Why Doctors Hate Science

Scaremongers warn that 'effectiveness research' threatens the lives of Americans.

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Thank God doctors in the United States are free to treat patients as they deem best, free from interference by faceless bureaucrats. If bureaucrats were in charge, physicians might have to prescribe the newest hypertension drugs as a first-line therapy, do MRIs to diagnose back pain and give regular Pap tests to women who have had total hysterectomies. Oh, wait—they do. All these medical practices are common, despite rigorous studies showing how useless or wrongheaded they are. Definitive studies over many years have shown that old-line diuretics are safer and equally effective for high blood pressure compared with newer drugs, for instance, and that MRIs for back pain lead to unnecessary surgery. And those Pap tests? Total hysterectomy removes the uterus and cervix. A Pap test screens for cervical cancer. No cervix, no cancer. Yet a 2004 study found that some 10 million women lacking a cervix were still getting Pap tests.

It's hard not to scream when you see how many physicians, pharmaceutical companies, medical-device makers and, lately, hysterical conservatives seem to hate science, or at best ignore it. These days the science that inspires fear and loathing is "comparative-effectiveness research" (CER), which is receiving $1 billion under the stimulus bill President Obama signed. CER means studies to determine which treatments, including drugs, are more medically and cost-effective for a given ailment than others. A study in February in the journal Lancet, for instance, compared treatments for severe ankle sprains, concluding that a below-the-knee cast is superior to a tubular compression bandage. A 2006 study of schizophrenia drugs found that old-line antipsychotics were as effective as pricey new ones.

Yet scaremongers have morphed effectiveness research into cost-benefit analysis, warning that Grandma will be denied a knee replacement because some bureaucrat decides it isn't worth spending $35,000 so a 93-year-old can walk without pain (how many years will she live, you know?). The Washington Times said effectiveness research will "threaten the lives of many Americans" as government decides "who gets lifesaving treatment and who doesn't." Sen. Tom Coburn of Oklahoma (a doctor) warned of "a Soviet-style Federal Health Board that will put bureaucrats and politicians in charge of our nation's health-care system."

You might attribute Coburn's rant to his small-government ideology, but I say blame his profession—not politics but medicine. Doctors have long resisted having science guide their practice. That's obvious from the disparity in clinical practices from one region of the U.S. to another, as The Dartmouth Atlas of Health Care has been finding since the early 1990s. Rates of coronary-bypass surgery among Medicare patients in McAllen, Texas, are five times those in Pueblo, Colo. Rates of back surgery in Casper, Wyo., are six times those in Honolulu and the Bronx. From one city to another, the frequency of visits to specialists varies more than fivefold. Yet elderly people in Casper don't have worse back pain than those in the Bronx, and those in Texas aren't suffering occluded arteries at higher rates than those in Colorado. Instead, the enormous disparity in how doctors in different regions treat the same condition reflects medical culture, not medical science. Docs influence each other—"How would you handle this?"—at the
local medical association and even on the golf links. "Doctors want to do what their colleagues are doing," says Elliott Fischer of Dartmouth Medical School. Identifying what works and what doesn't is only secondarily about saving money and primarily about proper care, he says: "It's an absurd mischaracterization of effectiveness research to equate it with cost-benefit analysis. Instead, it's the only way to protect ourselves from practices that are not beneficial and even dangerous, which so many treatments now in use are." Educating docs about what works and what doesn't promises to reduce overtreatment, too, which could improve health: more health care can buy worse health outcomes because of overdiagnosis and side effects.

The power of medical culture explains only part of the resistance to following practices that have been shown scientifically to be superior to others. Some doctors insist that results of such studies do not apply to their patients, since every patient is different. (Sure, but exceptions should be exceptions; you don't do an MRI on everyone who arrives with a sore back.) Money also matters. In one infamous case in the mid-1990s, a federal agency concluded that spinal fusion doesn't help back pain, a decision that threatened insurance coverage for it. Surgeons, who stood to lose piles of money, got Congress to decimate the agency's budget, forcing it to pull back from making recommendations.

A younger generation of doctors, perhaps more comfortable with science and clinical studies, is embracing CER. Dr. Kevin Pho, who practices internal medicine in Nashua, N.H. (and blogs at kevinmd.com), says that at least once a day he has a patient for whom there are numerous treatment options—the new diabetes drug or an old one? "An unbiased source of data, not drug companies, could really help us in primary care," he says. "There have to be allowances for individual differences, but you need standards." What a concept.