

Health Care Legislation: A Cautionary Tale of Unintended Consequences

The consequences of perturbing large, complex socioeconomic systems are not readily predictable. Currently, Congress and the Obama Administration are engaged in making decisions that affect the nation's health care system, which encompasses one-sixth of the entire US economy. As the nation hurtles forward, dodging toward and away from health reform, it is interesting to look back at prior health reform efforts for lessons learned and to use those insights to also look forward in time to try to predict areas that may be at risk.

Looking back, 5 major pieces of legislation and regulation come to mind: the original Medicare legislation, the "Stark" anti-self-referral laws, the Medicare Modernization Act of 1997, the Deficit Reduction Act of 2005, and the enactment of the diagnosis-related group (DRG) system in 1983. Each of these had remarkable unintended outcomes.

Medicare was never envisioned to become as large as it is now and certainly was never projected to become one of the largest components of the federal budget, threatening the nation with future bankruptcy if not somehow put in check. One such attempt, the Medicare Modernization Act, included the now infamous "sustainable growth rate" formula, which failed in its intended purpose from almost day one and now tortures providers and members of Congress on an annual basis. Its provisions are a Sword of Damocles hanging over the health system, undermining the morale of physicians and making them cynical toward the legislative process.

The Stark laws were intended to prevent abuses of self-referral but have instead been used to create an industry of self-referring physicians

that in many ways has spoiled the game for ethical providers by increasing the costs of imaging to unsustainable levels that are attracting intervention. The Stark laws have ironically created safe harbors for self-referral abuse.

The DRA's imaging provisions were touted as having a savings potential of \$2.8 billion over 5 years but actually resulted in cuts of \$1.8 billion in its first year, causing a substantial and disruptive decline in imaging equipment sales.

In some respects, the implementation of DRGs by Medicare is the most interesting story of all and probably the least recognized for its mischief. The idea behind the DRG concept was to shift from hospital-by-hospital cost reimbursement to standardized fixed payments for inpatient care. No one today questions the DRG system.

Under the pre-DRG cost reimbursement system, a substantial portion of the costs of hospital-based educational programs, such as schools of nursing and schools of radiologic technology, could be recovered from Medicare. After the DRG system was implemented, these costs could no longer be passed through to Medicare on the hospital cost report. These educational costs suddenly represented costs that came directly off the financial bottom line of the hospital. As a consequence, many hospitals that had run schools of nursing and radiologic technology shed these programs to reduce costs and improve their financial operating margins.

When I arrived at the Massachusetts General Hospital in 1988, I learned that the institution had terminated its radiologic technology

training program 2 years before in a cost-cutting move. The hospital could no longer obtain reimbursement for the associated costs after the implementation of DRGs. Other hospitals in the Boston region had done likewise. Technologist shortages rapidly developed. Massachusetts General Hospital's Department of Radiology experienced a 10% to 15% technologist vacancy rate in 1988. Similar shortages pertained for nursing both at the institution and within the region.

Massachusetts General Hospital and other regional institutions began competing with one another for an inadequate manpower pool in nursing and in many allied health categories, perpetually driving up costs of care by raising salaries in the futile attempt to get ahead of the market. No one had predicted any of this, a truly unintended consequences of implementing DRGs.

It is doubtful whether anyone knows if the nation saved or lost money by implementing DRGs, but clearly there have been substantial structural increases in labor costs built into the health system because of how hospitals responded to the DRG system. Hospitals have been lobbying ever since for increased reimbursement to help cover their increased labor costs.

In keeping with the foregoing observations, there are many issues touched on in the current health reform deliberations that have the potential for similar unintended consequences. For radiology, these include, among others, the attractiveness of radiology to future trainees, the attractiveness of the radiology market to commercial vendors, the venues in which radiology will be

practiced, the structure of radiology practices themselves and the way coverage policies for imaging services will be determined in the future.

The uncertainties caused by health reform initiatives in the mid-1990s caused a dramatic shift in the popularity of radiology as a career pathway. The job market tightened. New graduates of residencies found jobs but not always as attractive as anticipated. The word spread rapidly among medical students, and radiology experienced a cool-down in the number and quality of resident applicants. A similar environment exists again today, with current graduates scrambling for jobs. This is of concern because one of the things that has truly fueled the rise of radiology over the past 20 years has been the quality of people entering the field. Any counterforce to that resulting from health reform will have lasting negative effects.

Radiology has benefitted from having some of the leading companies in the world as major commercial vendors and partners to the specialty. These companies are responsible for bringing new imaging methods to market and making the benefits of creative new methods available to the public. If reimbursement for imaging is curtailed, especially for the technical component, the market for imaging equipment will decrease. This linkage is well established. The impact of the reductions in technical component reimbursement from the Deficit Reduction Act were dramatic and led to equally dramatic negative changes in equipment sales.

Without robust sales, companies will not have the resources or the interest to continue investing in new equipment to the same extent as in the past. This in turn will slow progress in radiology at a time

when imaging is truly transforming the way medicine is practiced. By seeking to reduce costs, policymakers may unintentionally slow medical progress to the detriment of quality and safety. For example, developments in CT offer the promise of markedly lower radiation exposures. Will the finances of the health system support this development?

The assault on the technical component of imaging services may also have a profound effect on how and where radiologists practice. This may be of little interest outside the field but is critical for the specialty. The bedrock of radiology through the years has been the hundreds of independent groups of radiologists who practice in both hospital and nonhospital venues. Current trends in Medicare reimbursement favor hospitals over imaging centers for no apparent benefit to the health system. Carried to its extreme, imaging centers will be less viable, and it will push imaging services back into hospitals, with obvious negative consequences for patient access, patient convenience, and the viability of free-standing radiology practices.

One of the policy issues in the health reform debate has been the redefinition of the roles of various advisory groups, such as the Medicare Payment Advisory Commission and the US Preventive Services Task Force (USPSTF). Right now, these groups are not in an official policymaking role but develop reports and provide opinions that others may or may not choose to use in policymaking and law making.

The recent report of the USPSTF on mammographic screening illustrates the potential risks of giving decision-making authority to a group working in isolation and beyond oversight authority. The

USPSTF, a group of people without any direct expertise in the area under consideration, ignored science and made a unilateral series of value judgments on behalf of the American people that were untested in the court of public opinion, a sort of scientific equivalent of jury nullification.

It is clear that on most issues that come before the Medicare Payment Advisory Commission or the USPSTF, there are two broad camps that typically have different points of view. They might be called the "theorists" and the "practitioners." The theorists are mostly health policy experts who joust with one another over ideas or models for health system design. The practitioners tend to be experts in diseases and conditions who take care of patients. In the end, it is the practitioners who are left to deal with patients. It is not surprising that they often lean toward earlier diagnosis and more preemptive care at the cost of more dollars spent because they will be the ones sitting with patients who have incurable cancers while having the knowledge that their patients' fates could have been prevented. The theorists are unburdened by any such unpleasant realities. The consequences of turning more authority over to people who are not at the "sharp end" of health care delivery are daunting to contemplate.

By the time this column is published, we may know the shape of health reform legislation, but we will not know the real consequences of health reform, if it passes, for years to come. Let us hope that the inevitable unintended consequences of the legislation can be overcome and dealt with in a reasonable manner. This has not always been the case.