There will always be some developing technology or other resource in short supply—yesterday it was kidney machines, today it is interferon and artificial hearts, tomorrow it may be implantable artificial lungs; and always there will be a limited supply of cadaver
organs. Furthermore, as you will see in Section 2, the long-term solution that worked in the case of kidney machines may not be viable as an option for other resources in today’s cost-containment era.

1.2 Principles of Allocation

The following are some criteria of selection proposed for situations in which resources are scarce:¹

1.2.1 Equality  A principle of distributive justice that receives high regard in modern Western societies is the principle of equality. Every person is considered to be of equal worth and thus to be equally entitled to the goods and services society has to offer. If such public services as police protection or water mains were made available only to certain citizens and denied to others, people would be justifiably outraged. Similarly, lavishing exotic medical treatments on some might make routine levels of care unavailable to others, and this would be generally regarded as objectionable. However, as important as this principle is, it cannot form the whole basis for allocation decisions in medicine:

"Radical egalitarianism" is a position based solely on a principle of equality, requiring allocation of goods and services in precisely equal shares, regardless of need. Thus, if Beulah suffered from bronchial asthma and Barney did not, both would still receive equal doses of theophylline. If there was not enough available to provide a therapeutic dose for everybody, each would still receive the same, subtherapeutic dose.

Surely it makes little sense to consider giving such a resource to those who have no need of it, or when the resource is in short supply, even to consider giving any to those whose need is not urgent. But this is to say that a principle of equality is not the only—or even the most important—criterion for allocation of medical resources. A higher priority is assigned to a principle of medical need.

1.2.2. Medical Need  This is clearly a background principle of the greatest importance. Virtually every system of allocation that has been proposed or put into practice includes reference to medical need. What is not often recognized is that this amounts to assigning priority to a principle of medical efficiency or "medical indications" above principles of equality (and possibly above other principles as well, as you shall see).

Central judgments here include judgments of medical appropriateness and judgments of medical necessity.

¹ For a description of one hospital’s approach to these decisions, which shows some of these criteria "in action," see Shana Alexander (1962).
A. Judgments of Medical Appropriateness If kidney dialysis is the resource being distributed, there is no point in employing it on those who have unimpaired kidney function. To do so would be, at best, useless and perhaps harmful. Thus these people can immediately be ruled out as candidates for the resource.

But what about a terminally ill cancer patient whose kidneys have failed? Dialysis would offer some benefit to this patient (or, at least, to his organic functioning), but is this short-term and limited benefit an appropriate use of this resource? As you saw in Chapter 4, these questions arise even when there is no scarcity of resources. Thus there might be reasons independent of allocation issues for ruling these patients as candidates for the life-extending treatment. However, this move is controversial; some physicians (as well as some patients) would want to continue aggressive measures like this even if death were imminent.

Furthermore, what about a schizophrenic patient? Some studies suggest that dialysis may be of assistance in counteracting schizophrenia in some patients. Does this possibility warrant making the resource available to schizophrenics? What if a particular patient or a member of her family explicitly requests that this form of treatment be attempted? If dialysis services were available in plentiful supply, one might consider honoring such a request both 1) to respect the wishes of the patient and/or her representative and 2) to gather further evidence to test this possibility. However, this request would generally not carry great weight if dialysis were in scarce supply.

Defining medical need is not a straightforward exercise of technical reasoning. At least two elements are essential to constitute a medical need: 1) the presence of a disease condition and 2) endangerment, i.e., the judgment that the condition is likely to alter the life course of the patient in an undesirable way. And the second of these is as much a value judgment as a technical judgment. Further complications are introduced if, for example, a screening test uncovers a disease condition that is asymptomatic at present and has an uncertain future course [e.g., the HTLV-III screen for acquired immunodeficiency syndrome (AIDS)]. Does this patient have a medical need? Or, if the disease condition obviously has been a long-standing one, the patient-perceived need prompting presentation to a physician may be only tangentially related to it. In addition, the exploration required to uncover and measure the extent of the need may itself be likely to cause harm, and judgments of need are bound to be influenced by considerations of the possibility of alteration through treatment, as well as by assessments of the likely cost (in terms of both effort and expenses) of alteration.

Finally, even if all possible inappropriate candidates were screened out, there might still be more candidates than could be served with the supply of the resource available. Some further basis of selection must be found.
B. Judgments of Medical Necessity  A further screening criterion might be developed in terms of judgments about the degree of medical need: whose need for the resource is urgent? For example, the patient in end-stage kidney failure will die without access to dialysis, whereas the schizophrenic’s life is not at stake. Another variation arises from estimates of the probability of successfully reaching the goal sought. One candidate may have a 90% chance of survival if given the resource, whereas another may have only a 50% chance even if the resource is provided.

However, these judgments cannot fully resolve allocation questions. In the first place, how need is to be taken into account in allocation decisions is unclear. Is priority to be given to the neediest person? Then it would go to the patient who has only a 50% chance of survival even with the resource. However, this conflicts with a standard of efficient use of the resource, which would dictate giving it to the patient with a 90% chance, if there is only enough to provide for one of these two patients.

Furthermore, it appears that judgments of necessity are themselves influenced by considerations of availability of resources. For example, the availability of intensive care unit (ICU) beds may influence the threshold of risk that a physician is willing to tolerate. If only one or two beds are available in the unit, she might be willing to “take a chance” by putting a patient on a regular ward, whereas if a half dozen beds in the ICU are vacant, she would prefer to have the patient monitored “just in case.” This suggests that judgments of medical necessity are probabilistic and variable. One physician’s threshold may be markedly higher or lower than another’s, and the same physician’s threshold may vary in different circumstances.

Even though they cannot serve as the whole basis of decision making, judgments of medical need of both these types can be employed in an initial medical screening to identify the group whose need is compelling and to screen out others whose need could be met in alternative ways. Then, if a surplus of candidates remains, perhaps some principle of distributive justice can be employed to make the final selection.

1.2.3. Lottery The principle of equality might be applied via randomness. Thus, one method often proposed to preserve equality in the face of shortage is a lottery of some sort; each person has an equal chance of receiving the benefit.

1.2.4. “First Come, First Served” Some theorists regard a procedure of “first come, first served” as equivalent to a lottery (Ramsey 1970, 252–259; Childress 1970). However, this overlooks the serious problems of differential access that may affect one’s position at any point at which scarce benefits are to be allocated.

2. For a careful discussion of decision making with regard to the ICU see Albert G. Muley, “The Allocation of Resources for Medical Intensive Care” (President’s Commission 1983c, 285–311).
1.2.5. Merit/Past Contribution  With this criterion, one person would be favored over another if he or she had made a more significant contribution to society in the past or had acquired moral merit according to some standard. Thus the upstanding citizen would be favored over the person with a criminal record; the Pulitzer-Prize-winning poet would be favored over the ne’er-do-well. This, for example, is the basis for the program of veteran’s benefits.

1.2.6. Social Worth/Future Contribution  This criterion would allocate resources to persons on the basis of their future promise rather than their past achievements. It can be viewed as society pursuing maximum return on its investment in the resource; thus the young would be favored over the old (assuming, of course, that they show promise).

1.2.7. Social Responsibilities  In allocation exercises, people are often favored if they are married, and especially if they have dependent children. This can be viewed (cynically) as society aiming to minimize its future burdens by keeping alive those who would leave the most dependents for society to care for. Less cynically, it can be viewed as a way of supporting those who have accepted social responsibilities.

1.2.8. Entitlement Theory  This theory designates a process of acquisition as the foundation of just possession rather than some end goal such as equality or allocation according to merit. One is entitled to have and to keep whatever one acquires by a fair, nonexploitive process, e.g., by initiative or ingenuity, or through a contractual agreement. In practice, this view often leads to a system of distribution based on commercial exchange in a free enterprise economic system. Thus one is entitled to the health care that one has earned money enough to pay for—no more and no less.

1.3 Case: Who Gets the Protection?

Consider the principles just described in connection with the following case:

Hepatitis B immune globulin (HBIG) is a drug indicated for prophylaxis to be administered as soon as possible following direct exposure to type B hepatitis. Because it is a very expensive drug, Community Hospital stocks a supply of only about five doses. Cornfield General Hospital, a small hospital in a nearby community, stocks none at all and has customarily relied on the pharmacy at Community Hospital to supply this drug when it is needed.

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3. Case and questions adapted from Can I? Should I? Must I? . . . Will I? A Symposium on the Ethical, Moral, and Legal Issues Confronting the Hospital Pharmacist of Today (The University of Tennessee Memorial Research Center and Hospital, Knoxville, April 23, 1982).
This supply usually meets the needs of the community adequately, but today is the resounding exception. The staff dentist in the Dental Clinic of Community Hospital urgently requests two doses of HBig for himself and a dental assistant who have just received word from the lab that a patient they treated two days ago has active hepatitis B. Almost immediately after this call, the pharmacist from Cornfield General calls with an urgent request for two doses of HBig—one for an infant just born there whose mother had documented hepatitis B infection during the last trimester of pregnancy and another for a nurse exposed through a needle stick involving the mother.

To make matters worse, the Emergency Room (ER) physician from Community Hospital appears in person to demand three doses for herself and two nurses who were exposed when a hepatitis B patient (also confirmed, after the fact, by lab reports) was brought in with gunshot wounds and they had to wade in up to their elbows in blood to stop the bleeding. The employee health nurse repeats the request for doses for the dental assistant and the ER nurses, and also asks for an additional dose for a floor nurse who was exposed through a needle stick involving the gunshot wound patient after he had been transferred to the floor.

The hospital pharmacist calls around to hospitals in the area only to find that there is no additional HBig at all in the vicinity. A call to the drug supplier brings word that the company does not have any in stock and cannot get any in before the end of the week, due to a general airline strike paralyzing transportation.

The Sheriff’s office calls explaining that the man they have in custody for shooting your ER patient is claiming that he and the patient have had a homosexual relationship for the last seven months, with their last sexual encounter occurring just before the shooting. The Sheriff demands a dose of HBig to give to the prisoner.

As chief of staff, you are called on to make the decision as to who should receive the available doses of the drug. You face nine requests for five doses of the drug. In the order in which the requests were received, they are:

1, 2  staff dentist, dental assistant
3, 4  infant, floor nurse at Cornfield General
5, 6, 7  ER—physician, nurse 1, nurse 2
8  floor nurse at Community Hospital
9  prisoner

Consider the following questions:

1. The solution most in line with radical egalitarianism would be to give each of the nine people 1/9 of a dose. However, this would not protect anybody adequately. A second procedure suggested by this principle would be to put the nine names into a hat and draw five out. Would this be a reasonable way to allocate the supply? (Read the additional considerations cited before accepting this alternative).
2. The following considerations are relevant to measurement of medical need. What difference should these factors make to the decision about who is to get the drug?
   a. The efficacy of HBIG for an infant whose mother was infected has not been established.
   b. The probability of infection is lower for exposure during a dental procedure than for exposure through a needle stick or contact with the patient's blood.
   c. The prisoner already may have active hepatitis B; if so, it is too late for a prophylactic agent like HBIG to do any good.

3. Would the principle of 'first come, first served' be a reasonable basis for decision?
   a. Would it make a difference here if you learned, for example, that the only reason that the Dental Clinic called you before the ER did was that the laboratory technician is a good friend of the dental assistant and therefore called the results to her before calling the ER?
   b. Suppose the priority were a result of a negative factor; i.e., suppose you learned that the laboratory technician had deliberately delayed calling the ER because she has a long-standing grudge against one of the ER nurses? How would this influence your view of the principle of 'first come, first served'?
   c. What if you learned that the specimen from the ER had been delivered to the laboratory before the one from the Dental Clinic?

4. Would considerations of merit or past contribution make a difference to the choice?
   a. What if you knew, for example, that one of the nurses had been a faithful employee of the hospital for more than 20 years, whereas all the others had been associated with their respective hospitals for less than five years? Should this make a difference to your choice?
   b. What effect does the prisoner's criminal status have on his eligibility?
   c. What effect does the prisoner's homosexuality have on his eligibility?
   d. Issues of personal responsibility for the exposure are also relevant to the principle of merit. What difference (if any) do these factors make in this sort of situation? Consider the following:
      1) Obviously, the prisoner's exposure was the result of a deliberate choice he made—to engage in homosexual acts with the patient. Would it affect your choice if you knew that the prisoner continued homosexual relations with the patient even after learning that the latter had hepatitis and that the disease might be spread through sexual contacts?
2) The nurses exposed through needle sticks could be accused of careless nursing practice.

3) Dental Clinic and ER personnel could have taken precautions (e.g., wearing rubber gloves for every patient) that would have prevented or minimized their exposure to hepatitis.

5. Would considerations of social worth or future contribution make a difference to the choice?
   a. The infant offers the greatest potential time span over which to make social contributions. Should this influence your choice?
   b. What if you learned that one of the nurses is about to receive certification in a much-needed specialization? Should this influence your choice?
   c. What if you were told that the prisoner is a graduate student who is credited with a scientific breakthrough in his doctoral research? Should this influence your choice?

6. Would considerations of social responsibilities make a difference to the choice? Suppose you learned that

   3 of the candidates are unmarried
   2 are married but have no children
   1 has one child
   2 have two children each, and
   1 is the sole financial support of five children.

   Should this information make a difference to your choice?

7. A number of factors are relevant to entitlement theories. Consider the following:
   a. What difference does it make (if any) that the supply of the drug to be allocated is owned by this hospital? That it has been carried in inventory (and thus as an expense) for some time, and that the hospital stocked the drug in anticipation of just such a crisis?
   b. Should Cornfield General's willingness to pay for its supply of the drug be a reason in favor of allocating some to it?
   c. One way to allocate the supply is to sell it to the highest bidder. Would this be a just system of distribution? Why or why not?
   d. At Community Hospital, all those exposed are employees of the hospital, except the ER Physician, who is a member of a medical group that contracts with the hospital to provide ER coverage. Does this difference in affiliation make any difference in the hospital's responsibilities toward this individual?
e. Should your decision be influenced by the status of the person making the request? You received requests from (in temporal order):
   a. dentist
   b. pharmacist
   c. physician
   d. employee health nurse
   e. sheriff.

What authority do you have to refuse the request of the physician? The sheriff? The hospital's employee health nurse? The others?

f. Should your decision be influenced by the authority and status of the individuals who would receive the medication? If so, how and why? If not, why not?

g. What legal and moral status is created by the past customary practice of supplying the drug to Cornfield General Hospital? In the absence of any sort of formal agreement between the two hospitals, does such customary practice create any basis for a claim on the drug by Cornfield General?

8. It has been said that "possession is nine points of the law." Is this true? What counts as "possession" or a commitment already made in these circumstances?

   Consider the following:

   a. Suppose the request from Cornfield General had been received well in advance of the remaining requests, and the drug had been dispatched but had not yet reached its destination at the time the other requests were received. Would it be morally permissible to contact the delivery vehicle by radio and order the drug returned to your hospital, or would a commitment already have been made?

   b. Suppose the drug had been dispatched to the Dental Clinic and placed on a shelf there but had not yet been administered by the time the other requests were received. Would it be morally permissible to go to the Dental Clinic and retrieve it, or would a commitment already have been made?

   c. When you got to the Dental Clinic to retrieve the drug, suppose it had been drawn into a syringe and the dental assistant was preparing to have it injected into her arm. Would it be morally permissible to postpone this injection until it could be decided whether this was the best use of the drug, or would a commitment already have been made?

9. Suppose your hospital has a functioning Ethics Committee. Would it be appropriate to turn to it for assistance in this case? What role should the committee be expected to play here? To make the decision? To issue an advisory ruling? Merely to talk the issue through?
1.4 Triage

An area in which allocations are regularly made is that group of decisions known as “triage.” One common definition of triage is

the medical screening of patients to determine their priority for treatment; the separation of a large number of casualties, in military or civilian disaster medical care, into three groups: those who cannot be expected to survive even with treatment, those who will recover without treatment, and the priority group of those who need treatment in order to survive. *(Stedman’s Medical Dictionary 1982, 1479)*

However, this area does not yield principles likely to be helpful in the whole range of allocation decisions.

1.4.1 Disaster Triage The selection principles indicated in the definition are most fully illustrated in disaster situations, such as battlefield and large-scale community emergencies, in which the shortage of medical personnel and supplies is drastic. These principles cannot be taken over directly as general guidelines for other allocation situations, however, because the goal of selection embodied in them is not justice (i.e., not the candidates’ level of need or desert), but rather efficiency in serving the common good, or some all-encompassing principle such as enhancing the military effort.

1.4.2 Emergency Room Triage A typical hospital emergency room uses these triage categories:

1. *Emergent*: Patients whose conditions are life threatening or will cause serious permanent physical impairment if not treated immediately. These patients are taken immediately to the appropriate treatment areas.

2. *Urgent*: Patients whose conditions require care within 30 minutes to 2 hours. Their conditions would not generally cause loss of life or serious permanent impairment if treatment is deferred. They will be placed in the appropriate treatment area after completing the registration process.

3. *Nonurgent*: Patients whose conditions are minor; the time of evaluation is not a critical factor. These patients will be taken to the appropriate treatment area within a reasonable amount of time after completing the initial assessment and registration process.

This is obviously based on a quite different set of principles from disaster triage. The patients who would be passed by in the disaster situation (e.g., those who will die with or without treatment) are given high priority for attention in the less catastrophic emergency room setting. The difference stems largely from the fact that scarcity of resources is not quite so acute in these situations. The result is that full medical goals—as well as decisions based on justice—can be attempted.
1.5 Patient Loyalties and Demands of Justice

To complicate further the case described in Section 1.3, suppose the floor nurse at Community Hospital (i.e., candidate 8) was a private patient of yours. Would this be a reason for you to favor her in allocating the drug? Why or why not?

This complication raises in acute form an issue underlying all these micro-allocation dilemmas: demands of justice may conflict with demands of loyalty to your patient. As discussed in Chapter 3 (Section 2.2), a component of the moral center of medicine is the expectation that the physician will go "all out" for his or her patients. As Charles Fried (1974) puts it:

The traditional concept of the physician's relation to his patient is one of unqualified fidelity to that patient's health. He may certainly not do anything that would impair the patient's health and he must do everything in his ability to further it. (pp. 50–51)

... According to the model embodying the ideal of personal care this doctor would have the obligation to care for his patient in every way that serves that patient's interest in health. (pp. 117–118)

The American College of Physicians (ACP) Ethics Manual asserts the same principle:

The guiding principle must be that the physician should concentrate his energy and attention on providing the patient with the best possible medical care within the context of practicing humanistic, scientific, efficient medicine. ... In the final analysis, no external factors should interfere with the dedication of the physician to provide optimal care for his patient. [ACP 1984a (Manual), 31; 1984b (Annals), 266]

But, of course, it is impossible to realize this ideal fully in a situation in which resources are too limited to permit it, i.e., in the face of what the Manual describes as "external pressures resulting from limited institutional resources [that] prevent the physician from providing optimal care" [ACP 1984a (Manual), 31; 1984b (Annals), 266]. The resolution of this dilemma may vary depending on other features of the situation. Consider, for example, the following three variations.

1.5.1. Conflicts Between Two Nonpatients  This is the most straightforward choice, since no prior loyalty is owed either party. In the simplest of these cases, decisions can be based entirely on the principles of justice.

In some cases the choice may involve establishing a future physician-patient relationship with one of the parties; if so, then future loyalties and the conflicts these might cause must be taken into account in arriving at a judgment. Fried (1974a, 75) describes this situation: "The notion is one of doing unstintingly what it is that one does, though choosing with care the occasions on which one will do it." This sort of situation would arise, for example, if one were choosing not
simply who should receive the one-time doses of a vaccine, but rather whom to accept for a long-term therapy program in which only a limited number could be accommodated.

You have no prior obligation to any of these prospective patients (although it would be a tragedy, and perhaps an injustice toward them all, to allow the resource to remain unused when need for it exists). However, once a choice has been made and a physician-patient relationship has been established, loyalty does come into play. It would be unjust, for example, to remove access to a given resource from a patient just because a more medically suitable candidate comes along, although this difference would have been a valid reason for preferring the more suitable candidate if they had both presented at the same time.

1.5.2. Conflicts Between Your Patient and Another’s One common example of this sort of allocation decision is the case of another physician requesting that you release a patient from the ICU in order to provide a bed for a patient of his. You may acknowledge that his patient’s need for the resource is more pressing than yours, but if you judge that the safety of your patient would be jeopardized by removal from the sort of close monitoring possible only in the ICU, is it appropriate for you to accede to his request? To do so would be to subordinate the principle of loyalty to your patient to the principle of justice. Some institutions seek to avoid placing individual physicians in this dilemma by leaving triage decisions of this sort to an ICU director or some other third party, thus converting this into a puzzle of the first type.

1.5.3. Conflicts Between Two of Your Own Patients This is in some ways the most complicated of all three puzzles. When the needs of two of your own patients conflict and you cannot manage to accommodate them both, you must appeal to a principle of justice to temper both principles of loyalty. The result may be that you do less for each patient than you would have done had the conflict not arisen.

1.6 Office Scheduling as an Allocation Problem

These dilemmas are not confined to the rare, life-or-death situation. Parallel questions arise in daily practice—even with regard to so mundane an issue as office scheduling practices.

The procedure best embodying the principle of equality would be to stick invariably to a uniform time allocation (say, fifteen minutes) for each and every patient. This would minimize waiting times by keeping everything right on schedule, and in this way it might be agreeable to patients; but, of course, it would not take into account differentials of medical need and thus would fall short of standards of acceptable quality.
At the other extreme, the principle of patient loyalty dictates taking as much time as you felt necessary to deal with the problems of each patient, no matter how long other patients had to wait. This is obviously a recipe for frustration and anger on the part of patients in your waiting room. One could avoid this problem by scheduling only one patient every hour, but this remedy may require an unacceptable personal financial sacrifice by either the patient (if fees were set for this period of time at a level that generates a satisfactory income for the physician), or for the physician (if fees were kept at roughly their present levels per visit), or for both (if fees per visit were raised significantly but not enough to sustain present income). For the physician to bear the whole financial brunt of this shift involves a personal financial sacrifice far greater than any duty to patients could demand.

What is required for an acceptable scheduling practice is a process that balances all these needs within practical limits; i.e., one that is sensitive to 1) patients who must take time off from work and other duties to wait to see you, 2) the medical needs of the patients once it is their turn to be seen, and 3) the efficiencies of a medical office as a business enterprise and the realities of medical practice as a source of your livelihood and that of your employees, as well as the means to your own career goals.

2 Allocation on the Social Scale

Usually, the scarcity that necessitates allocation decisions between individual patients is the result of background decisions on a wider scale to limit the resource. These decisions Calabresi and Bobbit (1978, 19) call "first-order determinations." For example, in the case discussed in Section 1.3, a decision by the hospital officials resulted in only five doses of the drug being available. If the officials had stocked ten doses instead, no dilemma of allocation would have arisen on this occasion, although a situation might arise at another time in which eleven demands for the medication would be received. A judgment about how much of a resource to make available determines, as a consequence, how frequently individual allocation decisions will arise and how acute they will be.

Options for the first-order decision in the early days of kidney dialysis included:

1. not developing the resource at all, thus achieving equality by denying it to everybody
2. not using the resource until it was available in sufficient quantity to meet the total need
3. making enough of the resource available to meet only part of the need, and meeting as much of the need as possible while additional quantities of the resource were being developed.