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Letter from the Editor ... Are We Over Treated and Over Dosed by Our Health Care Industry?

by Gail M. Lawrence

There has been a lot of discussion about the high cost of health care, creating an impediment for the financing of universal health care. A lot of fingers get pointed at defensive medicine, the high cost of technology, exorbitant compensation for some physicians, high prices for drugs, excessive demand by health care consumers due to insurance and prescription drug advertising, and large bureaucratic overhead created in large part by the insurance industry.

Only rarely are questions raised regarding the medical necessity of treatment and the efficiency in delivering quality outcomes by our health care delivery system. That would mean second guessing the practices and judgments of our sometimes revered health care professionals. In reality, the best evidence-based practices are not always straight forward in an industry where medicine is sometimes as much art as science.

A couple of weeks ago, I was channel surfing and stumbled upon the CSPAN coverage of a book tour appearance by Shannon Brownlee, author of *Overtreated, Why Too Much Medicine Is Making Us Sicker and Poorer*. Brownlee, a widely published journalist, is a senior fellow at the New America Foundation in Washington, D.C. Her presentation was compelling as she explained the numerous sources and reasons for waste within the medical system.

I bought the book and I found it to be an eye-opening, captivating read. Brownlee tackles a girth of topics, punctuating her points with well-documented medical research, pertinent anecdotal stories and even a glimpse into the personalities and motivations of the various players within the industry.

I was a student of economics long before I became an actuary. Business is about maximizing profits and revenues and for the most part, medicine is big business. Exacerbating the situation is Roemer's law, a tenet of health economics that exhorts the notion of supply-induced demand when it comes to medical care. In the medical field of dreams, if you build it, patients will come.

In *Overtreated*, Brownlee explores the extraordinary differences in geographic costs. For example, in 1996, a Medicare patient in Miami, Fla. cost $8,414 per year as compared to $3,341 in Minneapolis, Minn. In other areas of the country, some medical practices have distinct high-cost signatures. Research indicates that much of the extra spending is for minor procedures, as well as, imaging and diagnostic tests ordered at the discretion of the physician.

High spending does not necessarily translate into better health. Brownlee argues that research has shown patients are more likely to die in high spending environment. Higher death rates are caused by complications from medical procedures, a greater chance of medical errors, and lack of coordination among caregivers creating new medical issues.

One of the most interesting chapters dealt with "our broken hearts." Two million Americans have a heart catheterization procedure each year, of which 800,000 are in the midst of a heart attack. That leaves 1.2 million elective procedures where Brownlee writes, "at least 160,000 are inappropriate meaning they should not have been done, according to cardiologists' own rules for when to put in a stent or do an angioplasty….The latest research…suggests that the vast majority of elective cardiac procedures are no more effective at preventing heart attacks and death than medical management, which involves giving patients drugs and counseling."

Bypass surgery reduces the chances of dying for only the sickest of the sick. While some outcomes are successful, many patients have significant surgical side effects including death or cognitive deficiencies from being on a heart-lung machine. (The last time I saw my family doctor, I recall he complained about the large number of

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his age 80+ patients undergoing heart procedures, where he said only one in three have a good outcome.)

Medicare reimbursement rates for heart procedures create profit centers within hospitals. It is not surprising there has been an influx of catheterization labs into this lucrative field with no shortage of patients. As classic example of supply-induced demand, researchers have found a strong correlation between high incidence rates of procedures and greater availability of services.

Medicine is always in search of "the desperate cure." If some chemotherapy is good, it only seems to reason that more chemotherapy must be better. Chapter five tells the story of Dr. William Peters, his advocacy of bone marrow transplants for the treatment of breast cancer, the quick uptake, and the legal battles with feminist overtones that ensued to get insurance companies to pay for this treatment.

After 10 years of clinical trials, researchers ultimately concluded that the short extension of life for some patients was offset by the mortality due to the treatment. While bone marrow transplants for breast cancer have been discredited, other treatments of unproven efficacy pervade the medical landscape, such as spinal fusion therapy.

People and medicine seem to love new technology! Seventy-six million tomography scans were performed in 2005, up from 40 million in 2000. If the growth rate persists, 100 million scans will be done in 2010—one for every three Americans. Brownlee writes, "National Imaging Associates, a company that helps insurers decide how to pay for imaging services, estimates that at least two thirds of MRI's contribute nothing to physicians' ability to diagnose their patients accurately. In 2002, Blue Cross Blue Shield of Missouri calculated that 20 to 30 percent of their claims for PET, CT, and MRI scans were for unnecessary tests. In states where malpractice laws make it less likely that doctors will be sued, there's only about a 15 percent difference in the amount of unnecessary treatment doctors deliver."

Now there is a rush to buy the latest new 3-D and 64 slice CT scanners, described by Brownlee as a parlor trick by some radiologists because they don't really provide new information. Imaging procedures are big profit centers for hospitals and now physicians have gotten into the game, potentially contributing to supply-induced demand.

Much criticism has been written about the pharmacy industry, the fastest growing sector of health care, where harmful drugs have made their way into the market for extended periods of time. Brownlee provides insights into the life cycle of several harmful drugs and the lack of information to demonstrate that they were safe and more effective than conventional treatments. Our current system relies primarily upon the pharmaceutical industry to dictate what research is done and what information is disseminated. Bottom-line agendas and conflicts of interest provide strong incentives for biased research and conclusions.

Brownlee also discusses at great length the marketing tactics of the medical industry. We're all too familiar with the direct-to-consumer prescription drug advertising, which has been spectacularly successful. Brownlee writes, "...condition branding...allows marketers to extend a market simply by redefining disease; coming up with an entirely new disorder; or simply widening the definition of an old one, and then forging links in the minds of both physicians and consumers between the new definition and a particular drug." Add to that, the cozy relationship between physicians and the pharmaceutical industry where influence buying appears to be alive and well.

The insurance industry, in particular the ability of HMO's to contain costs and provide better medicine, does not escape Brownlee's

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perspective. It was a bit of a trip down memory lane as she recounts the effects of such early cost containment tactics as primary care gatekeepers, shifting extraordinary risk to individual practitioners, and strenuous pre-approval procedures. While HMO's have loosened their grips in some respect, they have been effective at ratcheting down reimbursements, perhaps contributing to the decline of family practitioners.

All is not broken and Brownlee has kudos for a number of health care systems, naming well-recognized organizations such as the Mayo Clinic, Kaiser Permanente, Intermountain Healthcare and Group Health of Puget Sound. She also touts Pursuing Perfection, a program started by a group of idealistic physicians in Bellingham, Wash., that uses a multidisciplinary approach to help practitioners prevent diabetes and chronic heart failure and to employ best practices for counseling patients on navigating the health care system and controlling their diseases.

She also tells the story of the remarkable transformation of the Veterans Hospital Administration under the direction of Kenneth W. Kizer beginning in 1994. Kizer led the effort to decentralize management, renegotiated contracts with suppliers and installed a computerized medical-records system now known as VistA. With a better computer system they were able to operate more efficiently, reduce errors, better coordinate care and perhaps most important, *measure outcomes and performance*. A neighbor of mine, who left a private medical practice for a position at our local VA, is now chief of staff and cannot sing its praises loud enough.

While Browlee does not have all of the solutions for fixing our system, she recommends we focus on making sure we use the best, most valid evidence-based approach in the delivery of medicine. She advocates changing compensation to increase cognitive services and the number of family practitioners who can best coordinate care and manage chronic conditions. She believes it makes sense to pay doctors and hospitals as a group on a per capita basis to encourage them to better coordinate care and render appropriate amounts of care. She advocates that Medicare change its reimbursement rates to stop overpaying for radiology and heart procedures, which creates profit centers and encourages unnecessary discretionary tests and procedures. In both public and private sectors, quality can be measured and reimbursement can be decreased to those facilities that don't measure up or facilities can be turned over to the VHA. Government can facilitate the transformation to electronic records by making VistA available to other hospital systems.

In this short article, I have only been able to touch upon some of the high points of *Overtreated*. I'm sure that many medical professionals will take issue with Brownlee's conclusion. However, as a consumer of medical care, so much of what Browlee has to say rings true.

As I reflect upon my family's encounters with the medical system, I can think of many instances of unnecessary tests and treatment. The list would begin with the removal of my tonsils at age five, a procedure so common it was practically a rite of passage for my generation. And the list could go on and on.

As health actuaries, we can participate in a number of ways to help improve the medical industry through such things as the design of better reimbursement systems, the encouragement of evidence-based medicine (see, for example Goldman's article in our last issue), and the measurement of quality and performance. Even if your career path does not take you in this direction, *Overtreated* provides insightful food for thought for all health care consumers.

In This Issue

With the presidential race in full swing and the health care reform debate heating up, this edition of *Health Watch* features four articles focusing on health care financing reform. In our cover article, Catterall relays what he learned from health care luminaries at the 2007 Health Policy Summit. There are two opinion pieces, one from Professor Lawrence Gostin of Georgetown Law and the other from Ian Duncan, recapping a debate from the 2007 SOA Annual Meeting. Professor Gostin argues that the health care crisis requires a fundamental change in the structure of the system (possibly even single payer), while Duncan argues that there is no health care crisis and the market will fix itself (especially if the government leaves it alone!). Our last article on this topic is by Anna Rappaport, who reflects on what she took-away from the National Academy of Social Insurance annual conference "Getting to Universal Health Insurance Coverage." She also offers a few opinions of her own, which offer a sharp contrast to Duncan's positions.

Health actuaries have unique abilities and perspective when it comes to health care financing. With this comes a profound sense of responsibility—that of keeping the debate rational. It will be very interesting and hopefully satisfying to see the contributions the actuarial profession makes.

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