



Some Ethical Considerations in the Cost of Cancer Care



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Cost of Cancer Care

Objectives

Explore ethical considerations in considering the cost of cancer care.

Understand the ethical underpinnings of patient demand for high cost care.

According to the Centers for Medicare and Medicaid Services, national health expenditures as a percentage of the U.S. gross domestic product (GDP) totaled 5% in 1965, but are expected to total 20% of GDP by the middle of this decade.

Although spending on cancer care comprises only 5% of the overall health care budget, these costs continue to rise at a pace more rapid than any other area of health care. National cancer expenditures are projected to increase from \$125 billion in 2010 to \$173 billion in 2020.

(1)

Health-care expenditures in the United States reached \$2.6 trillion in 2010—more than 10 times the \$256 billion spent in 1980, and growing faster than the national income.

- This combined with reduced reimbursement for costly treatments and procedures by insurance companies, shifting more of those costs to consumers, is leading to the inevitable question: When evaluating cost vs benefit, how much is a little more time worth?(2)

Why are Costs so High?

1. increasing number of expensive targeted therapies are adopted as standards of care.
 - the average cost of treating common cancers is rising rapidly, with drugs accounting for approximately 40% of the overall cost of cancer care (3).
2. increasing use of diagnostic imaging.
 - Significant annual increases in imaging have occurred across all major cancer types, and imaging costs have been rising at a faster rate than average total costs of care (3).
 - As a result patients are shouldering an increasing proportion of the health care cost burden, often placing them under significant financial stress. Treatment-related costs have been shown to significantly increase financial burden among underinsured patients (3).

Contributing factors:

Patents and monopolies that enable pharma companies to set drug prices

Medicare (the biggest purchaser) cannot negotiate prices; most insurance companies follow Medicare's lead

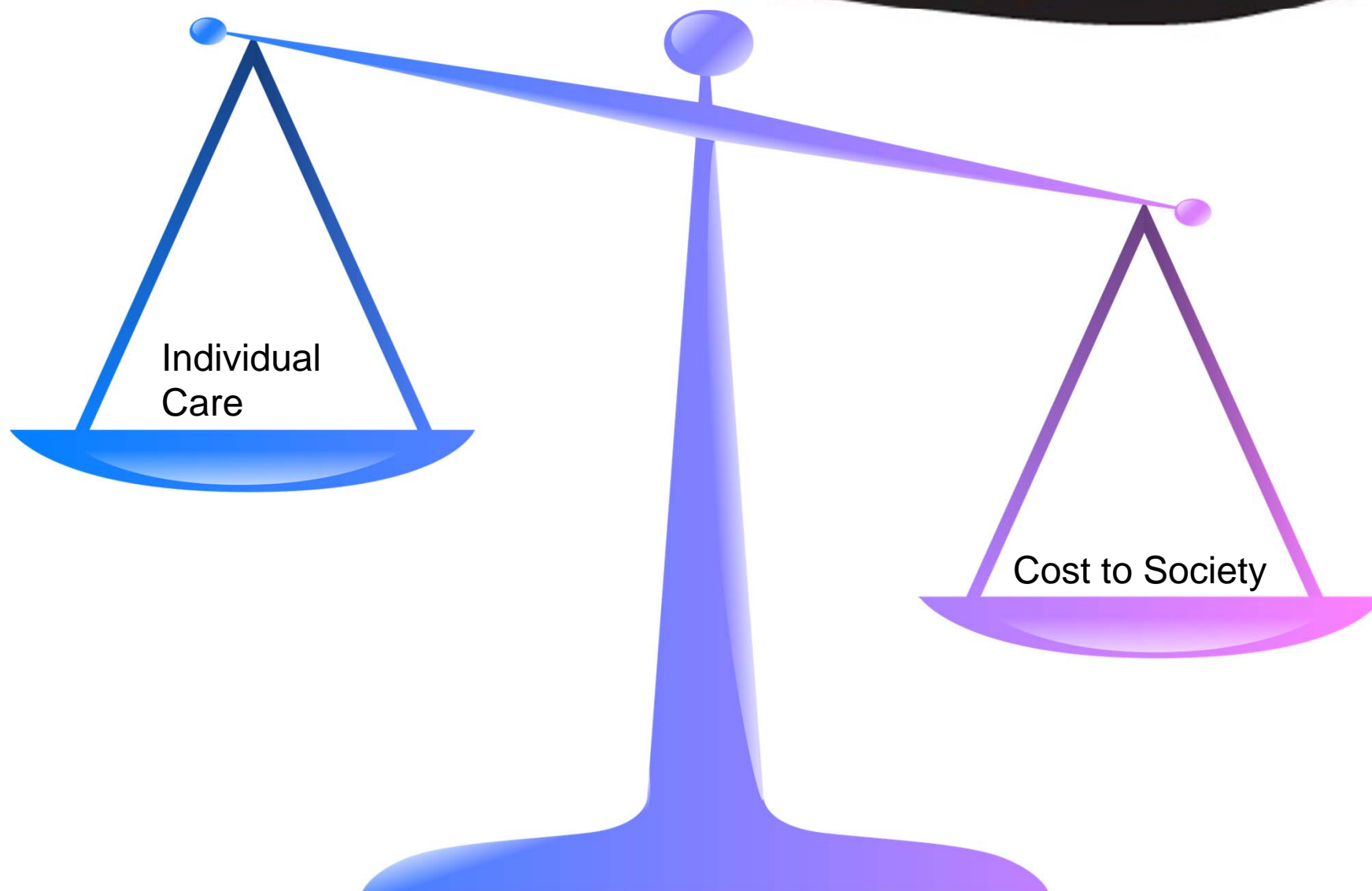
Insured population concerned with out of pocket expenses – so little incentive at this point to reject care that is not cost effective.

Horror stories

- difficulties faced by those who lack health insurance or go bankrupt due to large co-pays.
- Oncology nurse of 30 years – diagnosed with 3rd cancer just prior to losing her job/insurance due to her illness
 - Lost nearly everything she owned, cost of chemo was over 10K per month (1).



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- There is not enough funds to pay for all treatments/tests for all patients
- Effectiveness of treatments.
 - We have treatments/diagnostics that are costly but have slight evidence to support their use

We may be forced to prioritize the use of expensive interventions, even where those treatments have evidence-based effectiveness.

- May serve to deprive some patients access to approved medications or procedures.

Need to be critical of the added value of each test or treatment in order to arrive at an equitable basis for decision-making in oncology(1).

Table 1. Choosing Wisely: Five Things Patients and Physicians Should Question [8]

ASCO: The Top Five List

1. Don't use cancer-directed therapy for patients with solid tumors and the following characteristics:
 - Low performance status (ECOG 3 or 4).
 - No benefit from prior evidence-based interventions.
 - Not eligible for a clinical trial.
 - No strong evidence supporting the clinical value of further anticancer treatment.
2. Don't perform PET/CT, and radionuclide bone scans in the staging of early prostate cancer at low risk for metastasis.
3. Don't perform PET/CT, and radionuclide bone scans in the staging of early breast cancer at low risk for metastasis.
4. Don't perform surveillance testing (biomarkers) or imaging (PET/CT, and radionuclide bone scans) for asymptomatic individuals who have been treated for breast cancer with curative intent.
5. Don't use colony stimulating factors for primary prevention of febrile neutropenia for patients with less than 20% risk for this complication.

Adapted from Choosing Wisely, An initiative of the ABIM Foundation (<http://www.choosingwisely.org/doctor-patient-lists/american-society-of-clinical-oncology/>).
Abbreviations: CT, computed tomography; ECOG, Eastern Cooperative Oncology Group; PET, positron emission tomography.

Weighing the individual treatment/testing options vs cost to society brings to the forefront ethical considerations.

- What is our duty to our individual patients, to society, or to both?
- How will we do our part to contain health care costs while honoring therapeutic contracts and professional obligations to do the best for each patient?
- How will the increasing pressure to curb expenditures affect the way that oncologists communicate with patients about tests and treatments?(1)

- New therapies that provide marginal benefit but at extremely high cost

E.g. Woman with HER2+ breast cancer

- Data has shown that therapies given with trastuzumab may further improve outcomes
 - Trastuzumab-DM1 recently approved; if benefit is confirmed in clinical trials - will we have to decide between further improving clinical outcome and the cost of almost 10,000 per month of treatment (for an additional 5 – 6 months of life.) (1)

How will we decide what to use and who to treat?

E.g. 2: Patient with non-small cell lung cancer

- 18 weeks of cetuximab treatment
 - extends life by 1.2 months
 - costs an average of \$80,000
- Extrapolate that: it would cost \$800,000 to prolong the life of one patient by 1 year (\$80,000 X ~12 months)
 - “It would cost \$440 billion annually, an amount 100 times NCI's budget, to extend the lives of 550,000 Americans who die of cancer annually by 1 year”.(3)

Who will decide?

- Oncologist?
- Team of health care professionals?
- Ethics committees?
- Will patient have a say?
 - What role, if any, will patient preference have?
 - Will these options only be available to the rich?
 - There is some data that show patients with cancer want to discuss cost with the oncologist.

What will be the impact of the Affordable Care Act? Other government interventions?

- What is our obligation to assist in the avoidance of catastrophic financial burden to an individual patient?
- Will government financial incentives to ACO's (to reduce spending, unnecessary testing) eliminate patient choice?
- Should eliminating off-label use of drugs be the policy?

86 year-old man with acute myelogenous leukemia

- the literature indicates that currently available therapy cannot be recommended for those 80+
 - Do you offer expensive chemotherapy?
 - Harms clear – loss of freedom and pleasure, high probability of pain, disability, and even death.
 - Patient wants the chemo. Patient sees no greater harm in the side effects, etc. of chemo than being dead within several weeks.
- What do you do?

Things to Consider

Providers should not feel compelled to provide care that is not rooted in medical evidence, even if the patient wants it.

- E.g.: requesting CT scans to try and detect metastasis before symptoms arise

Another question is *should we* be treating the elderly with expensive chemotherapy agents? (ageism)

- Again – who decides?

Are those with the worst health (those nearest death) truly those in the most urgent need for treatment?

– *Maybe not*–

Assume that giving chemo is equivalent to providing additional months or years of life. Who are the worst off with respect to months and years of life?



If you assume that the worst off are those who will have had the least life if they are not treated — it's not the elderly cancer patient but younger patients (4).

E.g.: Consider a 35-year-old patient B who will die in 4 months without a liver transplant. Patient B is worse off in the relevant sense because patient B will have had many fewer years of life if he or she doesn't get the transplant.

- So, does that mean the most urgent are not the worst off, and therefore, elderly-dying cancer patients do not deserve special priority for medical interventions? (4)

But, should life extension be the priority over other health needs?

There is a rule called “rule of rescue” (Jonsen, 1986) which is often applied.

It states that we are unwilling to let an identified person in peril die or suffer great harm when we could rescue that person, even if it may be very costly.

In an advanced cancer case, however, many expensive new drugs do not really rescue dying patients but only provide a small chance of life extension. This is not the type of benefit that the rule of rescue involves.(4)

To consider

To deny expensive chemo drugs to the elderly purely because of age is 'ageism', and is as difficult to justify as discrimination against any sub-group of society.

A resource allocation formula based on years of expected benefit certainly appears to disadvantage the elderly who place the same value on 'the rest of their lives' as younger patients, irrespective of that life's duration.

Alternatively, it could be argued that preferentially allocating resources to younger patients and successfully treating them would allow more to reach older ages.

However, if the risks of chemotherapy do increase substantially with age, then a medical decision based on the risk:benefit ratio may differ in older patients purely on that basis, and not because of age.

Medically

- Examine the likelihood of response to chemotherapy and survival benefit.
- Review the factors that may complicate chemotherapy in the elderly. These factors include the physiological changes accompanying ageing and the impact of comorbid diseases. Loss of organ function will affect cytotoxic drug metabolism. Changes in kidney or liver function or bone marrow reserve are particularly problematic when giving chemotherapy.

Does this come down then to Rationing?

Do we need a willingness not to cover very cost-marginal interventions, in particular, at the end of life?

- *How willing are we to restrict access to marginally beneficial cancer therapies because they are too costly for what they do?*
- It may not come easily or soon, and it will require major cultural changes in the thinking of those in health care, as well as the establishment of a national health care system to avoid the current variations in care (4).

Ethically

Ethically, maybe decisions about chemotherapy for elderly patients should be guided by a principle of non-maleficence: do no harm. This is usually interpreted as ensuring that the risk to benefit ratio is favorable.

The patient will expect to be allowed to make an autonomous decision about chemotherapy, but **will be reliant on accurate information** about the potential risks and benefits.

Can we use a formula for deciding?

For example: determine “the net benefit of the treatment in terms of the goals of the patient, accounting for the negative effects of the treatment across all patients and considering the cost of the treatment.

– This includes the value of having a treatment, the opportunity costs of forgoing other treatments or of closure, and potential alternative uses of health care resources.” (4)

Case 2

A 55-year-old woman is transferred to the intensive care unit (ICU) after complications following resection of brain metastasis from her non-small cell lung cancer.

- She is a lawyer. She married late in life and has a young daughter. She never smoked. The patient and her husband traveled 40 miles, bypassing numerous other large hospitals with cancer programs, to receive cancer care at a particular academic center (4).

Complicated post-operative course

- including intracerebral bleeding, a low blood platelet count, and deteriorating mental status on day 16 in the hospital.

The ICU team was concerned that the aggressiveness of her care might be inappropriate.

- On hospital days 28 and 32, she underwent neurosurgical procedures to drain cerebral fluid collections associated with the tumor.
- On hospital day 47, the patient's respiratory function worsened due to pulmonary infection and the ICU team was concerned that she would require mechanical ventilation.

- On hospital day 53, imaging showed further intracerebral tumor progression.
- On hospital day 58, the patient's condition was stable enough to begin erlotinib treatment by nasogastric tube.
- On hospital day 62, she had worsening clinical status, hypertension, and renal failure.

There is a tremendous pressure to rescue in clinical cancer care

- “innovative” or off-label use of chemotherapeutic agents is common. While erlotinib clearly showed a 2-month survival benefit and a 9 percent response rate for stage IIIB/IV non-small cell lung cancer (NSCLC) patients compared to less than 1 percent in the control arm, this patient did not fit the inclusion criteria for this trial.
 - The patient’s performance status was far too low, and she had symptomatic brain metastases. (4)

Cancer patients are willing to pay the price
(although they rarely pay all or even most of it)
to achieve a personal rescue.

- Seriously-ill patients with metastatic cancer are willing to accept a far greater burden for a small chance of benefit.
 - In one study, cancer patients were willing to withstand substantial side effects and risks for a 1 percent chance of cure, while physicians required a higher-probability of benefit (10 percent), and nurses and the general public required a higher probability still (50 percent). (3)

Numerous studies both in the United States and internationally have shown that patients sometimes want cancer treatment that clinicians might not be willing to accept for themselves due to high toxicities and low probability of benefit at the end of life.

Furthermore, while a patient's prognostic estimate and their desire for aggressive, life-sustaining treatment both decrease as the end of life nears, patients' prognostic estimates are *often unrealistically optimistic*

- *What responsibility do clinicians bear for these optimistic patient prognostic estimates? Many factors play a role: (1) oncologists tend to be optimists themselves, (2) prognostication is difficult, and (3) empathic discussions of prognosis, adverse health outcomes, and costs are difficult.*

Such discussions of prognosis infrequently happen in a timely manner, even though the evidence suggests that patients want this information and guidance in cancer care decisions.(3)

The tremendous demand for rescue at the end of life sets off a cascade of aggressive care, often without a discussion of prognosis or next steps for care or palliation in the event of clinical decline.

When this decline arrives, the health care system meets it with intensive care, organ support, and, not infrequently, undignified suffering prior to the patient's death, which leads to pathological bereavement, poor health care practitioner morale, and high costs.(4)

Goals of treatment

Need to be defined

- Need patient/family input
- The physician's role in guiding cancer care is far broader than selecting the right chemotherapeutic agents – it is to inform patients and surrogates about the course, risks, and benefits of treatment in an iterative, ongoing fashion.
- It is to discuss prognosis, if the patient is willing, and to provide continuity of guidance. (3)
 - This includes guiding patients to receive care that best meets their goals within the constraints of policy-level decisions, discussing cost, and disclosing potential conflicts of interest.

“Costs”

Involve more than

- cost of drug per patient
- cost of treatment on the bottom line costs of health care

Intangible costs to patient, family, society, caregivers

- The provision of unnecessary services not only exposes one's patients to avoidable harm and expense, but also diminishes the resources available for others”

Ethical Decision-Making & Control of Costs

Patient/Family needs to hear when the treatment should stop, that it would not help;

- not that there is something else that could or might be done.

Would this patient/family have selected not to have the brain surgery if it was unlikely to help?

Some Guidelines

1. No legal requirement to OFFER or provide treatments you believe are harmful or ineffective to the patient.
2. If a patient asks for futile treatment, do not just say “no”, engage in dialog and discuss goals and alternatives.
3. Convey that medical CARE is never futile –
 - Transitioning to Palliative Care
 - Sometimes prolonging life is not always in the best interest of the patient.

No easy answers

Cancer drugs clearly raise the issue of health vs cost in a way you don't find in other health care

- Should cost be a consideration?
 - Should it be a consideration only for therapies that deliver only a modest benefit?
- Other countries already consider this – “rationing”

The fact is, we already ration care:

- On ability to pay; kinds of insurance

The real question is how fairly is the care rationed?

- Denying access to care that is not really beneficial – might be ok.
- But what if the benefit is very small compared to very high cost? How do you ration this? some receive no benefit; some a negative benefit; and some an enhanced benefit.

Ethically

- Tailor to specific patient's wishes once the patient understands all the options and all the consequences – even the financial ones – “shared decision making”
- But what about the ethical dilemma of how to equitably allocate limited health-care resources so everyone benefits, not just those with the ability to pay for costly therapy (2).

Society needs to decide what the tradeoffs should be between the cost of the treatment and the benefit and how to distribute these equitably.

Some steps being taken – ASCO; Affordable Care Act, etc.

We are not there yet.

There is no method for assessing the true cost of a human life – especially when that life is yours or that of someone you love....

If we could answer the question of the financial value of a human life – then we might have an easier answer to how much should we spend to keep a person from dying.

"For the meaning of life differs from man to man, from day to day and from hour to hour. What matters, therefore, is not the meaning of life in general but rather the specific meaning of a person's life at a given moment." - Viktor Frankl

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