The value of cancer care has emerged at the center of a national discourse on fiscal responsibility and resource allocation. At the current rate of growth, 20% of the gross national product will consist of health-related expenditures by the middle of this decade. Although spending on cancer care currently comprises only 5% of the overall health care budget, these costs are rising at a more steady pace than any other area of health care. National cancer expenditures are projected to increase from $125 billion in 2010 to $173 billion in 2020. Some reasons for these rising costs include the increasing number of expensive targeted therapies and diagnostic imaging modalities.

As we struggle to address this unsustainable rise in cancer expenditures, oncology providers are forced to examine practice patterns and their contributions to the overall health care cost burden. The American Society for Clinical Oncology (ASCO) identified the top ten areas for change in current oncology practice. These two “Top Five” lists comprise ASCO’s contribution to the Choosing Wisely campaign and identifies tests, procedures, and treatments whose use is not supported by available evidence. Although this initiative represents a substantial preliminary effort, the scope of the problem is more complex. In oncology, the real and practical problem arises when there are not enough funds to pay for all treatments and tests supported by evidence. Even among all available evidence-based, approved treatment options, some are extremely costly and could lead to the deprivation of some patients of access to effective medications anticancer therapies.

A fundamental issue that underlies the struggle within the oncology community is that there is no consensus about what defines value in cancer care. One definition of value is that the benefits in expected life extension and improved quality of life are obtained at a reasonable cost comparable with other typically funded treatments and at a reasonable cost per quality-adjusted life year. This definition essentially uses cost effectiveness as a standard to compare cancer treatments for health benefits gained per unit of resources expended. However, defining what constitutes valued cancer care, particularly in the United States, is difficult for many reasons. One of these reasons is an ethical one; the professional norm is that the first and foremost responsibility of oncologists is to do what is best for their patients. This norm is eroding in the face of the ever-increasing growth of health care costs, but it still influences the practice of many oncologists.

These issues add to the complexity of decisions that oncologists face daily at the level of the individual patient, often without a defined algorithm to guide the process. For example, in the case of HER2-overexpressing breast cancer, evidence shows that additional HER2-based therapies given with trastuzumab, such as lapatinib and pertuzumab, improve outcomes. Ado-trastuzumab emtansine has also been approved for the treatment of metastatic HER2-positive breast cancer and clinical trials in the early-stage setting are under way. The cost of ado-trastuzumab-emtansine is approximately $9,800 per month of treatment, for an additional 5.8 months of life in patients with metastatic disease. If additional benefit of these drugs is confirmed in large, adjuvant randomized trials, one can imagine a scenario in which we are forced to decide whether we can afford to attain a certain improvement at the cost of doubling or tripling the
expense of therapy. As we enter into an era of bundled payments, oncologists will be faced with additional dilemmas complicating their treatment choices for such patients.

As oncologists, we find ourselves asking “is our duty to our individual patients, to society, or both?” How will we do our part to contain health care costs while honoring our therapeutic contracts and our professional obligation to do our best for each patient? How will the increasing pressure to curb expenditures affect the way we communicate with patients about tests and treatments?

OUR DUTY TO OUR PATIENTS

The traditional notion that medicine is an art as well as a science rests on the complexities inherent in applying universal scientific knowledge (what is true—other things being equal—about all human beings or what is known about the distribution of variations within a population of human beings) to individual patients. As Aristotle succinctly said, the doctor does not treat human beings in general, but “Callias or Socrates, or someone else” who is sick.16 Medicine, as a science, studies and learns about universals and populations. Medicine, as an art, is practiced by and for individuals. Those who are experts in both the science and the art are called professionals. Traditionally, this fundamental understanding of the nature of medical practice has undergirded a professional ethic that is patient centered. Whether based on a paternalistic understanding of the patient’s good or a conception of the good of the patient or a conception of the good of the patient as he or she autonomously defines it, the goal of the clinical encounter is to promote the good of the individual patient.

As an art, in this sense, medicine is also practical. Like any other positive moral precept, there have always been practical limits to what one is required to do to assist patients. Some of these are the limits of medical science. One cannot cure an individual patient of a disease which one lacks any understanding of the nature of its cause or therapy. Likewise, the care of patients is limited by resources. Physicians in developing countries might read in textbooks about trastuzumab but may not have access to the drug to use it for their patients. And yet, patients in those countries ought to still be able to trust that their physicians will do their best for them in light of the available resources. Questions of justice might arise regarding the unequal distribution of medical resources across the globe, but such questions are not answered in the immediacy of the bedside encounter with the individual patient in a particular society.

Professional ethics has demurred for millennia from the notion that medicine is a market commodity.17 Economists have noted that it does not fit standard market assumptions, because of the significant externalities (such as vaccines), lack of fungible nature (e.g., the absurdity of exchanging a diamond ring for an emergency bypass), and relative price inelasticity. Given the necessity of health for access to so many other goods, many economists have suggested that it is better thought of as a public good. The fact that patients volunteer to be research subjects or allow medical students to learn from them is based on the notion that they are contributing to a public good. Public support for medical education and research reinforces this conception. No one “owns” health care. The existential situation of sickness demands that patients be able to trust that their doctors are applying this public good for their individual benefit, not the physician’s personal financial benefit or the good of society at large. Practicing medicine is different from selling shoes. No one will wake up tomorrow suddenly in need of $100,000 worth of shoes; however, any of us could wake up tomorrow suddenly needing $100,000 worth of health care. The true value of health care is not measured in dollars, but in the priceless dignity of the persons that medicine serves.

Rising health care costs now threaten to crowd out other social goods. One of the great questions western societies face is how to control health care costs without undermining the professional ethic on which individual patients must rely. In well-balanced democratic societies, professions, markets, and the state maintain independence from each other and provide effective checks and balances. Pure markets in health care are intolerable, irrational, and detrimental to good social order. Attempts to tweak the health care system to make it behave more like a market commodity are the product of a blind faith in markets and a heedless disregard for the law of unintended consequences. Calls for physicians to engage in bedside rationing are equally misguided. Such calls undermine trust, disrupt the balance between profession, market, and state, and are likely to be idiosyncratic and unjust to individual patients. These are the schemes of those who dream of societies with systems so perfect that no one will need to be good.

Rather, society can require a two-track approach to cost control.18 First, as professionals, physicians should practice the art with greater wisdom, striving for “therapeutic parsimony and diagnostic elegance” in their bedside decision making.19 This ideal in practice would be undertaken in the interests of patients, for whom iatrogenic illness and unnecessary cost and inconvenience are harms, not benefits. Likewise, remembering the difference between the art and the science of medicine, physicians should renew their understanding of the difference between statistical significance and

KEY POINTS

- Value of cancer care is at the center of national discourse on fiscal responsibility and resource allocation.
- Cancer expenditures are rising at an unsustainable rate.
- Oncology providers are faced with balancing their duties to individual patients and to society.
- Oncology providers can do their part to contain health care costs.
- Physicians should maintain their professional ethics as they work to tackle the problem of rising health care costs.
clinical importance. Cost containment would be a happy by-product of such thinking, even if not its primary aim. Second, our society must engage in a messy and uncomfortable, but absolutely necessary, political conversation about how much health care we can afford and how to distribute access to health care justly. It is not for physicians alone to decide idiosyncratically at the bedside what tests or treatments to ration, but for all of us to decide as a society. This should be governed by the precepts of deliberative democracy in a respectful, transparent, and widely participatory fashion. The role of physicians in such an approach would be to participate fully in this political process as informed members of society with expertise to share, and then to advocate for individual patients within the boundaries set by this political process, to the full extent professional ethics requires of them. Physicians would thus have an important role in the political process, but would act in the interests of individual patients in their individual clinical encounters within the practical limits established by society. Physicians should not be agents of the state or the market, but should maintain their professional ethics as they work with their fellow citizens to tackle the problem of rising health care costs.

OUR DUTY TO SOCIETY

Although the physician’s moral duty to the patient is paramount in any individual clinical encounter, physicians also have duties to the broader society whom they serve through their privileged professional role. Physicians’ specialized knowledge and skills are the direct product of public funding of graduate medical education and the hands-on education afforded to them by a general public that allows trainees to participate in patient care. In turn, physicians gain an obligation, as members of a uniquely privileged profession, to serve not only their individual patients, but also society more broadly.

Considerable research has established that the health of a population is influenced not only by medical treatment but also by access to education, social services, and a host of other activities that may be alternative uses of a fixed gross domestic product. To the extent that costly medical treatments have caused health care costs to spiral upward and crowd out other essential spending, physicians can ill afford to ignore all considerations of cost and simply serve their individual patients. Of note, the question is not whether resource allocation (or rationing) occurs in our society. Resources are finite, and therefore allocation certainly occurs; the question is simply how. Physicians owe it to society to help ensure that resources are allocated in a way that is congruent with broader moral intuitions, as well as to reduce waste to maximize the value of our interventions.

Given the difficulties with which bedside rationing by physicians is fraught, physician stewardship of society’s scarce resources may best be accomplished at the societal, rather than individual, level. Although it is possible that some of the tradeoffs that exist are tragic choices that may be difficult for society to confront openly, physicians must play a role in calling attention to general areas of wasteful spending in health care and in developing solutions to improve efficiency. Physicians must lead the way in developing a robust evidence base for the assessment of value, including studies to identify situations of overdiagnosis and overtreatment in health care. Physicians must also encourage the development of transparent participatory processes by which the broader public can deliberate over priorities and guide resource allocation decisions so that they are not made in an ad hoc fashion at the individual patient level. For example, in the United Kingdom, physicians can contribute to this mission by serving on committees and guideline development groups of the National Institute for Health and Care Excellence (formerly the National Institute for Clinical Excellence), which was originally established in 1999 to reduce variability in care in the British National Health Service.

Recently in the United States, professional organizations have initiated a Choosing Wisely campaign that has identified certain practices that may represent wasteful use of finite societal resources. ASCO was one of the first nine medical societies to join this campaign and has now issued two lists of “top five” opportunities to improve the quality and value of cancer care. The 2013 list includes advice against the use antiemetic drugs intended for use with a regimen that has a high risk of causing nausea and vomiting to those patients receiving regimens with lower risks of causing these side effects. It also advises using single-agent chemotherapy for metastatic breast cancer unless tumor-related symptoms require rapid response. It recommends against monitoring with PET and PET-CT scans in asymptomatic patients, unless high-level evidence suggest that such imaging would change outcome. It discourages prostate-specific antigen testing in asymptomatic men with a life expectancy of less than 10 years. Finally, it advocates against using targeted therapies unless tumor cells have a biomarker that predicts for response. ASCO’s Choosing Wisely list concludes: “These test and treatment options should not be administered unless the physician and patient have carefully considered if their use is appropriate in the individual case.” Thus, Choosing Wisely is an example of physicians fulfilling their duty to society while also respecting their duties to individual patients.

Also of relevance to oncology practitioners are the Choosing Wisely recommendations of subspecialty organizations such as the American Society for Radiation Oncology (ASTRO), which has developed guidelines for the practice of radiotherapy. For example, ASTRO’s Choosing Wisely campaign has considered a large Canadian trial that has established the equivalent safety and efficacy of a hypofractionated course of 16 fractions of adjuvant radiotherapy in the postlumpectomy setting when compared to a more traditionally fractionated course of 25 fractions. Of course, not all patients are clinically appropriate candidates for such an approach. For example, a patient’s large body habitus might compromise the ability to attain a homogeneous radiation
dose distribution and increase the potential risks of a hypofractionated approach. Nevertheless, in many cases, hypofractionation is both less costly to society and less burdensome to patients, although it does result in lower reimbursement. In such situations in which strong evidence exists to suggest that clinical benefit is uncompromised by a more efficient approach to treatment, physicians do have a duty to consider cost. ASTRO’s Choosing Wisely campaign suggests that physicians at least consider hypofractionation when initiating whole breast radiotherapy in the setting of breast conservation in women age 50 and older. Just as with ASCO’s Choosing Wisely campaign, this seems to be a reasonable approach toward engaging practicing physicians in optimizing the value of health care for the broader society we serve.

CONCLUSION

The debate over the value of cancer care will only become more challenging as the costs of health care continue to rise. The mandate for demonstrating value in the care we provide has been established, and the oncology community needs to make practical determinations on how to define value. These ethical dilemmas represent our struggle to maintain high, evidence-based clinical standards while delivering efficient and effective care to the maximum number of patients. The oncology community must continue to examine our delivery of care by advocating for our individual patients, then to our practice environment, and finally to society at large. We are obligated to better understand the issues regarding value of cancer care and work with other stakeholders to be a part of the solution and not be seen as part of the problem.

Disclosures of Potential Conflicts of Interest

Relationships are considered self-held and compensated unless otherwise noted. Relationships marked “L” indicate leadership positions. Relationships marked “I” are those held by an immediate family member; those marked “B” are held by the author and an immediate family member. Relationships marked “U” are uncompensated.


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21. AUTHOR TO PROVIDE NEW REFERENCE.