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Death and Taxes

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Tax incentives can provide a large financial impetus to change behavior. Current U.S. law establishes a substantial discontinuity in the amount of estate tax that many patients will have to pay in 2010: During this year only, the tax rate drops to zero. This article discusses concerns regarding the sharp change in tax rate and the

incentives it creates for persons who are nearing the end of life and provides estimates of the number of people affected by this issue.

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ax policies can be extremely powerful incentives to change behavior. Individuals and corporations alike will choose to limit expenditures that may be magnified because of levied taxes, and tax-free income deductions are used by state and federal governments to promote savings and philanthropy, with clearly demonstrable effect (1, 2). Decisions about health care are no exception to these forces-much of the rationale for a patient visit or prescription copayment is to limit unneeded care and change the behavior of patients through the assessment of small sums of money, and larger sums can have an even greater effect.

Under the current tax policy passed by the U.S. Congress in the early years of the Bush administration as part of the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA) (3), the top marginal rate of the estate tax was decreased from 49% in 2003 to 45% in 2009. The year-long repeal in the estate tax in 2010 means that all estates can be inherited tax-free without limit in that year. If no further legislation is passed, in 2011 the top marginal tax rate will return to 55%, as the provisions set by this law lapse or "sunset" (Table 1).

A few congressional bills have been proposed that would aim to enact permanent changes in the estate tax, with many calling for a permanent repeal. Despite passage in the House of Representatives, none have become law. Recently, H.R. 5970 (4), a bill which aimed to keep the estate tax in 2010 with a \$5 million exclusion, was approved in the House of Representatives but ultimately failed in 2006 because of the end of session of the 109th Congress. This proposed bill heavily modified the EGTRRA provisions and ultimately taxed large estates at a top marginal rate of 30%.

The discontinuity presented by the sudden adjustment of the tax at the start of the calendar year is concerning. Simply put, if a relative dies outside of an arbitrary period,

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Table 1. Tax I	Rate, Exception	Values, and	Estate	Tax Paid,	by
Year of Death					

Year of Death	Exception (Tax-Free) Amount, \$	Top Marginal Tax Rate, %	Tax Paid on \$5 Million Estate, \$	Tax Paid on \$10 Million Estate, \$
2008	2 000 000	45	1 350 000	3 600 000
2009	3 500 000	45	675 000	2 925 000
2010	0	0	0	0
2011	1 000 000	55	2 200 000	4 950 000

his or her heirs will receive a fraction of a potentially large sum of money. The current law creates a great incentive to assign a favorable date of death, with enormous forces of secondary gain.

Terminally ill patients may themselves agree to extreme measures to prolong their disease states if it results in larger sums funneling to their children or heirs rather than to the government. In late 2009, the goal of living until the start of 2010 may save the heirs a great deal of money, far more than the cost of care, even without medical insurance benefits.

As 2011 approaches, potential heirs will have large economic incentives to limit care that would prolong life past the new year. Equally problematic is the realization that a distressed patient may voluntarily trade prolongation of their life past the end of December 2010 for large financial implications for their kin. Whether these incentives are explicitly specified in wills or communicated to their power of attorney over the dinner table, they are clearly present and affect the ability of all involved parties to make unbiased decisions.

How significant a problem is this issue? Estimates of potentially affected persons can be obtained from life tables of monthly mortality from the National Center for Health Statistics in 2006 (5). Persons who are expected to die during a 6-month window at the end of the 2009 calendar year would be most amenable to artificial life-prolonging efforts, whereas those who are expected to die at the start of 2011 would be vulnerable to premature termination or cessation of care to prolong life. Thus, the number of deaths from July to December 2009 or from January to June 2011 could potentially be shifted. For estimation purposes, Table 2 shows monthly mortality data correspond-

Key Summary Points

Financial incentives provide an explicit or subconscious force to change behavior, including aggressiveness of health care consumption.

Current tax law creates a potential large financial incentive to assign the date of death as 2010 because of a complete repeal in the estate tax during this year.

Sharp changes in tax law or other policies at a specific time magnify these incentives.

Awareness of this issue can help physicians recognize underlying patient or family motives.

ing to these months for July 2006 to June 2007. To summarize, more than 2.4 million persons are expected to die in a period when they would be motivated to shift their death to 2010. With an estimated 9.3 million households of a net worth of \$1 million or more in 2006 (6) and a U.S. population of 300 million with a single head of household, approximately 37 000 individual estates would benefit from 6 fewer months of life, with resultant death in 2010. Because the \$3.5 million exception is in place in 2009 and one seventh of these persons would be affected by this higher cutoff (7), approximately 5000 estates would benefit from the extension of life at the end of 2009, with a total of 42 000 estates affected.

Historical trends support these estimates. Figures from the Congressional Budget Office demonstrate that in 2000, 52 000 people per year (8) died and paid estate tax beyond the \$1 million exception level; persons at this level would all benefit from timing their death to occur in 2010. For some persons, the amount of money saved would be substantial.

Table 2 shows calculations of total tax for a person with \$5 million and \$10 million in taxable estate. The

Table 2. Monthly Number of Deaths and Death Rate for the 2006-2007 Transition

Period	Deaths, n	Annualized Death Rate per 1000 Persons
July 2006	192 000	7.6
August 2006	193 000	7.6
September 2006	190 000	7.7
October 2006	200 000	7.9
November 2006	194 000	7.9
December 2006	214 000	8.4
January 2007	222 000	8.7
February 2007	204 000	8.9
March 2007	216 000	8.5
April 2007	203 000	8.2
May 2007	199 000	7.8
June 2007	188 000	7.6

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largest discontinuity is seen in the jump in tax liability after 2010; as taxable estates increase in size, the absolute tax rate of this group increases to more than half of the estate. The estate generally includes all property and assets of the person that are given to children after any charitable or allowed deductions.

The future of the estate tax policy is blurred by the results of recent elections and resultant long-term changes in economic vision. The law is likely to change, but possibly not before the scheduled reset in 2011. In addition, some proposed alterations of these policies also contain a large discontinuity in the tax rate, which raises the same concerns near the date of the sudden change. Nevertheless, other factors, such as avoidance practices (in which persons with large estates can legally or quasi-legally shelter sums of money), may act to mitigate the effect, as taxable assets and the difference in inheritance because of death timing are reduced.

Ethical difficulties for the primary or palliative care physician, long-term caregiver, or intensive care physician will probably be subtle and understated. In practice, a patient may request do-not-resuscitate or do-not-intubate status after an event occurring in 2010, whereas he or she might have previously opted for aggressive care. Another patient under long-term care may suddenly request aggressive measures, including intubation or dialysis, in late 2009, only to decline them early in the next year. Most commonly, families and individuals will make no obvious changes but have this awareness in the back of their minds, occasionally coming to the surface through humor or other remarks. It is difficult to assess how much, or how subtly, this would influence the family's medical decision making. Some evidence (9, 10) suggests that an elderly person's own mindset can alter their date of death from various causes by influencing their own health-related behavior or physiology in a subconscious fashion. This has been demonstrated in relation to an important event, as seen by a decrease in mortality rates before major Chinese holidays (9) or Passover (10). Other studies (11), however, have not found this phenomenon for deaths from cancer (11).

Physicians and caregivers should recognize these potentially imposing issues when dealing with end-of-life decisions. Although few care providers have formal training in dealing with this specific issue, ensuring that all parties involved are aware of potential conflicts of interest and that the wishes of the patient are truly governing care should be of paramount importance (12). The patient may be fully aware of influences of his or her decisions and wish to carry out these plans for their relatives. Knowledge of these factors when discussing end-of-life plans may also help the compassionate physician ensure his patients are aware of their own, and others', motivations.

I believe it is advisable to change the estate tax policy before 2010 to avoid this problem, which is a substantial health concern not only for the growing number

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of aging millionaires in the United States but for any person caring for a person with an estate. Both physicians and congressional lawmakers should be aware of the potential implications of current law, and if it is changed, this should be communicated as soon as possible to prevent initiation of measures designed for a financially advantageous death.

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