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ETHICS CASE

The High-Value Care Considerations of Inpatient versus Outpatient Testing

Commentary by Josué A. Zapata, MD, and Christopher Moriates, MD

Dr. Cordova is a hospitalist at a busy New York City hospital. One Thursday morning she admits Mr. Finlay, a 64-year-old man with a history of coronary artery disease and myocardial infarction with a significant cough. His chest x-ray shows a pulmonary infiltrate, and he is treated for community-acquired pneumonia with intravenous antibiotics.

Dr. Cordova plans to discharge Mr. Finlay as soon as he was breathing well on room air. On Friday morning, however, she receives a call from Mr. Finlay's cardiologist, saying that Mr. Finlay is due for a repeat stress test and repeat echocardiogram and asking her to order them during Mr. Finlay's admission. The cardiologist explains that Mr. Finlay lives alone in Brooklyn without strong family or social support. It is difficult for him to travel to and from the hospital to get these tests done on an outpatient basis. Furthermore, he does not keep all his appointments because of the financial constraints of travel and because public transportation is challenging, so performing these tests while he is in the hospital might help ensure that they happen.

The stress test and echocardiogram cannot be scheduled until Monday or Tuesday of the following week. Keeping Mr. Finlay in the hospital for additional days puts him at risk of hospital-acquired infections and hospital-associated disability and delirium. Additionally, in the back of her mind, Dr. Cordova also knows that some of her salary, as well as general advancement in the department, depends on metrics such as keeping patients' length of stay to a minimum.

All things considered, Dr. Cordova feels that keeping Mr. Finlay in the hospital, awaiting repeat testing which could be done on an outpatient basis, would not be the best use of hospital and health care resources, so she discharges the patient.

Commentary

This case reflects a common tension experienced by virtually all well-meaning and value-conscious clinicians practicing in an inpatient setting. Providing this patient with an echocardiogram and stress test in the inpatient setting (for the sake of this discussion, we will assume that these tests are indicated) may delay or affect diagnosis and treatment for other patients who are awaiting these tests or perhaps boarding in the emergency department awaiting a hospital bed. Furthermore, in addition to the

uncertainty about the patient's best interest, this physician has a direct conflict of interest, in that she benefits both professionally and financially from limiting his length of stay. While it is clear that personal incentives should definitely not play a role in medical decisions, is it reasonable to expect physicians to consider costs to others and to society while caring for individual patients?

An Ethical Basis for Considering Value

In the same way that conventional frameworks help us deal with common clinical complaints, a well-established set of principles forms the core of modern Western medical ethics: respect for patient autonomy, beneficence, nonmaleficence, and justice. In practice, these ethical principles often conflict with each other, and balancing them is necessary for ethical decision making. We will examine the case in light of these principles and the concept of value, which is commonly defined as quality of care divided by overall costs.

Respect for patient autonomy. In this case, one could propose prioritizing respect for the patient's autonomy by allowing Mr. Finlay to decide whether he would prefer to have these tests done while he is in the hospital or whether he would rather return and have them done as an outpatient. Although the scenario reports that he lives alone and has difficulty returning for tests and visits, he still might in fact prefer not to spend an extra weekend in the hospital. Engaging Mr. Finlay in discussion of the potential benefits and harms of these different options and allowing him to choose could maximize his autonomy. Shared decision making can be an important strategy for ensuring ethical and high-value care decisions when there is not one clearly superior treatment option, since achieving greater alignment of care with patients' values has the potential to improve patient understanding and satisfaction, result in better outcomes, and reduce unwarranted variation in care and costs [1, 2]. However, in this case, prioritizing the patient's preferences may conflict with other important interests, including stewardship of limited health resources and nonmaleficence.

Beneficence and nonmaleficence. Beneficence, or the obligation of the physician to act in the best interest of the patient, suggests that the physician has a duty to make decisions based solely on the benefit to the single individual without consideration of other interests, including societal interests. The American Medical Association (AMA) specifically warns that physicians' "first duty must be to the individual patient. This obligation must override considerations of the reimbursement mechanism" [3]. In this case, Dr. Cordova could argue that her fiduciary duty to Mr. Finlay is to be his unwavering advocate and act exclusively in his best interest. Indeed, she may agree that, although every health care system needs a method for limiting health care overuse, to respect the fundamental principle of beneficence she cannot be expected to simultaneously consider both the interests of the health system (high-value care) and those of her patient (access). She may decide to order the echocardiogram and stress tests while Mr. Finley is

in the hospital because she believes that they will help Mr. Finlay, even if she also believes this may not be the most efficient use of hospital resources.

On the other hand, considering the case from a nonmaleficence (or the classic "first do no harm") perspective, Dr. Cordova may decide that keeping Mr. Finlay in the hospital for a nonurgent diagnostic workup would expose him to unnecessary risks (e.g., infection and delirium) that do not outweigh the benefits. According to a large study by the Centers for Disease Control and Prevention, nearly 650,000 hospitalized patients each year develop a hospital-acquired infection [4], and other studies indicate that delirium occurs in up to one of every five noncritically ill hospitalized adults [5, 6], resulting in serious harms, including increased mortality [7]. Additionally, while the intricacies of inpatient billing are extremely complex and beyond the scope of this commentary, some privately insured patients are responsible for significant co-pays and co-insurance; in a 2007 study, 62 percent of personal bankruptcies were due to medical expenses, and hospital bills were the largest single out-of-pocket expense for nearly half of medical debtors [8]. Thus, Dr. Cordova may be concerned about exposing Mr. Finlay to possible "financial harm" [9] with a longer stay.

Justice. The principle of justice in medical ethics refers to a fair and equitable distribution of health resources. One part of seeking justice is promoting the fiscal sustainability of the health system for the greater good of society, which is where value comes into play. The medical professionalism charter endorsed by the American Board of Internal Medicine (ABIM) Foundation, the American College of Physicians (ACP)-American Society of Internal Medicine Foundation, and the European Federation of Internal Medicine states that "While meeting the needs of individual patients, physicians are required to provide health care that is based on the wise and cost-effective management of limited clinical resources" [10]. In addition, the ACP calls for physicians to "choose interventions and care settings that maximize benefits, minimize harms, and reduce costs" [11]. To comply with this principle, Dr. Cordova must consider whether the benefit to Mr. Finlay warrants occupying a hospital bed and a slot with an echocardiographer and a cardiologist in the stress lab, which may mean that another patient (perhaps even a patient who needs these tests more) has delayed or reduced access to such services. Moreover, performing these tests in the inpatient setting may be more expensive, adding to overall health care system expenses. Considering this case from the standpoint of social justice, Dr. Cordova should not offer a prolonged hospital stay for these nonurgent tests to be performed.

Beyond Low-Hanging Fruit—When Patient and Societal Interests May Not Be Congruent

We can illustrate the potential conflicts between beneficence and justice (which subsumes value) and help clinicians understand how to consider value ethically by classifying tests and treatments according to whether or not they are good for the

patient and whether or not they are good for society [12]. If an intervention is good for both (e.g., vaccination programs, prenatal screening), it is easy to decide to perform it. If a test or procedure is bad for both (e.g., screening mammography or colonoscopy for an 85-year-old patient with stage-IV cancer), then the decision is similarly straightforward. The conflict arises when patients' and society's interests are not aligned, resulting in a situation in which something is good for the patient but bad for society as a whole, or bad for the patient but good for society as a whole. When either of these situations occurs it becomes necessary to weigh the values of beneficence and justice simultaneously and attempt to arrive at an ethically acceptable balance.

In this case, performing the tests in the hospital—assuming they are necessary and will help Mr. Finlay—is good for his health and will save him money and difficulty but will generate additional expense and potentially disadvantage other patients who need the same services, thus possibly making it detrimental to other individuals and society as a whole. Consequently, Dr. Cordova must decide between a tragedy of the commons, in which she places the interest of Mr. Finlay above that of the need to safeguard health resources, and the bitter pill for the patient, in which Mr. Finlay subordinates his personal needs for the overall benefit of the public. Indeed, all clinicians are implicitly forced to make these calculations routinely, whether they view them as an ethical conundrum or not.

What's the Right Thing To Do?

Ultimately, Dr. Cordova elected to discharge Mr. Finlay without providing the tests. In making her choice, she considered Mr. Finlay's best interest, thought about how to minimize harm to him, and reflected on the overall needs of the health care system—for cost-effective care, in this case—and alternative costs to other patients. After deliberation, she felt that the benefit to the individual patient did not outweigh the overall harm done to the health care system and other patients.

Although not every medical decision should value justice above beneficence, these types of complex ethical challenges deserve a clear and explicit process similar to what we have described above to serve both the interests of the patient and society. By taking the time to thoughtfully navigate these clashing ethical principles, Dr. Cordova performed her professional duty as a physician.

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