

## Chapter 8

# Evidence based medicine

### The world at your fingertips

One of the greatest advantages of EMR is practicing medicine according to the latest research around the world. In the past, an old-fashioned GP might pull a volume off his shelf to read the clinical results of a test conducted years earlier. No more. The internet gives the practitioner instant access to cutting-edge research conducted by governments and the best university research laboratories and teaching hospitals in the world.

You know the best databases that pertain to your specialty. If you want to double-check a decision to see if you're keeping up with the research, all you have to do is click on a link.

### ePrescriptions

When you prescribe a medication, and you have an electronic prescribing module in your EMR, you have instant access to the latest research data. A good EMR e-prescribing system will give you the efficiency, cost therapeutic alternatives and multiple plans. You can write your prescription with confidence that no better, more up to date medications are available. You don't have to pull a heavy tome from a shelf that's possibly outdated. With a few clicks of the mouse, you're up to speed on the medicine for any use that you can name.

What are the efficiencies of a medical database? Physicians are said to direct 80 percent of the spending in a \$2 trillion American health care market. They are, in essence, purchasing agents, yet numerous studies show that physicians don't know the costs of diagnostic tests and drugs and lack comparative data about how effective they are or what are their adverse effects.

Beginning in 2009, Medicare will pay two percent more if you do e-prescribing.

### Savings to lower your blood pressure

By one estimate, if physicians prescribed the proper drugs for older Americans with high blood pressure, \$1.6 billion per year would be saved because of fewer strokes and heart attacks. The problem with some pay for performance (P4P) programs is that they don't distinguish whether a patient's blood pressure happens with a calcium channel blocker that may worsen his five year mortality rate, an expensive new drug with no five-year outcomes data, or with a diuretic that clearly improves the five-year mortality rate.

While EMR systems are touted as a key way to reduce the cost of our health system, little attention is paid to the benefits of a e-based system in sharing data that could save money.

Guides touting EMR usually concentrate on money saved by using proper billing codes and the rest of it, but ignore larger savings to the patient and insurance companies footing the bills.

## **From old ways to the new**

Historically, practicing physicians followed the solutions recommended by this or that expert. These experts were usually affiliated with academic medical centers with no more recommendation than they were Big Ten football powerhouses. This practice was time consuming and expensive, often requiring hours of research to answer a single question. Most doctors just couldn't afford the time to do truly comprehensive research.

Systems that take full advantage of EMR integrate clinical decisions with content-specific support messages from health record databases. A database linked to invalidated guidelines or medical texts is not sufficient.

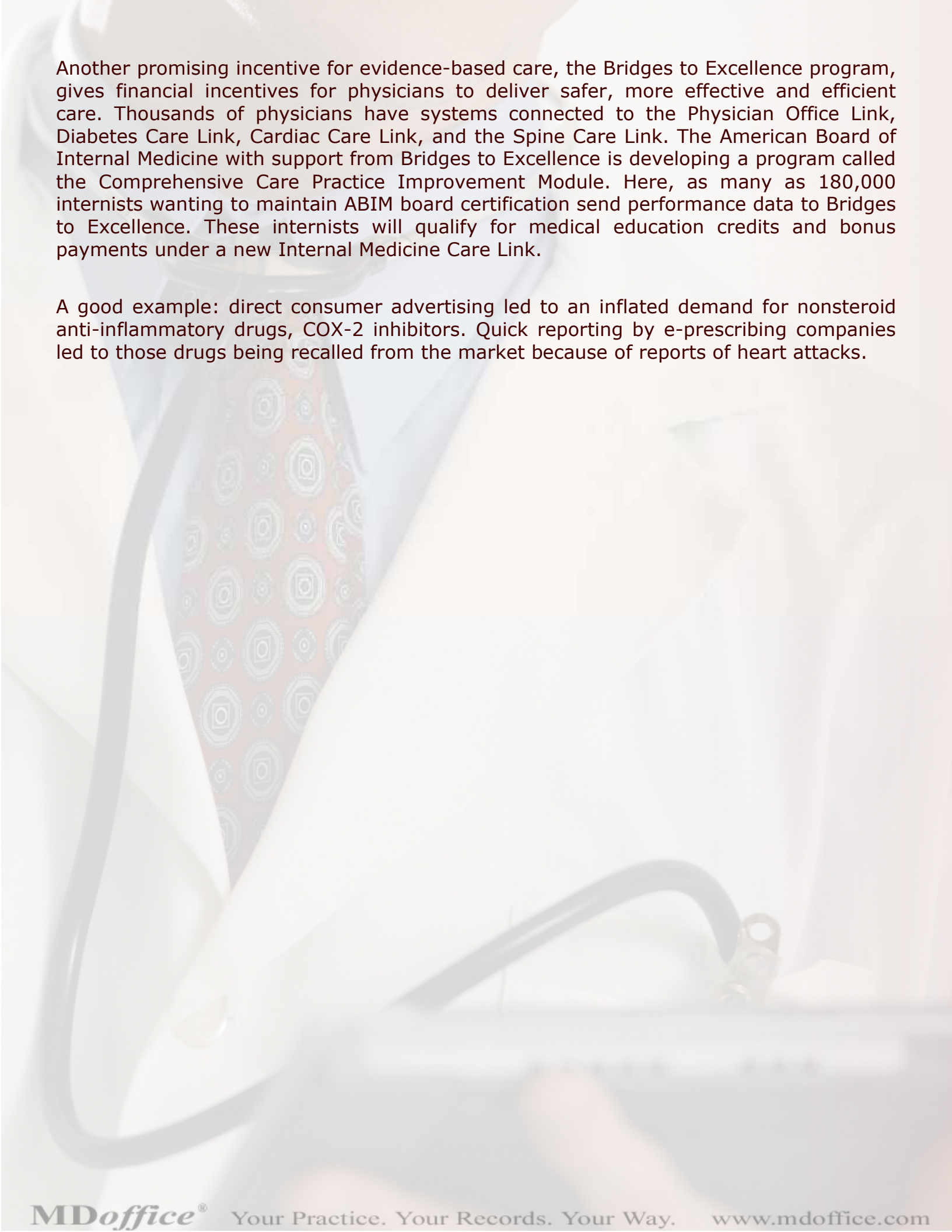
## **Evidence based, the numbers**

In the UK, eighteen percent of a physician's annual income is at risk, depending on his per performance against 146 quality measure—these are listed in their contract with the National Health Service. In the U.S. maybe two or three percent of their income is at risk. Why should we pay physicians to do their job more efficiently? The truth is that physicians need incentives so they can afford the hardware, software, and other costs of EMR. And they have been more efficient, increasing their productivity by thirty-five percent between 1995 and 2003. Yet, adjusted for inflation, their income dropped eighteen percent. At the same time, there was a fifty percent drop in the number of American-trained physicians choosing careers in family medicine. Medicare projects payment cuts of thirty-five percent by 2015, while estimated physician costs will escalate by twenty percent.

## **Evolving evidence-based plans**

Insurance payers have been reluctant to give performance bonuses. Physicians are stuck with "free riders" and tend to give all their patients the same treatment. The result is if one payer with a large share of the market pays for an incentive program based on evidence-based care, its competitors get most of the benefits.

About twenty percent of Medicare recipients are covered by plans that indirectly reward evidence-based, fiscally responsible care. These are funded with a yearly risk-adjusted formula paying physicians for patients as determined by their diagnosis coding the previous year. Doctors who code poorly earn less; the increases in revenue go to doctors who code well. In these plans, doctors using EMR with sophisticated, accurate coding earn thirty percent more than doctors who paid little attention to their coding.

A doctor in a white coat and patterned tie, holding a stethoscope. The background is a soft, out-of-focus image of the doctor's hands and the stethoscope.

Another promising incentive for evidence-based care, the Bridges to Excellence program, gives financial incentives for physicians to deliver safer, more effective and efficient care. Thousands of physicians have systems connected to the Physician Office Link, Diabetes Care Link, Cardiac Care Link, and the Spine Care Link. The American Board of Internal Medicine with support from Bridges to Excellence is developing a program called the Comprehensive Care Practice Improvement Module. Here, as many as 180,000 internists wanting to maintain ABIM board certification send performance data to Bridges to Excellence. These internists will qualify for medical education credits and bonus payments under a new Internal Medicine Care Link.

A good example: direct consumer advertising led to an inflated demand for nonsteroid anti-inflammatory drugs, COX-2 inhibitors. Quick reporting by e-prescribing companies led to those drugs being recalled from the market because of reports of heart attacks.