

Two Cardiac Arrests, One Medical Team

George Burnham and Donald Mattison were patients in adjoining rooms in the rehabilitation division of a state medical center. George was a thirty-three-year-old, developmentally disabled man who had lived in state institutions since the age of three. His family had had no contact with him for over twenty years. George had been trained to feed himself and to keep himself reasonably clean, but at the age of twenty-five he had suffered a cardiac arrest that left him with some paralysis. After rehabilitation he only occasionally lacked bowel control. A second recent cardiac arrest left him semi-paralyzed and totally incontinent. The chances of his regaining even his former level of continence, the staff felt, were hopeless.

Donald Mattison, a forty-eight year old businessman, active in community and church affairs, married, and the father of four, had suffered a minor stroke, which left him slightly paralyzed. In his six weeks on the rehabilitation ward, he had regained almost total use of his arm and leg. His prognosis for full recovery seemed excellent.

The hospital has at least one cardiac arrest team on duty twenty-four hours a day, and one crash cart in every patient area at all times. The possibility of simultaneous cardiac arrests seemed remote. If it were to happen, there would not be time to transfer an additional crash cart from another patient area, since the rehabilitation ward is served by an extremely slow elevator.

But in this case the improbable happened. George had a cardiac arrest at 3:00 one morning. Within four minutes the cardiac team had arrived in his room and was ready to begin work. At that very moment Donald also had a cardiac arrest. Knowing of the simultaneous cardiac arrests, every team member hesitated. Two also knew both patients' histories; the others, including the team leader, did not. After a moment, the team leader said, "First come, first served. Let's go to work." With no further hesitation, the team began to resuscitate George.

Without the emergency aid, Donald died. George was resuscitated, but suffered yet another cardiac arrest at 8:20 the next morning. This time another team was unable to revive him, and he too died. Did the team leader make the right decision in resuscitating George instead of Donald's? Is "first come, first served" the proper principle to apply in such cases?

COMMENTARY

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The most painful of all medical care decisions concerns life-preserving measures which, because of limited resources, require certain individuals to be excluded in favor of others. How does one weigh the relative rights of individuals to such care? Whenever possible, decisions to withhold lifesaving therapy should be made in advance. But in the absence of a clear expression that lifesaving care should be withheld, the person in charge must assume that care was intended. Should incompetency, the patient's family status, capacity to contribute to society, and related considerations be woven into the decision-making process? Let us consider each case on its own merits, then look at the priorities so as to answer the troubling question: "Who shall we permit to die?"

George has just suffered his third cardiac arrest. Since there was sufficient clinical information from two prior arrests to anticipate that cardiac arrest might occur again, in the absence of directions not to resuscitate we must assume that care should be initiated, as it was. George's severe retardation does not per se justify withholding resuscitative efforts, nor does his additional brain damage and total incontinence. The courts have indicated (in the *Dinnerstein* and *Spring* cases) that cardiopulmonary resuscitation (CPR) as

well as other forms of lifesaving and life-prolonging therapy can be withheld in appropriate circumstances. But an appraisal by either care-provider or family of the "quality of life" of the lifelong incompetent as a basis for withholding such therapy has been specifically rejected (in the *Saikewicz* and the *Storar* and *Eichner* cases).

Recently, the highest court in the State of New York ruled without equivocation that there exists in some circumstances a positive obligation to provide lifesaving treatment to the terminally ill lifelong incompetent based on the common law requirement that a guardian act only in the best interest of the ward. While some may disagree, that decision supports the conclusion that there existed an obligation to treat George unless a court had already determined that withholding CPR was in George's best interests.

As for Donald, there are no indications that he had refused or would refuse resuscitation. He had a good prognosis for full recovery. He was young, married with four children, and employed.

Assuming that George would have received the full attention of the CPR team had Donald not arrested, how is one to proceed fairly? With a single crash cart and one cardiac arrest team, if we attempt to initiate CPR for both men, it is likely both will die. Donald's prognosis is better than George's. In addition, Donald's wife and children are emotionally and economically dependent on him so that there are broader societal costs were he to die. On balance, the choice clearly favors full commitment of CPR to Donald. Should we then abandon poor George? Or is it possible to allocate care in such a way that he may survive without seriously compromising Donald's chances?

One approach would be to initiate basic life support (artificial ventilation and external chest compression) immediately for Donald, using a single member of the team, and, as quickly as possible, attempt to defibrillate George. If initial attempts at defibrillation were unsuccessful, or if the attempt took more than thirty to sixty seconds, we would abandon efforts with George and concentrate totally on Donald. If George were in asystolic cardiac arrest (no electrical activity, as opposed to chaotic electrical activity in ventricular fibrillation) we would terminate efforts on his behalf because the likelihood of successful resuscitation would be very small and the time required would very likely preclude Donald's resuscitation.

This approach is based on the following considerations: (1) both George and Donald have a right to lifesaving treatment; (2) George's immediate prognosis is poorer than Donald's; (3) the societal costs of Donald's death would be substantially greater than those of George's; (4) George's best chance of returning to his previous state is immediate defibrillation.

Even the brief delay to defibrillate George may decrease the likelihood of successfully resuscitating Donald. But if Donald could be effectively ventilated (providing adequate air exchange in and out of the lungs of a patient whose breathing has ceased) and receive effective external chest compression (for the purpose of circulating blood in a patient whose heart has stopped beating) for a period not to exceed thirty to sixty seconds before all energies were di-

rected toward him, the delay should not entail great additional risk. The small increase in risk to Donald must be balanced against the alternative, which would be to withhold all chances of survival from George. Would that conscientious decision making were as simple as ". . . first come, first served!"

COMMENTARY

Margaret Battin

To consider what would have been the right course of action for the crash cart team leader, let us look at two aspects of the case: first, the distributive principles to which one might appeal in order to honor fundamental moral commitments, and second, the procedural strategies one might use to put them into practice.

Of the many possible principles, at least three are plausible in this case:

Better prognosis. "When both cannot live, treat the one with the better prognosis." This principle, similar to that used in military triage, would clearly have preferred Donald. It reflects a moral commitment to maximizing the preservation of life. It should be applied only where the disparity between prognoses of competitors for treatment is relatively great: it will decide between two individuals when only one is likely to survive if treated, but it will not decide cases where the disparity is uncertain or small (for instance, which patient will receive a kidney, if one's recovery would probably take five weeks and the other's six). This principle can be applied without reference to George's retardation: if the medical history of arrests had been reversed, he would have been preferred.

Social worth. "When both cannot live, prefer the one who has greater value for other persons." This principle, although often attacked as inviting racism, sexism, and bias against the elderly, retarded, and mentally ill, may also be understood without bias: it prefers the person whose continuing life is of greater importance to others. This need not automatically mean Donald. Though George was seriously retarded, he might have contributed significantly to the life of the patients and staff of the ward; conversely, though Donald had prominent public status, he might have been a vicious abuser of relationships with his wife, children, and associates. However, we have no evidence for any such claims, and it is highly likely that Donald had greater value for other persons. Like "better prognosis," this principle is also to be applied only where the disparity between competitors is great; it will not decide, for instance, between saving the parent of two children and the parent of three. Correctly applied, it reflects a fundamental moral commitment to protecting important human relationships.

First come, first served. "When both cannot live, treat the one who is presented for treatment first." This principle, which the leader of the team chose to follow, is blind to the particular characteristics of competing individuals; since George's arrest occurred first he is to be saved, but it could have hap-

pened the other way around. Insofar as the principle is neutral to persons, it is similar to random selection, and seems to reflect a moral commitment to the equality of all.

We might praise the team leader's choice as reflecting a primary commitment to the equality of persons. But is this what the team leader's choice really shows? Note that both the other principles—"better prognosis" and "social worth"—would have required the team leader to make a comparative judgment about the conditions and circumstances of Donald and George. But the person-neutral "first come, first served" principle requires no background information about the competitors, presupposes no disparity except time of presentation for treatment, and will decide every hard-choice case except genuinely simultaneous ones. Did the team leader's choice (and do "first come" institutional policies) actually reflect a commitment to human equality, or the fact that this distributive principle is easier to apply? The fact that every member of the team "hesitated" before treating George suggests that other bases for decision were evident to all; is it sheer convenience that gives priority to this one?

Because non-neutral principles require judgments about conditions and circumstances, they are subject to bias when the disparities between competitors are small. Between Donald and George, however, the disparities in prognosis and social worth were very great; hence, bias would have been much less likely to arise.

To say that medicine might well pay greater attention to non-neutral distributive principles is not to deny that there will be disagreements over these principles, or occasions when relevant information is not available, or cases in which there are multiple disparities, some of which favor one competitor and some the other. But these are the hard cases. The case of Donald and George is *not* a hard case: both non-neutral principles could have been applied and would have favored Donald over George. Only a two-minute disparity in time of presentation favored George; a genuinely neutral principle would have permitted treatment of either one. In hard cases, retreat to neutral distributive principles cannot be avoided, but in this case the team retreated too soon. The society that resorts to easy strategies even before the choices become hard may fail to honor the fundamental moral commitments it makes.