

**Overtreated:
Why Too Much Medicine is Making us Poorer and Sicker
Shannon Brownlee
Williams College – October 10, 2007**

Shannon Brownlee (SB) gave an Oakley Seminar and a public lecture at Williams on October 10th. 2007

[Brownlee](#) is a Schwartz Senior Fellow whose stories, essays, and opinion pieces about medicine and health care have appeared in such publications as The Atlantic Monthly, The New York Times Magazine, The New Republic, Slate, Time, Discover, BusinessWeek, Washington Monthly, The Washington Post, the Los Angeles Times, and The Wilson Quarterly.

Her talk was directed at the subject of her new book: [“Overtreated Why Too Much Medicine is Making Us Sicker and Poorer”](#)

To listen to Shannon Brownlee address this subject go to NPR’s Science Friday:

<http://www.npr.org/templates/story/story.php?storyId=15233303>

This is an extraordinary interview that covers similar areas as SB’

Random Notes:

SB first got interested in the area of overtreatment ~ 15 years ago when she was reporting on the topic of high dose chemotherapy and bone marrow transplantation for breast cancer. It turned out that this very expensive therapy often killed patients but was perceived by patients and doctors as a woman’s only hope if she had late stage breast cancer. . Yet it cost (in those days) ~ \$150,000 per patient. It was clear that this was a potential profit center for hospitals. The press helped by touting this modality, too. There was never evidence to corroborate its value.

The Institute of Medicine estimates that <50% of what we do in medicine has a solid value. David Eddy, an expert on medical expert, feels this number is closer to 15%.

Imaging Centers: Chapter

Stephen Baker, chief of radiology at the University of New Jersey School of Medicine and Dentistry, says that “by day I buy machines – by night I wonder what the hell I am doing.” A maverick in his field, Baker has argued

for many years that doctors rely too heavily on imaging, even when an image will make no difference in the patient's treatment, or when an image will simply cloud the picture. Too many scans give too much information and often we don't know what to do with this information, it can harm the patient and the radiation doses may be dangerous in addition to the short and long-term harm of overdiagnosis. Physicians often do not understand how expensive new technologies are "important" revenue sources for hospitals and physicians – They made ~\$50,000 per breast CA patient with BMT/Hi Dose chemo. Hospitals call these profit centers "centers of excellence," which implies they provide high-quality care, when what they really provide is high profit. Spiral CT may be one of the next profit centers. There will be many more.

Medical Research: We need to fund medical research with public money, because the end result is the public good. At present 80% of clinical research is funded by the pharmaceutical industry. It's important not to demonize the industry – they are doing what they are supposed to do, which is serving stockholder interests (making money). They are not humanitarian or socially conscious organizations at their core. Of course, it's a bit more complicated, but they are businesses and the health and wellbeing of the public (or world community) are not their primary concerns.

SB feels that to oversee medical research we need a Federal Reserve Board of Medicine, or at least a federal agency that enjoys the political protection of the Federal Reserve Board so it can go about the business of funding the comparative effectiveness research we so desperately need.

Care: The more care one gets in hospital and the more procedures one is subjected to the more risk one is exposed to. This holds for so-called preventive screening as well. (In reality, screening does not prevent anything. The question is, **when (and in what instances) is early diagnosis beneficial?** We don't know the answer to this question.

It is said that cancers follow three basic patterns: turtles, birds and bears.

1. Turtles move so slowly that you can still capture them while they're moving slowly along;
2. The birds fly away so quickly that you can't catch them in time;
3. The bears can escape if you ignore them, but if you catch them in time, you can capture them.

This simple but brilliant formula comes from a superb article by Christie Aschwanden on sunscreens and skin cancer that appeared in the July 10, NY Times. See: [Turtles](#)

Imaging cannot tell the difference between “turtles, birds and bears,” because imaging is static and we need to know about the behavior of a cancer and the body’s response to it. Serial imaging over time may help – but that concept needs to be studied. The same may go for pathology (biopsies): basically a nineteenth-century science based on the technology of the time, the microscope. Cancer is a biological process, and looking at cancer cells can only tell us so much. They can’t predict a lesion’s behavior. This leads to overdiagnosis, and the trapping and treating of many more harmless turtles.

The public doesn’t know this. **The public thinks that catching cancer early leads to cures – we don’t know this for sure. The public thinks that if a person dies of cancer, they just didn’t get scanned early enough.** Given these unreasonable expectations, it’s not surprising that mammographers are sued more than any other doctors.

Here is the central problem with Screening: Beforehand you don’t know whether the screening procedure will help or hurt. You can think of it this way: You are standing on the edge of a cliff, next to a rickety bridge across the chasm. Behind you, a forest fire rages closer and closer to where you are standing. You know there is a chance that the fire will reach you – not 100 percent certain, but a chance – and a chance that the bridge will fall apart as you cross. What do you do? In many ways, this is analogous to where we are with screening. The fire is the cancer. The bridge is the treatment for cancer. We know there’s a chance you will be harmed by the treatment, and a chance you will be helped. We also know there’s a chance the cancer will kill you, and a chance that it won’t. The problem is, we don’t really know what those odds are on either side. Screening just makes you see the forest fire from farther away. It doesn’t tell you whether or not the fire would actually reach you.

For some cancers, the chances that it will be symptomatic in your lifetime are low. Prostate cancer for instance. More men die with a prostate cancer, most of them asymptomatic, than from one.

In medicine, often we don't know the risks of a disease. But the risks of a procedure (such as BMT, bypass surgery) can be gauged. Yet, for years, these procedures have been performed without full knowledge of whether they are actually providing more help than harm. Spinal fusion surgery is largely not evidence based – yet it is still widely performed, and has been for more than 40 years, without benefit of evidence that it actually works any better than less invasive surgery or non-surgical treatments.

A key fact here is that **physicians are not trained to understand the nature of evidence.** In medicine, one often can't tell the true value of a procedure or a drug without doing a clinical trial. “It sounded like a good idea” is often the rationale to use or prescribe.

The IOM estimates that 18,000 people die annually in the US because of lack of access to care; while 30,000 die from overtreatment.

The very hospitals that give too much care, can often give too little care. They often fail to deliver care what is known to be beneficial, like prescribing a beta blocker to heart attack patients to prevent a second event. We also fail to provide adequate care to the uninsured. Hospitals and many doctors are quick to treat paying patients, but often exclude the non-insured and Medicaid patient.

Health care costs us \$2.1 trillion per year. If the trend in these expenses continues at the present rate health care will consume the entire federal budget by 2050. The cost of health care has been rising exponentially for nearly 40 years. Yet we aren't getting good value for our dollar. The outcome of all this medicine has not kept pace. Life expectancy at birth, for instance, has been rising very slowly for the last two decades. It has begun to decline in the last two years. Think of that. Your children have a shorter life expectancy than you do. That has never happened in the history of modern medicine.

All evidence shows that places with good accessible primary care have better health outcomes than specialist driven systems. (See the example of Cuba) Yet, we are training more specialists than generalists.

SB was asked: “What is the best strategy for a patient?

Answer – Find a good primary care physician with whom one can talk about the pros and cons – back to Plato's Slave and Free doctor and patient. (DJE will add as a pdf with this post)

The biggest waste in US health care is unnecessary care – This is at least 30% of what we spend – literally 100s of Billions of dollars.

If overtreatment were a disease, it would be considered to be an epidemic. More people die from overtreatment than from HIV/AIDS.

More care does not mean better care. Doctors and hospitals are paid to do more – not to do better.

SB feels that Evidence is key.

Nearly all of the unnecessary stuff done is tests, procedures, scans that are of unproven value. Part of the reason is that the things we do to patients are reimbursed better than face time between patients and health care providers – and a big reason for that is that Medicare's Board that determines reimbursement is largely run by physicians who perform procedures. They are consulted when determining reimbursements!! For the most parts PCPs (FPs, Internists and Pediatricians) play second fiddle here. Their poor reimbursement leads to less young docs going into these fields.

It has been shown that the greatest amount of unnecessary care takes place in locales where there are the most specialists and machinery. We are hemorrhaging money to pay for unnecessary care that often gives NO BENEFIT, and leads to patient harm and death.

By spending too much money we are also assuring that we do not die the way we want or would like to. The more ICU units there are in a community means the likelihood of winding up in one is better. Then, dying peacefully is not an option. Ivan Illich called this "The Dance of Death."
Geography is destiny when it comes to how we die.

The supply of medical resources determines how many tests are done as well as surgeries. The more urologists the more prostatectomies. The more radiologists and PET scanners the more unnecessary procedures.

20 percent of Medicare patients are chronically ill. These patients account for 80 percent of Medicare expenditures and the vast majority of that money is spent on hospitalizations .

Few people are talking about overtreatment – except for Shannon Brownlee – it’s a taboo subject since procedures are touted so favorably.

Ms. Brownlee believes that “We need a health care system that considers value not volume, quality not quantity.

Q: How to solve the health care crisis?

SB’s answer:

1. Every American needs to be covered. It’s the right thing to do for the world’s richest nation. It is also the right thing to do because the uninsured distort the medical market.
2. Then we need to address overtreatment