**Question:** What percentage of American women treated for stage 4 breast cancer are pursued by a collection agency to pay their medical bills? A) 5%  B) 10%  C) 50%  D) 80%

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**Book Review: The Price We Pay – What Broke American Health Care and How to Fix It**

BY: Marty Makary, MD

The author is a surgeon at Johns Hopkins Hospital and professor of Health Policy at Johns Hopkins University in Baltimore. He is noted for his best-selling book *Unaccountable* published in 2012. In my opinion, his latest book tops anything he has published.

Dr. Makary writes in a seamless way, lacing stories that touch us all with data that satisfies the nerds like me. He presents his work as a detective might explore for truth. He suggests that there are culprits about, and then he goes on to use a study of some kind to identify and rehabilitate those who are taking advantage of vulnerable people. Sometimes the coconspirator is some institute as common as your local church that sponsors health screenings. These may lead to unnecessary and potentially harmful ‘care.’

Dr. Makary addresses the instances where hospitals make it a habit to sue patients if they don’t pay up immediately, and often the payment is astonishingly high. He tells stories of times when he has taken a personal interest in the plight of someone suffering from crippling medical bills. He has fun, it seems, persuading the billing people to change their tune about how much money they expect. He also finds that doctors are often unaware of the predatory billing practices of the institute where they work.

Another interesting topic he addresses is the use of phrases that persuade the patient to go along with the doctor’s recommendation. For example, a guy he calls Dr. Dinner likes to be home for his evening meal, so rather than wait for a natural, vaginal birth, he talks the patient into accepting a C-section in the afternoon. He uses the phrase, ‘You do not want to risk the life of your baby, do you?’ There is a collection of such phrases used by doctors to frighten patients into compliance.

One other interesting topic is how we have come to pay dearly for helicopter rides to hospitals. Most of these are unnecessary in the first place and are often controlled by companies in the business to serve their bottom line rather than the patient’s needs. Many hospitals no longer offer helicopter service, so the field is open for exploitation. It is disheartening when people are at their most vulnerable and another person exploits that vulnerability. This is an exceptional book written by an amazing doctor and researcher. Be prepared to be shocked by his revelations. The price paid is not simply in terms of money, it is also in terms of harm. I thought I knew how bad it is, but I had no idea of the depth of parasitic practices. 5++ stars – It is the best book on health care problems I have read. About $17 in hard copy.
Harm During Healthcare Transitions
Healthcare may involve care transitions from one facility to another or to home (or the reverse). For example, one may transition from home to a hospital. One may transition from hospital to nursing home, or the reverse. A huge team of investigators assessed the harm associated with transition from hospital to a long-term-care (LTC) facility. They examined the LTC-facility records of 555 older patients that transitioned from hospital to LTC-facility using a trigger tool to discover harmful events that occurred within 45 days of the transition. Potential harms were discovered by nurse reviews, and then these were reviewed in detail by doctors. Records went from March 2016 to December 2017.

The reviews turned up 379 harmful events in 762 transitions (some patients had 2 hospital stays and transitions). Of the harms, 52% involved resident care (pressure ulcers, skin tears, and falls with injury), 29% involved a healthcare-acquired infection, and 17% involved a reaction to drugs. Of these harms, 52% were less serious, 38% serious, 7% life threatening, and 2% fatal. Most (70%) were deemed preventable or ameliorable (harm could have been reduced but was not preventable).

The authors called for better standardization and coordination of hospital-to-LTC transitions. Moreover, they readily admit that their search method is not going to find all harmful events. When my father transitioned from hospital to nursing facility many mistakes were made. These did not necessarily cause obvious harm. For example, the nursing facility was not weaning him off oxygen as promised in the hospital, and they failed to initiate a swallow test until the family pressured them to do so. He easily passed the test.

The message here is clear for patient advocates. If you want to ensure optimal care during a hospital-to-LTC-facility transition, then you are going to have to be on top of absolutely everything. Especially in the week after the transition, you must be vigilant for care that may invite harm. Finally, if harm does happen to the person in your care, then insist that you learn the root cause of that harm and find out what changes will be made to prevent this from happening again. The combination of stress from a hospital stay and the inherent vulnerability of elderly people make this population at high risk for harm.

Dust in the Air
A large team of investigators, as reported in the New England Journal of Medicine, looked at particulate (fine dust) pollution in 652 cities around the world to determine if there was an association between the level of dust and the mortality in those cities. They looked at daily concentrations of dust with an aerodynamic diameter less than 2.5 microns and dust with an aerodynamic diameter less than 10 microns. These dimensions are in the range of the size of bacteria (or a little larger) and are about the same as the thickness of plastic wrap. They compared the concentrations to daily mortality. They ‘rolled up’ their massive data by methods I do not understand, but accept as valid due to peer review. They presented 2 graphs showing that there was a clear association between dust concentrations and mortality.

In the 10-micron data there was an increase of 0.44% in daily, all-cause mortality for each increase of 10 micrograms per cubic meter of dust concentration. For each change of 10 micrograms per cubic meter in the 2.5 microns or less size, there was an increase in daily, all-cause mortality of 0.68%. There are many factors that may skew the conclusions, including different composition of the particles, different susceptibilities in the people exposed, and development of tolerance to particulate pollution in cities with higher concentrations. Taken together with other studies, these data suggest that particulate air pollution may play a role in increasing the chances of death as concentrations of dust increase.

In another study, published in the Journal of the American Medical Association, the effects of air pollution (ozone, 2.5 micron particles, and nitrogen oxides) on emphysema and lung function were assessed in 6 US metropolitan areas. Approximately 7000 patients (age range at recruitment 45-84 years) were studied from 2002 to 2018 using CT scans to assess emphysema, and spirometry (breathing capacity measurement) to assess lung function. Residence-specific pollutants were established using modeling from generalized monitoring data. The authors concluded that long-term exposure to air pollutants was associated with increases in emphysema as shown by CT scans and lung-function tests.
Overuse of Antibiotics for Pneumonia
I have a good friend who recently went to the hospital with pneumonia. He was touch-and-go as far as going into renal failure, and then after discharge, he recovered full kidney function, but contracted a *C. diff* infection. I was suspicious that the original antibiotic to fight pneumonia may have paved-the-way for this infection. More than 6000 patients with pneumonia and treated at 43 institutions were the subjects of an investigation of how often patients received too much antibiotic. In 2/3rds of the cases, the patients received an unnecessarily long course of an antibiotic.

After discharge, the investigators sought any side effects of the excess antibiotic treatment. These included patient-reported *C. diff* infection and prolonged QT interval in an ECG (physician documented). The first is a nasty, GI bacteria with significant mortality risk, and the second is a risk factor for life-threatening heart beat disturbances. The vast majority (93%) of the excess antibiotic prescriptions were at discharge. Patients having received too much antibiotic had more patient adverse events than those who did not receive excess treatment. Below, C Diff bacterium (CDC)

![C Diff bacterium](Image)

Patients and their caregivers have a role in preventing antibiotic overuse. Ask what the guidelines say about the duration of a given antibiotic prescription to treat the type of pneumonia present. If your prescription is longer than that, then ask for the rationale for that prolonged prescription.

Risks of Implanted Cardiac Devices
A major new study has shed important light on the risks associated with cardiac devices upon first implantation. Experts writing their opinion of the study using administrative data from Australia and New Zealand make several important observations. First, it is the largest study of which they are aware and reflects ‘real world’ outcomes vs. outcomes from clinical trials. Second, it showed an 8% serious complication rate from the aggregate of implanted cardiac devices. The kinds of devices surveyed included permanent pacemakers, implantable cardioverter defibrillators, and resynchronization therapy devices. Third, it found that the complication rate varied greatly from one hospital to another – the lowest complication rate being 5% and the highest being 14%.

The authors note that the inherent risks and nearly 3-fold variation in complication rates suggests that genuine informed consent (and shared decision making) must be made part of any discussion of the need for these devices. In addition, there needs to be improvement in the risk of harm in some medical institutions. The empowered patient will ask many questions before having one of these devices implanted. There may be several options including medications, lifestyle improvements, or doing nothing.

Heat Triggered Kidney Disease
We know that working in hot conditions can lead to dehydration and this in turn can affect kidney function. I used to know a nephrologist who said that many of his patients were runners who failed to remain hydrated while running in the Houston area in the summer. A couple of MDs wrote their perspective that there is a rising rate of lethal kidney disease in Central America. It is particularly prevalent in agriculture workers in poor countries. They offer no proof that rising temperatures are behind this illness; however, this kidney disease has become the second-leading cause of death in Nicaragua and El Salvador. All evidence points to rising temperatures and hard work in hot conditions. They suggest that this phenomenon is one of the adverse consequences of global climate change. Certainly, poverty also plays a role in the causation of this disease, presumably because access to quality medical care is unavailable. They concluded that those of us in wealthy countries have a moral obligation to better manage climate change and its consequences.
Overuse of Echocardiography after a Heart Attack
So you have had a heart attack, and the hospital has you in its clutches. There are several useful measures that may be employed in evaluation of the severity of your heart attack. Echocardiography is a non-invasive way to visualize the performance of your heart, but the key question is whether the results of the procedure will improve your outcomes. A newly reported study involved 99,000 patient records from 374 hospitals during 2014. The variation in use of echocardiography following a heart attack was from 2% to 95%, with a median of 74%.

There are various clinical factors that could explain some of the variation. However, when corrected for such variations, there was no difference in the outcomes between those in the lowest quartile of use and those in the highest quartile. The primary driver of whether or not an echocardiogram was performed was most dependent on which hospital was involved. Those who had an echocardiogram tended to have a longer hospital stay, and the mean cost in that group was about $3,000 more than in the group that had fewest echocardiograms. The authors note that some institutions may be overusing echocardiography without any benefit to the patient.

The Challenge of Shared Decision Making
Two MDs wrote their opinion about how best to achieve shared-decision making (SDM) in the face of time constraints and difficulties knowing when to elicit patient preferences. They noted that SDM is not practiced well in most clinical encounters and that clinicians often overestimate the benefits and discount the risks of procedures. They gave 5 ways to improve the situation: medical guidelines should give specific guidance for SDM, use decision aids, choose which decisions are appropriate for SDM, create an interpersonal relationship for each medical encounter involving SDM, and render medical recommendations with ‘prudence.’

In my view, this is all good opinion making; however, the encounter is also going to be greatly strengthened by patients if they know about SDM, know what they wish to know, and have done their homework. Patients should also do deep ‘soul searching’ when faced with a difficult medical decision. Knowing their preferences before a clinical encounter will facilitate the process. Finally, patients must be willing to speak up when they are not being given SDM.

Three experts wrote their view of artificial intelligence (AI) on the clinical encounter and decisions that arise from that. Physician knowledge may be enhanced by AI, and the patient may use AI to manage their care, say through decision aids. One thing is certain, patients and clinicians must be involved in the evolution of AI support information. Inaccurate AI will erode trust of patients and clinicians. Greater automation through AI may free clinician time, enabling more time to be spent on improved interpersonal interactions. I certainly do not want a robot for my doctor. Hopefully, we are not headed that way.

Answer to question: C) 50%, according to The Price We Pay page 28