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Cost of Care

From The Editor

Educating for Professionalism

Case in Health Law

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From the Editor
Cost-Consciousness in the Patient-Physician Relationship

In the public arena, discussions about health care focus almost obsessively on costs. Insurance premiums, deductibles, and patient copayments are climbing. The cost of prescription drugs is exploding. And successively larger portions of state and federal budgets are being devoted to health care costs.

Until now, discussions of cost have been abandoned as soon as the patient passes from the waiting room into the exam room. Yet it seems ever more unrealistic to expect that we can keep cost out of patient-doctor encounters [1]. This issue of *Virtual Mentor* begins with the assumption that, as cost increasingly dominates public and political discussions about health care, it will begin to infiltrate the private conversations and relationships between doctors and patients.

Underlying the discussion about health care costs is America's deep struggle over what role cost should have in health care decisions. Ethicists and economists often speak about cost-consciousness in decision making in terms of "moral hazard"—the concept that the less likely one is to suffer the expected consequences of taking a risk, the more likely one is to take that risk. In the realm of health insurance, moral hazard theory suggests that generous health insurance will induce Americans to seek out health care that they do not need or to engage in riskier health-related behavior than they would if they were uninsured.

Conversely, some theorize that designing health insurance so that it does not protect patients from the consequences (ie, the costs) of seeking health care will promote cost-conscious decision making; unshielded by generous benefit plans, individuals will avoid frivolous services and their associated excessive cost. Experts have built volumes of economic models and collected scores of anecdotal experiences to argue for and against the impact—and even the existence—of moral hazard [2].

In this phrase, the qualifier "moral" invokes the lesser-used meaning of that word—"having influence on one's character or conduct" [3]. But the more common connotation of "moral"—indicating the ethical correctness of an action or idea—certainly underlies commentary on moral hazard in health care. This month's *Virtual Mentor* will look explicitly at how this implicit commentary influences medical decision making by patients and physicians.

When is it ethically permissible—or obligatory—for cost-consciousness to be acknowledged, discussed, or integrated into decision making in the patient-doctor encounter? When concerns about cost arise, how should physicians respond to them?

What cost-related pressures are patients facing, and what resources and information do they need from physicians concerning cost (in addition, of course, to affordable health care)? This month's expert authors will help us examine these quandaries.

Doctors are still intimately involved in the cost of health care for individual patients. They are the gatekeepers for services provided, diagnostic tests ordered, procedures performed, and drugs prescribed. In the 3 case studies that open this issue, Drs Federman, Danis, and Goodman help us consider situations in which cost comes up in clinical encounters. In our journal discussion, Drs Frankel and Stein comment on the findings of a nationwide survey that asked 660 Americans whether they discussed cost-related adherence problems to their doctors. These physician-authors offer insight into how we might analyze the role of cost-consciousness in patient care decisions.

In the medical education section, 3 experts offer pragmatic, widely applicable, evidence-based advice on how to acknowledge and aid patients who have concerns about medication costs. Drs Fischer and Avorn outline an innovative curriculum to help health care professionals recognize why medication cost matters and what they can do about its effect on patient care. Then Dr Alexander gives us guidelines on how to initiate and facilitate discussions about medication costs with patients.

Next we turn to how cost-consciousness shapes our health care system and patients' access to it. In the clinical pearl Niamey Pender examines the role of computed tomography (CT) in the diagnosis of appendicitis, specifically the need to balance clinical judgment and experimental evidence when making expensive risk-benefit decisions. In the medicine and society section, Dr Plax and Mr Seifert detail the burden that medical debt places on American individuals and families and explain how it impacts our health care access. Dr Liang introduces us to a California health law case that defines physicians' obligation to advocate for their patients when cost is an issue.

Finally, we turn to how reform of the health care system could acknowledge cost-consciousness while decreasing its burden on patients and physicians. In the policy forum, Dr Rosenthal summarizes research on pay-for-performance initiatives, in which improvements in the quality of patient care earn economic rewards for physicians. Our 3 op-ed authors then address the moral hazard theory, as they examine the risks and benefits of cost-savvy, "consumer-driven health care." Dr Newhouse offers insight into how these plans affect patients' health care utilization based on his legendary RAND Health Insurance Experiment. Drs Parkinson and Herrick provide 2 perspectives about the philosophy underlying consumer-driven health care and how plans could be designed to follow these new ideas.

Learning objectives for this issue include:

- Understand how changes in the US health care financing system influence the decisions of patients and doctors.

- Understand the effect that cost-consciousness can have on patient adherence and the patient-doctor relationship.

- Learn techniques for acknowledging, analyzing, and addressing concerns about costs in patient encounters.

My hope is that this collection of articles will help us think about how cost-consciousness impacts doctors, patients, and the relationship between them and about how we can change our clinical practice and our health care system to account for cost considerations without compromising patient trust or quality of care.

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Clinical Case
"Can We Just Drop the Copay?"
Commentary by Alex Federman, MD

Once every 6 months for the past 15 years, Edgar Delmand has been taking a morning off from his job as construction foreman to visit Dr Robiel's office. Over the years, Dr Robiel has diagnosed Edgar's high blood pressure, high cholesterol, and type 2 diabetes and helped him manage these conditions.

As Edgar enters the examination room, Dr Robiel glances at his chart. Although he has written all the entries himself, he likes to remind herself what Edgar's 3 children are doing these days and what concerns he had at the last visit. He also notes that Edgar had an HbA1C drawn last week; the levels had bounced up to 8 percent, despite 3 oral hypoglycemic medications.

As they chat, Dr Robiel learns that Edgar, now 53, is taking his medications daily but that he was recently seen in the ER for an infected foot blister that he "just hadn't noticed." He has been checking his blood glucose twice a day but doesn't write down the numbers. Dr Robiel mentions to Edgar that their control of his diabetes had slipped a little; they had been quite successful for the past 8 years, but they might need to add insulin to his regimen if the current treatments were not working.

"Actually Doc," Edgar interjects, "I feel like my diabetes is not the only thing I'm losing control over. The company is making changes in our health insurance; they want me to switch to a doctor on their preferred list. If I stick with you, they're going to charge me 20 percent of your bill. With 2 of the girls in college, that 20 percent carries a noticeable punch for us. You understand...isn't your oldest boy in college now?"

Dr Robiel nods. "I would hate to have you leave my practice, Edgar." He sincerely enjoys visits with Edgar, and he feels that his dedication to this patient's health has made a genuine difference. They have worked well as a team to avoid complications of Edgar's hypertension and his diabetes. Dr Robiel appreciates how college tuition bills stress a family's budget—he recently added an extra weekly evening session to his practice to ease the burden on his savings. "I understand your dilemma, but I'd love to convince you to stay."

"Well Doc," Edgar continued, "maybe we could find a balance that suits us both. You're my doctor. I'm not anxious to switch to someone who doesn't know me or my conditions. We've worked together for a long time. Would you consider forgiving the

extra 20 percent reimbursement—and just accepting what my insurance pays you—if I do stick with you?"

Commentary

This vignette illustrates the importance of openness between patients and doctors about health care costs, and it highlights the value of having a strong patient-doctor relationship when addressing the topic. In this commentary, I point out some aspects of the case that speak to the problem of cost for patients, the potentially deleterious effects it can have on accessing care, and the role of the patient-doctor relationship in mitigating these effects.

Beyond Medications—Health Care Services and Insurance Costs

Medication costs have captured the lion's share of attention about the financial burden of health care for adults, and indeed they represent a major barrier to care for many patients. Yet, this case reminds us that insured patients can also bear significant costs—the cost of insurance coverage *and* the cost of services—a fact that is often overlooked in clinical and health policy discussions. Insured patients typically face a variety of out-of-pocket health care expenses including monthly premiums, deductibles, and copayments for visits and treatment. Medicare beneficiaries with traditional (fee-for-service) coverage pay an $88 monthly premium, a $124 annual deductible, and a copayment of 20 percent of the fee for most outpatient services, such as physician visits and radiological tests [1].

For individuals with modest incomes, such as Mr Delmand in this vignette, these insurance costs and copayments can cause financial hardship. As many as 20 percent of low- and middle-income working adults may drop their coverage or switch to a new plan when health insurance premiums increase by 10 percent [2]. Numerous studies, including the RAND Health Insurance Experiment, show that various levels of cost-sharing (eg, copayments) can lead to reduced use of appropriate and needed services [3]. As a result, patients' health may suffer. Recent research has found that people with diabetes had worse glycemic control, and adults with coronary artery disease had higher rates of angina, when they skipped medications due to financial strain [4, 5].

Talking about Costs

Although patients are increasingly burdened by medication, health care, and health insurance costs, conversations about the problem are unusual in patient-doctor encounters; only about 16 percent to 27 percent of adults who have some problem paying for medications ever discuss this hardship with their doctors [6, 7]. Patients and physicians cite similar obstacles to discussing drug costs, chiefly discomfort about the issue, lack of time during the visit, and a paucity of solutions [8]. The literature also suggests that those who do talk about costs with their doctors are those who are more severely affected.

If so few patients ever discuss cost, why did it happen in our narrative? Several factors are likely to have pushed Mr Delmand to raise this uncomfortable topic: anxiety over a specific financial concern, his worsening diabetes, the risk of a switch to a new provider, and his commitment to continuity of care. But perhaps the most important factor in his

broaching the topic is his trust in Dr Robiel. The element of trust is suggested by the long duration of their relationship and the ease and familiarity of their encounters. Research on patient-doctor communication identifies trust as a singularly critical element for establishing effective communication [9-12]. Patients' trust in their physicians has also been shown to mitigate the effects of cost on medication adherence [13].

There is much that physicians can do to establish trust with their patients—most importantly, perhaps, engaging patients in their own care and using a psychosocial communication style in which the balance of speaking and setting priorities tips towards the patient [14]. This helps to create an environment in which the patient feels safe enough to discuss sensitive topics that might otherwise trigger embarrassment or shame. Patients whose physicians employ this psychosocial communication style tend to be more satisfied with their care and have better health outcomes than those who have physicians with more paternalistic communication styles [14-17].

In our case, Mr Delmand asks Dr Robiel to waive the portion of the bill that his insurance will not cover. This seemingly unusual request is a testament both to the financial stress that Mr Delmand is experiencing and to his comfort with and trust in his doctor. In a less trusting relationship, Mr Delmand might have simply started seeing a new doctor without informing Dr Robiel of the reasons for the switch, or might not have offered up his own solution to the problem. This is a request that Dr Robiel should consider very seriously, so let's look at his choices.

Dr Robiel's Choices

Dr Robiel has 3 obvious choices in this matter. First, and with some justification, he could refuse Mr Delmand's offer outright. The copayment may be a substantial portion of the physician's revenue from the visit because reimbursement rates to primary care physicians can be quite low, and Dr Robiel recently added hours to his schedule because of his own financial situation [18, 19]. Dr Robiel may also consider it unfair to charge this patient less than he charges everyone else for a visit.

A second option is to try to convince Mr Delmand that continuing their visits is worth the extra cost because discontinuity of care is often associated with worse health outcomes, and Mr Delmand's health has been generally well maintained under Dr Robiel's care.

Thirdly, Dr Robiel could choose to accept Mr Delmand's offer and waive the copayment. He clearly enjoys the relationship and does not want the patient to suffer any setbacks in his diabetes management by having to start with a new doctor. But there is another, less obvious option. Dr Robiel could consider cost-saving alternatives for Mr Delmand, such as replacing some office visits with telephone calls. This solution makes the most sense for the patient's well-being, would probably be the most satisfying option for the doctor, and would require only small sacrifices on both the doctor's and the patient's part.

The point here is that Dr Robiel *can* consider Mr Delmand's financial struggles by modifying the type of care he gives Mr Delmand. It may take an open mind and a bit of creative thinking to work around financial challenges, but the patient's health and the doctor's relationship with the patient are likely to be the better for it.

Lessons Learned

In summary, this vignette provides a simple illustration of how health care costs can threaten access to and continuity of care. It also shows how elements of the patient-doctor relationship, specifically trust, can aid in the communication process and offer the physician the opportunity to do something about the problem. Indeed, physicians and patients can often find reasonable solutions to financial obstacles to care.

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Clinical Case
To Scan or Not To Scan?
Commentary by Marion Danis, MD

As a fourth-year medical student planning a residency in internal medicine, Rose Simmons enjoyed her rotation in the emergency room and saw it as a chance to learn practical points about patient management. She purposely chose Percy Hospital because of its diverse patient population.

One evening Rose was working with Dr Charles, a respected attending who had been at Percy for almost 10 years. Dr Charles handed her a chart. "Twenty-two-year-old male with abdominal pain, Rose. See him in Room 15 and then present him to me."

Fifteen minutes later, Rose returned with her note and a radiology order form in hand. "Twenty-two-year-old male, no previous medical history, presents with abdominal pain that started this morning as crampy and diffuse and localized to the right lower quadrant over the past 2 hours," she reported to Dr Charles. "He's febrile to 102, slightly tachycardic, with rebound tenderness in the right lower quadrant. His white blood cell count is 16 000 with a left shift. Sounds exactly like the patient with a possible appendicitis that we sent to CT this afternoon; want to sign this order form so I can send him too?"

Dr Charles hesitated. "What does this gentleman do for work?" he inquired. Rose replied that he worked as a cashier in his family's grocery store. "Does he have insurance?" Now it was Rose's turn to hesitate: "He mentioned that he didn't, but I reassured him that we would make sure that he gets the medical care he needs."

"I'll take a look at him to confirm your findings. Then, why don't we call the surgeons and tell them that this patient needs to go to the operating room?" offered Dr Charles. He looked up from another patient's chart to meet Rose's confused stare. "CT can be helpful for the diagnosis of appendicitis, but it's not the standard of care. This kid's family would have to swallow the cost; $1500 is a lot of night shifts at the grocery—or an uncompensated loss for the hospital. We can save the family the trouble—and save ourselves a potentially inconclusive scan—by trusting our clinical intuition and calling the surgeons now."

Commentary
This scenario describes 2 different approaches to the diagnosis and management of insured and uninsured patients with similar symptoms. The juxtaposition leads to valuable insights.

Dr Charles has ordered an abdominal CT scan for an insured patient with suspected appendicitis; later in the day he suggests managing the care of an uninsured patient with suspected appendicitis without a CT scan. The delivery of a parsimonious plan of care for the uninsured patient may well be among the best strategies one could offer. By avoiding excessive and expensive diagnostic tests in clear-cut cases of appendicitis and proceeding to provide necessary treatment, the attending physician in this story may be providing the most cost-effective and affordable care possible.

One could argue that by offering frugal care, Dr Charles is being both prudent and kind to this uninsured patient. Whereas insurance allows those of us who have it to pool the financial risks of being sick, the uninsured patient must carry the financial burden of his or her medical care alone. For the uninsured patient, illness often imposes both sickness and poverty. By thinking about the financial burden for this patient, the doctor has been attentive to the social context of illness.

As we consider this scenario carefully, we notice that Rose Simmons, the medical student, perceives the disparity in care offered to the insured and uninsured patients and infers that the care of the insured patient reflects the standard of care. Yet we, and the student, should be cautious in making this inference. Often insured patients get excessive interventions merely because reimbursement is available. This may well be the case for the insured patient described here; CT scans are not always warranted because, despite their sensitivity and specificity, they have not led to a reduction in unnecessary operations [1-3].

Aside from the question of how good the CT scan characteristics are, when the clinical presentation is classic and clinical suspicion is high, Bayesian logic suggests that one ought to proceed to treat without the scan [4]. Bayesian logic applied here dictates that, when the clinically based probability is high enough, a test will not necessarily add to the verification of a diagnosis; it thus behooves a clinician to proceed immediately to treatment. If, as the narrative seems to imply, the insured and uninsured patients were similar in their presentations, the *un*insured patient may have gotten the more cost-effective approach to care.

This initial interpretation of the scenario may be overly simplified. Appendicitis, or any other clinical problem, can present atypically, and the diagnosis can often be uncertain. If that is the case in this scenario, what should the attending do? One option that would preserve the cost-effective strategy of the physician would be watchful waiting prior to making a decision about surgery [5]. This option is ethically acceptable because of concerns about cost. In other words, this would be an ethically justifiable way to ration.

If, on the other hand, Dr Charles is uncertain about the diagnosis and does think that a CT scan would be the best approach to diagnosing the patient, he faces some tough options. He can either order it and risk incurring the anger of administrators at his institution who are intent on avoiding financial losses, or not order it and impose unfair rationing and the possibility of harm on an uninsured patient. In making this decision, Dr Charles is choosing whether or not to be complicit with an unfair system that denies equal access to uninsured patients [6].

Complicity is an ethical problem we all confront in a morally imperfect world. As Christopher Kutz suggests, when we live in a complicated world in which the harms imposed by economic, social, and political institutions affect our relationship with others, we must sort out whether we wish to participate and the degree to which we are thereby complicit in these collective harms [7]. His analysis—that to behave ethically we must each take some responsibility for what goes on—would direct Dr Charles to order the CT scan if he is in doubt about his uninsured patient's diagnosis. Of course, Dr Charles might possibly suffer the consequences of the hospital's financial loss, but he would do so while representing the patient's well-being and interest.

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Related Articles

CT Scans in the Diagnosis of Appendicitis, March 2006

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Clinical Case
Martha's Spastic Bladder
Commentary by Robert Goodman, MD

Dr Sentzer takes pride in keeping her office free of pharmaceutical advertisements. She refuses pens and paper plastered with drug company logos. She does not attend dinners sponsored by pharmaceutical companies, even when they are at her favorite French bistro. And she does not see company representatives—nor accept their free medication samples.

In preparation for her afternoon appointments, Dr Sentzer reviews the chart for the first patient—Martha Lodge, a 72-year-old woman whom Dr Sentzer sees regularly. Martha takes several medications but manages them meticulously. She does not welcome changes to this regimen, as it complicates her daily routine and her monthly budget. But she tends to follow Dr Sentzer's advice faithfully.

Dr Sentzer enters the exam room and is greeted by a relieved and grateful smile from Martha. "Thank you for squeezing me in, doctor," she dives in immediately. "I hate to bother you when I'm doing well, but I really need your help. Do you remember how we changed my blood pressure medicines at my last visit? Because I was—well, you remember—not making it to the bathroom in time? I'm afraid the change didn't help at all."

"I'm sorry to hear that, Martha," replied Dr Sentzer.

Martha continued: "The exercises are no help either, doctor. I can't go out with my husband for dinner or with my friends to a movie because if I laugh too hard…. Even at home, sometimes I suddenly need to go, but I can't always get to the bathroom in time. Can you help me?"

Dr Sentzer does have a solution, but she knows it is not what Martha wants to hear. "There are medications I could prescribe—to calm down your bladder. They might give you more control. But it would add another medication to your pillbox. And the once-daily pill only comes as a brand name, so it wouldn't be a cheap addition."

"Dr Sentzer," said Martha, crestfallen, "there really isn't room in our budget for another brand name drug. Between my husband's pension and our Social Security, we barely cover our medicines already. Some of my friends say that their doctors give them free samples to cut down their costs. Could I at least start with some samples to see if it works for me?"

The frustration on Martha's face wins Dr Sentzer's sympathy. She does recall turning away a salesman for one of these medicines just last week; he managed to leave his business card, but she refused to accept the free samples that he wanted to leave with her.

Commentary

One must surely pity poor Martha Lodge; she has an overactive bladder, and, like so many others in the US, she has underactive health insurance. And now she has Medicare Part D to deal with—enough to make anyone run for the bathroom. One can also sympathize with Dr Sentzer; any physician would want to do everything possible to help a patient in such a mess.

But is providing a "free" sample really the solution to Mrs Lodge's problem?

It is an interesting phenomenon—and a brilliant marketing coup—that physicians have come to see pharmaceutical samples as bandaids for a broken health care system instead of what they actually are: a hugely successful promotional ploy. Of the billions of dollars spent yearly by the pharmaceutical industry on the marketing of prescription drugs in the United States, over half is spent on samples. And for good reason: as both personal experience and the medical literature attest, once a patient is given a sample, there is a good chance that he or she will be prescribed that medication in the future. Since samples are almost exclusively the newest, most expensive medication, this results in a physician's ultimately writing a prescription for a specific medication that the patient neither needs nor can afford (think Vioxx, for several years one of the most heavily promoted and heavily sampled medications). If pharmaceutical companies were really concerned about providing medication for patients who lacked prescription drug coverage, rather than merely promoting their products, they might provide vouchers so that these medications could be filled at the pharmacy (in the quantity the patient needed), rather than promotionally packaged samples to be "filled" by the physician.

It is instructive to contrast what happens when a medication is dispensed by a pharmacist with what happens when it falls from a physician's sample cabinet. In the case of the pharmacist, medications given to customers are labeled with the patient's name, the date, and dosing information and include printed instructions with information about side effects and interactions. This information is rarely, if ever, provided by the physician when handing out samples. The patient who leaves the doctor's office with samples is likely to require a shopping bag to carry out a month's worth of medication. When (and if) she returns in a month for another bagful, that medication may or may not still be in the cabinet. If it is not, she may or may not be given a slightly different medication, until (and if) she returns a month later.

To be fair to industry, almost any medication can be acquired for eligible patients through company-run patient assistance programs. While most physicians have come to see these programs as time-consuming and difficult to use, the Internet has made the information gathering and the application process much easier to negotiate. Several web sites currently make information about these programs more readily accessible [1].

Likewise, more medications are going off patent (as evidenced by the long-acting formulations and enantiomers flooding the market), meaning that cheaper generics will soon be available. Though the Detrol that Martha has most likely seen advertised on TV is not yet available generically, oxybutynin, which is equally effective, is. And Martha might be interested to learn that 1 month's worth of oxybutynin costs about $20, compared to $120 for a month's worth of Detrol, though that $100 per month in saving may also come with a drier mouth [2]. There are even now patient assistance programs for obtaining generic medications [3].

It is worth noting that the deluge of direct-to-consumer advertising has probably not helped matters. Martha—whether watching Oprah or the evening news—has probably recently seen an ad for the very medication that is likely to come tumbling down from her doctor's sample closet. Unsurprisingly, doctors' cabinets are filled with the same medications that are heavily advertised to consumers. It is possible that Martha didn't even know she had this condition until she saw the ad on TV. It is very possible that Dr Sentzer's next patient—or perhaps Martha, the following week—will be complaining of a restless leg, or an irritable bowel. Industry will say that these ads get people to their doctors and this gets the conditions diagnosed and treated. No doubt there is some truth to this. But the question is, for all these spastic bladders, restless legs, irritable bowels, not to mention flaccid penises, how many "patients" are we creating for each one that we are helping? How many people, who, prior to turning on their TV sets naively believed that they were "well," have we in fact made ill? This remains an unanswered question.

Dr Sentzer should be commended for "saying no" to industry inducements and enticements and getting her information from less biased, nonindustry sources. She is doing good for her patients. Doctors often frame the problem as "samples or nothing," but this is a false choice. There are alternatives; alternatives that in the long run will very likely save patients' money and perhaps even their lives. Instead of spending so much time defending our right to bear samples (and the lunches that come with them), if we really wanted to advocate for our patients we should be reminding our congressmen and women about all the Martha Lodges out there who have a difficult time paying for their medication. And while we're at it, remind them that these folks vote!

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Robert Goodman, MD, started No Free Lunch, an organization that encourages health care providers to "just say no," to pharmaceutical industry gifts and enticements. He continues to see patients and teach at Columbia, where he includes a course on "non-promotion-based medicine" in the curriculum for internal medicine residents.

The viewpoints expressed on this site are those of the authors and do not necessarily reflect the views and policies of the AMA.

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Medical Education
Educating Trainees about the Cost of Medications
by Michael A. Fischer, MD, MS, and Jerry Avorn, MD

New drugs are introduced into clinical practice at a brisk and daunting pace, making it difficult for physicians to keep up with the latest therapeutic advances. Some new agents are clinical breakthroughs that must be introduced into practice rapidly, while others, heavily hyped by their manufacturers, represent little that is therapeutically new or important. A few pose major risks of adverse events—not adequately emphasized when the drug is first marketed—that must be weighed carefully against their potential benefits for each individual patient. And many are quite costly; pharmaceuticals represent the fastest-growing component of the US health care budget. In some instances, an expensive new drug may actually save money because of its benefits in terms of improved patient outcomes, shortened length of hospital stay, or reduced need for other health care resources. But other new agents add expense far out of proportion to the clinical benefit they offer. At a time of rapid advances in therapeutics, increasing concern over adverse drug events, and constrained reimbursement, it is vital for each physician to have the best available data on the benefits, risks, and costs of a drug therapy.

Obtaining all of this information is not easy. On the one hand, promotional material from drug manufacturers is easy to come by (often accompanied by tasty meals and tickets to sporting events) but is aimed primarily at increasing product sales rather than at providing well-rounded objective information or an educational experience. On the other hand, many insurers and other payors, alarmed at drug price increases of up to 20 percent per year, are eager to impose their own incentives and restrictions in an attempt to hold down pharmaceutical spending. The physician writing a prescription must balance these competing pressures. Yet costs of therapy are rarely discussed in medical training curricula.

The Division of Pharmacoepidemiology and Pharmacoeconomics at Brigham and Women's Hospital was created to serve as an evidence-based, clinically relevant, outcome-oriented information resource for clinicians. Faculty in the division educate students, house officers, and attending medical staff about many aspects of prescribing, including medication costs. In this review we will focus on educating medical trainees (students and residents), although this same framework can be used with more senior physicians. The curriculum has 3 components: (1) engaging clinicians about why the topic of drug costs should matter to them; (2) eliciting baseline knowledge and

correcting misconceptions; and (3) providing practical suggestions and resources for future actions.

Why Should I Care about Drug Costs?

Traditionally, the first hurdle has been convincing students and residents that medication costs are a significant concern, not just for patients, but also for hospitals and insurers. This task has become considerably easier in the past few years, thanks to the intense media coverage of hardships due to prescription drug expense and related stories about drug reimportation from Canada and other countries. The ongoing problems with the Medicare Part D drug benefit have also kept the issue of drug costs in the national spotlight. For medical residents working long hours at the bedside for relatively modest wages, however, issues of national health policy or hospital cost containment may not resonate, so discussions that start at the patient level can be more effective.

Asking the group about the monthly cost of some common medications can be eye-opening; for example, the monthly cost of most statins exceeds $100, which often surprises trainees [1]. Case studies calculating the monthly prescription expense for a typical older patient with conditions such as hypertension, hyperlipidemia, type 2 diabetes, or congestive heart failure can build on this initial point. Once students and residents have a better idea of monthly drug costs, the discussion can move to how patients pay for their medications, emphasizing the increasingly high copayments and cost-sharing requirements faced by insured patients and the persistent problems for the elderly, despite Medicare Part D. Case studies illustrate the difficult choices patients face when they must decide between paying for prescription drugs and other basic needs. Pointing out the documented inverse relationship between medication costs and adherence to prescribed regimens drives home the clinical relevance of this point and underscores the obvious: prescribed treatments that are not taken will not work [2].

This initial conversation should help trainees understand that drug costs are a barrier to care that blocks the path to effective therapy. Conveying the need to control drug costs at the hospital and societal level can be more difficult. The issue can be framed in terms of competing budget needs, using analogies to patient-based case studies, but specifically examining how financially strapped hospitals might have to balance increased pharmacy spending with, for example, reductions in nursing staff. Situating the economics of drug costs in the broader context of health care spending helps students and residents understand why hospitals and insurers need to limit the use of highly expensive medications. As the conversation moves from the patient to the health policy context, one or more members of the group usually asks the next logical question: why are drug costs so high?

Do Drugs Need To Be So Expensive?

Before identifying the components of drug pricing, it is useful to provide some basic concepts and terminology. Many medications are described as "cost-effective," but this catch phrase is frequently misused and misunderstood. We differentiate between the expense of producing a given agent—its cost—and the benefit per dollar spent on that agent in place of other treatment options—its cost-effectiveness. We focus here on the

actual magnitude of medication expense, ie, cost; cost-effectiveness is an important topic but is beyond the scope of this discussion.

The next step is to solicit thoughts about why drug costs are so high. There are often substantial misconceptions about this. The high cost of developing and testing drugs is almost always cited as justification for high drug prices, with the argument that large drug company profits finance the research that will yield the next therapeutic advance. A couple of facts qualify this justification. First, the amount spent by companies on marketing, sales, and administration is 2 to 3 times greater than spending on research and development. Second is the fact that "me-too" drugs (new drugs in an already-established therapeutic class) account for more than 75 percent of drug applications to the FDA [3].

Next, the educator should tackle the issue of drug detailing and how it works. Most students and residents have been exposed to pharmaceutical representatives and have received pens, lunches, stethoscopes, or other items in exchange for their attention. Group members should be asked whether they think detailing has an impact, either on prescribing patterns as a whole or on their individual decision-making. Following that discussion, the leader can introduce the considerable evidence about the influence of detailing and its impact on drug expense, from newspaper stories about cheerleaders "pepping up" sales as drug detailers to our own studies showing that academic detailing can improve prescribing [4-6]. Prominent recently published position statements by medical leaders help demonstrate growing recognition of the professional obligation to resist drug-company influence when making prescribing decisions [7].

The relative merits of branded and generic medications are a related and equally important topic. Many students and residents believe that branded medications are superior to generic alternatives; indeed, they are likely to have heard this from more senior physicians. Here again, the literature demonstrates the equivalence of most generic and brand name medications, and research shows the potential savings if generics are substituted for branded medications [8-10]. For certain medications with a narrow therapeutic index (thyroid replacement, warfarin, some anti-convulsants) minor variations in medication absorption may be clinically significant, although even in these cases generic medications can be a reasonable option if prescribed thoughtfully [11-13].

Sensitized about the hardship of drug costs for some patients and understanding how costs have gotten so high, the group is ready to learn how to do something about the problem.

What Can I Do about It?

It is best to begin with the professional responsibilities of physicians to their patients. Physicians have an obligation to learn and consider the evidence for drug selection from credible and impartial sources and to be guided by data, not marketing hype. The increasing recognition of evidence-based medicine as a cornerstone of current practice also helps convey this message. Beyond encouraging physicians to acquire knowledge from reliable sources, we need to help them apply that knowledge in their interactions with patients.

We urge all physicians to introduce the topic of medication costs with patients and to ask them openly and nonjudgmentally whether they are taking their medications as prescribed and whether cost is an issue. Physicians should know the cost of both prescribed drugs and their alternatives. Physicians with computers in their offices can go to Internet resources that provide access to medication costs, share those findings with patients, and make medication choices collaboratively. As part of the discussion, patients should be asked about their drug insurance status. This is especially true for older patients confronting the confusing choices of the new Medicare drug plan. Referrals to social workers or hospital patient advocates can assist patients in finding coverage for some or all of their drug expenses.

Finally, we encourage physicians to integrate their knowledge about medication costs into their teaching and research. There are many opportunities for clinicians to shape institutional responses to high drugs costs, such as by serving on formulary committees or drafting hospital guidelines. We urge physicians to advocate rational prescribing to their colleagues, tell them about other resources for thinking about medication costs, and encourage them to resist the blandishments of pharmaceutical detailers.

The current environment offers excellent opportunities for physicians to learn about drug costs and incorporate this knowledge into practice. Events of the past several years have raised awareness of the importance of prescription drug costs, and physicians can no longer prescribe without considering expense. The approach that we have outlined can help all clinicians—regardless of their educational level—learn more about costs. Future innovations, such as electronic prescribing programs that incorporate cost information at the moment of prescription writing, will help doctors continue to apply these lessons in the future.

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Additional Resources

For more information about medication costs, antidetailing groups, and rational prescribing visit:

www.drugstore.com
www.epocrates.com
www.nofreelunch.org
www.RxFacts.org
www.drugepi.org
www.PowerfulMedicines.org

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Medical Education

A Crash Course? What Happens When a Patient's Medical and Economic Best Interests Collide?

by G. Caleb Alexander MD, MS

Out-of-pocket costs, particularly for prescription medicines, have captured the attention of the nation. Yet the effects of these common costs are frequently overlooked during patient-physician encounters [1]. Despite the considerable relief that the Medicare Modernization Act will provide for many patients 65 years and older, millions of Americans remain burdened by their prescription costs, and this is unlikely to change any time soon.

Many barriers prevent patient-physician communication about prescription costs [2]. For example, patients may think that physicians have little choice but to prescribe certain treatments; physicians may not know what patients' out-of-pocket costs are, and, even if they do, they may feel as though they're caught between a rock and a hard place. Although difficult decisions and tough calls have to be made at times, physicians can often ease patients' drug cost burden considerably.

Strategies to Reduce Patient's Out-of-Pocket Drug Costs

Strategy #1—Critically review medication lists and discontinue nonessential medicines.
All too often patients are taking medicines that are no longer needed but are simply continued due to clinical inertia and a preference towards the status quo. For example, many patients take medicines daily that they could safely regulate and use on an as-needed basis. Treatments for conditions such as mild gastroesophageal reflux, constipation, or degenerative joint disease fall into this category.

Strategy #2—Develop good prescribing habits.
The practice of prescribing is incredibly complex. For a common condition like hypertension more than 150 treatments can be found in a pocket prescription guide. Generic medicines, less expensive than their brand-name counterparts, are available for many of these conditions. Even when patients participate in tiered formulary plans, generic medicines often occupy lower tiers and therefore have lower associated copayments than the corresponding brand-name drugs. Many patients have misconceptions about the clinical equivalence of generic and brand-name drugs, and physicians can play an important role in helping to dispel such myths. Physicians who follow the rules of good prescribing and become familiar with a small number of time-tested, evidence-based, first-line treatments for common conditions are bound to help reduce patients' out-of-pocket costs.

Strategy #3—Prescribe 3-month supplies and tell patients to split pills when appropriate.
Many prescription plans allow participants to order several months' medication at one time. Receiving a 3-month rather than a 1-month supply often enables patients to pay considerably lower annual copayments. In addition, many drugs are amenable to pill splitting; patients can be prescribed higher-dose pills, which cost only slightly more—or even the same as—lower-dose pills and can be instructed to take half a tablet at a time. This can cut drug cost by as much as 50 percent. Medicines with time-release dosing and those for which extremely precise dosing is required may not be amenable to this practice.

Strategy #4—Encourage patients to shop around.
There is considerable variation in the out-of-pocket costs associated with different drugs, depending upon where the prescription is filled. This variation is present across pharmacy chains, individual stores within chains, and Internet drug suppliers. The potential savings that can be realized by comparison shopping will be greatest for the few really expensive medicines that may account for the majority of patients' out-of-pocket costs.

Strategy #5—Use office sample, governmental, and pharmaceutical assistance programs.
Much controversy surrounds the use of manufacturer-supplied office samples and its influence on prescribing practices. Are samples a bane or boon to the practice of good clinical medicine? Regardless of the answer to that question, physicians regularly dispense free samples to help patients lower their prescription costs [3]. These samples may be particularly valuable for time-limited conditions. The caveat is that sample use should not initiate a patient to long-term reliance on a new or relatively expensive brand-name drug when a less-expensive alternative exists. In addition to manufacturer-supplied samples, there are numerous governmental and nongovernmental organizations that assist patients burdened by the cost of pharmaceuticals. Naturally, navigating these programs can be cumbersome and time-consuming for busy physicians, but their utility for select patients in select settings should be recognized.

Strategy #6—Work with patients to prioritize their medicines.
It is well known that up to 50 percent of prescriptions are not filled or not taken as directed and that numerous factors—including illness, treatment side-effects, and out-of-pocket costs—modify adherence. Given this and other evidence that patients prioritize their therapies, physicians must supply information that is vital to patients' decision making. Such an obligation cannot be fulfilled without communication between patients and physicians about their prescription regimens, their out-of-pocket costs, and the other factors they use to determine which therapies to adhere to. Physicians have a choice: allow patients to prioritize their medicines without expert input and possibly threaten their well-being or become more involved in patients' efforts to manage the clinical and economic realities of their prescription regimens.

The Bottom Line

More than 100 years ago, Osler wrote "the desire to take medicine is…really one of the most serious difficulties with which we have to contend. Even in minor ailments, which would yield to dieting or to simple home remedies, the doctor's visit is not thought to

be complete without the prescription" [4]. Despite the wisdom in these words, out-of-pocket costs for prescriptions, as well as other tests and treatments, are increasingly recognized as an important barrier to quality of care.

Asking patients whether they are burdened by prescription costs at the point of prescribing offers a valuable opportunity for physicians to establish a climate of concern with their patients and to intervene by the methods described above. Since the majority of patients and physicians wish to discuss patients' out-of-pocket prescription costs, physicians must see to it that communication about such costs is not a neglected topic in clinical medicine [1].

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Journal Discussion
A Better IDEA for Communicating With Patients about Costs
by Richard M. Frankel, PhD, and Terry Stein, MD

Piette JD, Heisler M, Wagner TH. Cost-related medication underuse: do patients with chronic illnesses tell their physicians? *Arch Intern Med.* 2004;164:1749-1755.

The 2004 article by Piette, Heisler, and Wagner entitled, "Cost-Related Medication Underuse: Do Patients with Chronic Illnesses Tell Their Doctors?" raises a number of important questions about the cost of treatment and the patient-physician relationship. When is it appropriate to talk with patients about their ability to pay for medical treatments? Who should raise the issue, the physician or the patient? Are there more and less effective ways of asking and disclosing information about ability to pay for medical treatment?

Piette and colleagues' study was based on a nationwide survey of 660 adults with chronic diseases who reported underusing medication in the prior year due to cost. The investigators found that two thirds of the study subjects did not talk with their physician about their intention to cut down on medication use due to cost and no one had ever asked the majority of these patients about the effects of medication costs. Nearly a third of the patients reported that, when they did raise the topic with clinicians, the discussion did not result in changes to their drug regimen. In other words, doctors do not usually respond to the problem of high prescription cost by using generic drugs or changing to a lower cost treatment [1].

Despite the infrequency of conversations about cost of care, this study confirms previous findings that most patients (63 percent) and physicians (79 percent) would like to discuss drug costs but are hindered by barriers that include discomfort with the topic, insufficient time, and doubts of finding viable solutions [2, 3]. Studies have also shown that increased costs to patients resulted in reduced use of such medications as nonsteroidal anti-inflammatory drugs, antihistamines, antihypertensives, antidepressants, and antihyperlipidemics [4, 5].

Piette and co-investigators did find that a trusting patient-physician relationship seemed to moderate medication nonadherence that was due to financial pressures and further suggested that improving communication could influence the choices patients make in response to increased cost-sharing [6].

Based on the findings in the Piette and colleagues study we propose the mnemonic IDEA to assist clinicians in proactively discussing costs with patients. IDEA stands for **inquire, discuss, educate, act.**

Inquire: Physicians should introduce the cost-of-care topic routinely by saying, for example, "Many patients find it hard to afford their medication. Is this a problem for you?" or "I know that there is a copay for this test. Will the cost make it difficult for you to get the test?" Empathic responses such as "Sounds like paying for this medicine (or test) will be a real hardship for you right now" can diminish embarrassment [7].

Discuss: Explain clinical recommendations to the patient using simple language and briefly review the rationale, evidence, risks, benefits, and side effects. Explore possible treatment alternatives and then elicit the patient's concerns and preferences. Shared decision making has been shown to increase adherence, decrease patient anxiety, and improve patient satisfaction and health outcomes [8].

Educate: Confirm the patient's understanding of the diagnosis and treatment by saying something like, "I want to make sure I've been clear about the options. Can you tell me what you would tell a family member or friend about what we've discussed?"

Act: Decide together on the best course of action. Adjusting medications may mean changing to a less costly alternative, splitting pills, stopping unnecessary or marginally beneficial medication, referring the patient to the business office, or suggesting Internet sites for discount drug prices. In Piette's study, patients were most likely to find those clinicians helpful who offered specific solutions [1].

Vignette 1: Jake Goodwin is an 82-year-old retiree who has lived alone since his wife died. Mr Goodwin receives Social Security payments and a small pension. He is being treated for chronic obstructive pulmonary disease (COPD) by Fred Isaacs, a primary care physician. Mr Goodwin uses a long-acting bronchodilator but has recently complained of increased difficulty in breathing. He neglects to tell Dr Isaacs that he is not using the inhaler as prescribed so that it will last longer.

Using our mnemonic, let's try to improve upon the clinical encounter.

Inquire: "Mr Goodwin, many of my patients have a tough time paying for all of their medicines. Has the cost of your inhaler been a problem for you?"

Discuss: When Mr Goodwin answers, "Well, not really. As long as I only use it when I really need it, I only have to refill it every couple of months and I can afford that," Dr Issacs and Mr Goodwin can talk about the connection between his subtherapeutic dose and his increased difficulty in breathing and explore why Mr Goodwin's "rationing" might make him feel worse.

Educate: "So Mr Goodwin, I want to make sure that I've been clear about how to use the inhaler so that it helps you breathe better all or most of the time. Can you tell me what you understand?"

"You're saying that the reason my breathing isn't as good as it used to be is because I often skip using the inhaler."

"Right. So how about if we talk about options that will help you afford refilling the prescription for the inhaler more regularly?"

Act: Dr Isaacs may not be able to change the therapeutic regimen but he might be able to offer some financial resources. "Our business office has some information about financial assistance."

Vignette 2: Isabel Morales is a 54-year-old paralegal with intermittent dyspepsia, which usually responds to Cimetidine. Over the past month Ms Morales has gone to the acute care clinic twice for gastric distress. On the second visit triple therapy for *H. pylori* was prescribed. When asked during follow-up by Joanna Slavin, an internist, what might be causing the flare-up of her symptoms, Ms Morales says simply, "I've been under a lot of stress lately." Ms Morales does not mention that much of her stress is related to the implementation of her employer's new health plan which may not cover all of her medical needs. Dr Slavin's diagnosis is "exacerbation of dyspepsia due to stress." She recommends a stress reduction program and reassures Ms Morales that the recent medication should relieve her symptoms.

Vignette 2 represents another familiar problem in primary care practice. In this case, a patient with an exacerbation of a chronic condition serious enough to require several visits over a short period states to her physician that she is "under a lot of stress." Since stress can exacerbate this and many other conditions, it might seem reasonable to encourage the patient to find ways to reduce stress and perhaps even begin a course of low-dose anti-anxiety medication.

If Dr Slavin had taken the time to explore the meaning of Ms Morales' simple statement by using an open ended comment such as, "Tell me more about your stress," "Go on," or "I see," or if she had repeated "a lot of stress?" she probably would have discovered Ms Morales's dilemma. If the patient felt embarrassed about her situation, Dr Slavin might have had to **inquire** further by saying, "I know that the medications you were prescribed are pretty expensive. Has the cost added to your other stresses?" She then could have proceeded to **discuss** the pros and cons of alternative treatments, **educate** Ms Morales about the relationship between stress and symptoms, and **act** as an advocate for her by suggesting lower cost options.

The key component in both vignettes is having a low threshold for inquiring about cost concerns. Proactive asking requires curiosity, lack of assumptions, and a recognition that the time required for the discussion will pay off in higher trust and greater adherence. As Alex Federman states in his editorial accompanying the Piette article, "In regard to health care costs, when doctors don't ask and patients don't tell, opportunities to help are missed and patients remain at risk for underusing medications and services" [9]. We offer the IDEA approach as a guide to help busy clinicians initiate this important conversation.

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Clinical Pearl

CT Scans in the Diagnosis of Appendicitis

by Niamey Pender

Acute appendicitis is responsible for more than 250 000 visits to the emergency room every year, with a roughly 7 percent probability of occurrence over one's lifetime [1]. Although appendicitis is usually diagnosed on the basis of clinical findings, computed tomography (CT) and other imaging modalities have been used when the diagnosis is unclear. The escalating use of CT has led physicians to examine its diagnostic role more closely.

Based on the risk-benefit ratio of the surgery, physicians generally accept that about 15 percent of appendectomies will reveal a normal appendix, although this rate varies with the population being considered [2]. In a healthy young man with right lower quadrant pain, this "negative appendectomy" rate is less than 10 percent, whereas it may reach 20 percent in a young woman due to other pelvic processes that obscure the diagnosis and alter the risk-benefit ratio. Young children and patients over the age of 65 historically have higher rates of both perforated appendix and negative appendectomy [3].

As many as 45 percent of patients do not display classic signs of acute appendicitis, making imaging a potentially useful tool. For example, approximately one third of patients have normal white blood cell counts, and some patients are afebrile until perforation [4]. In situations such as these, CT can aid in the diagnosis.

Physicians are increasingly ordering CT scans to balance the risk of a negative appendectomy with the risk of delayed surgery and a perforated appendix. A large, population-based trial published in the *Journal of the American Medical Association* in 2001, however, demonstrated that the accuracy of diagnosing appendicitis has not improved with the use of advanced imaging techniques over the last 15 years [5]. In general, the researchers recommended imaging only when the diagnosis is unclear, and for these cases CT is usually the preferred method of imaging. The same group published a longitudinal study in the *Journal of the American College of Surgeons* in December 2005 confirming the unchanged rate of negative appendectomy despite increasing use of CT and ultrasound [6].

When using CT to diagnose appendicitis, there are 2 main options: the standard abdominal and pelvic scan and the appendiceal scan with rectal contrast. The former displays classic patterns such as concentric, thickened appendiceal walls; an appendicolith, fat stranding, or other signs of inflammation. A phlegmon, abscess, or

free air can also be suggestive of appendicitis. Contrast or air present within the lumen of the appendix virtually excludes the diagnosis of appendicitis. Based on a systematic review of patients with suspected appendicitis, the sensitivity and specificity of a pelvic and abdominal CT scan are 94 percent and 95 percent, respectively [7]. The benefit of a complete abdominal scan is that alternative diagnoses are made in up to 15 percent of patients [8].

The other option is an appendiceal CT scan with rectal contrast. Introduced in 1996, these are helical, thin-collimation images focused on the right lower quadrant of the abdomen. Contrast is supplied rectally to enable full visualization of the lumen of the bowel. A major benefit of this type of imaging is the rapidity with which results can be obtained—less than 15 minutes. But this method looks only at the appendix, so the scan, if it is normal, will not help in the diagnosis of other pelvic diseases. Thus, the physician should have a high clinical suspicion of appendicitis before choosing this imaging method. Appendiceal CT scans are considered to be 98 percent accurate in diagnosing acute appendicitis when read by an experienced radiologist [9].

Other methods of imaging, such as nuclear scans, use a radiolabeled mononuclear antibody directed against neutrophils. They appear to have a limited role in assisting the diagnosis of appendicitis, mainly due to time required for the scan and limited around-the-clock availability [10].

Before a CT is even considered, history, physical exam, and simple laboratory tests should point to appendicitis as the most likely diagnosis. One should keep in mind that, because nausea and emesis typically occur after the onset of abdominal pain, anorexia is nearly always present in acute appendicitis. Classic physical exam signs include Rovsing's sign and tenderness at McBurney's point. A urinalysis should be ordered to rule out a urinary tract infection (although up to 30 percent of patients with appendicitis also have microscopic hematuria and pyuria due to local irritation of the bladder and ureters), as well as pelvic cultures and a pregnancy test for female patients.

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Case in Health Law
Cost Containment and Physician Obligations: Mandates for Patient Advocacy
by Bryan A. Liang, MD, PhD, JD

Lois Wickline had limited financial resources and education when she began receiving treatment for back and leg pain from her family practitioner, Dr Daniels. Initially, Dr Daniels prescribed physical therapy, but Ms Wickline did not benefit from this treatment, so he admitted her to Van Nuys Community Hospital for a consultation with Dr Polansky, a vascular surgeon.

Upon examination, Dr Polansky determined that Ms Wickline had Leriche's syndrome. Consistent with the standard of care for that condition, he decided that surgical artery excision and graft placement were necessary. Ms Wickline, who was insured through Medi-Cal, California's Medicaid program, obtained Medi-Cal authorization for the procedure.

Ms Wickline was admitted to the hospital on January 6, 1977. The next day, Dr Polansky performed the surgery using the right groin as the surgery site. Postsurgically, Ms Wickline experienced a clot within the graft. She was taken back to surgery, where the incision was reopened and the clot removed. After this episode, Ms Wickline experienced a "stormy" recovery that included pain, vascular spasm, and hallucination episodes [1]. On January 12, again consistent with the standard of care, Dr Polansky performed a lumbar sympathectomy in an effort to relieve Ms Wickline's spasms.

Ms Wickline was scheduled to be discharged on January 16. On that day, however, Dr Polansky determined that it was medically necessary for her to remain in the hospital for an additional 8 days. He based his assessment on the belief that he could save Ms Wickline's legs if she remained under close observation so that, if any emergent condition occurred, it could be treated immediately. He also expressed concerns about possible additional clotting and infection.

Dr Polansky and the hospital filed the required Medi-Cal forms, requesting approval for the additional stay and supplying the clinical rationale and justification for the extension. The Medi-Cal medical consultant who reviewed the case rejected Dr Polansky's request, granting instead a 4-day extension. Although it was possible for Dr Polansky to appeal, he abided by Medi-Cal's decision and discharged Ms Wickline on January 21. Ms Wickline protested the discharge, but she did not prevail.

Following her discharge, Ms Wickline began to experience significant pain in her right leg and, as the pain increased, the leg "got bluish" [1]. After twice calling physicians, she was told to go to the emergency room at the hospital and was admitted when she got there. Dr Polansky's colleague, Dr Kovner, who had assisted in the previous surgeries, examined Ms Wickline and found she was experiencing "unrelenting pain" in her right leg, an open and infected wound in the original incision area, a mottled foot on the affected side, and a significantly cooler right lower extremity [1]. The next day, Dr Polansky examined Ms Wickline and concluded that she had developed severe clotting in her right leg. There was no circulation to that leg, and she had developed an infection at the surgery site.

Dr Polansky could not remove Ms Wickline's clot surgically because the infection raised the possibility of additional clotting and septicemia. Instead he treated Ms Wickline with antibiotics and anticoagulants, but her condition did not improve. With medical treatments exhausted, Dr Polansky performed a below-the-knee amputation on February 8. This surgery failed to effectively address her clinical condition, and, on February 17, Dr Polansky performed an above-the-knee amputation. Both amputations were within the standard of care at the time.

Ms Wickline sued the Medi-Cal program through the State of California, claiming that she was negligently discharged from the hospital prematurely and, as a result, suffered the damage of complete occlusion of her infra-renoaorta and subsequent amputation of her leg.

Disposition: *Wickline v State of California*

At trial, the jury found in favor of Ms Wickline. An appeal was filed and the appellate court reversed the ruling, finding that the process of review by Medi-Cal was appropriate. It also found that the primary responsibility for assessment and decision making for clinical care rested with the treating physician and that he or she could not avoid that responsibility by deferring to financial considerations associated with decisions of the insurer or payor [1].

The appellate court first noted that the escalating costs of health care required that public and private payors implement cost-containment measures. Included in these measures were prospective utilization reviews like the one performed by Medi-Cal in Ms Wickline's situation.

The court then noted that both the common (ie, judge-made) law and the state's statutory (ie, legislative) law required that, "All persons are required to use ordinary care to prevent others being injured as a result of their conduct." These laws constituted the negligence rule used by the state in deciding medical injury cases.

Regarding the procedure by which the Medi-Cal reviewers assessed Ms Wickline's case, the appellate court concluded that it was adequate and conformed to the requirements of state law. The decision to deny the 8-day hospital extension had been based upon the Medi-Cal consultant's skill, knowledge, training, and experience in the medical field. There was no obligation on the part of the Medi-Cal consultant to seek additional

information beyond what was contained in the paperwork filed by Dr Polansky and the hospital.

With respect to physician responsibility, however, the court held that, "As to the principal issue before this court, i.e., who bears the responsibility for allowing a patient to be discharged from the hospital, her treating physicians or the health care payor… it was for the patient's treating physician to decide the course of treatment that was medically necessary to treat the ailment" [1]. Further, the court wrote in no uncertain terms that:

It was also…the physician's responsibility to determine whether or not acute care hospitalization was required and for how long…[T]he patient's physician is in a better position than the [payor] to determine the number of days medically necessary for any required hospital care. The decision to discharge is, therefore, the responsibility of the patient's own treating doctor [1].

The court then emphasized that physicians must act in the patient's best medical interest regardless of payor decisions and will be held responsible for this advocacy, writing that:

...the physician who complies without protest with the [cost-containment] limitations imposed by a third-party payor, when his medical judgment dictates otherwise, cannot avoid his ultimate responsibility for his patient's care. He cannot point to the health care payor as the liability scapegoat when the consequences of his own determinative medical decisions go sour [1].

Hence, the state's Medi-Cal program, which complied with the prospective utilization review process as defined by law, was found not to be liable. The primary responsibility for the welfare and outcome of Ms Wickline and her treatment was Dr Polansky, and he could not transfer that liability to the state.

Commentary

Cost containment is a standard consideration in health care delivery today. Yet, as shown by this case, the law requires physicians to consider the clinical implications of treatment or denial of treatment for the patient, regardless of the financial consequences or potential limitations payors attempt to place upon care delivery. The law therefore recognizes the primacy of patient welfare as the mandate of physicians and will hold them accountable for fulfilling that responsibility.

Clinical medical ethics pronouncements strongly support this legal perspective. The AMA *Code of Medical Ethics,* Opinion 8.054, "Financial Incentives and the Practice of Medicine," states that:

[Physicians] first duty must be to the individual patient. This obligation must override consideration of the reimbursement mechanism….Physicians should…advocate for incentives that promote efficient practice, but are not designed to realize cost savings beyond those attainable through efficiency. As a counterbalance to the focus on

utilization reduction, physicians should also advocate for incentives based on the quality of care and patient satisfaction [2].

The AMA specifically notes in a separate policy statement that it "strongly opposes, and will take appropriate action necessary to restrict, third-party cost-containment strategies that jeopardize patient health and the quality of care" [3].

Physicians have faced greater and greater cost-containment pressures with the advent of managed care and increasing costs. Yet even in this environment, where arguably physicians do not have the discretion in care provision and decision making they might have had in the past, they are still mandated to consider the patient's welfare first and will be held liable for patient injury regardless of managed care payment decisions [4-6].

In this particular case, Ms Wickline was entitled to have her physicians consider only the clinical aspects of her situation when determining how much health care to provide her. Perhaps more importantly, Dr Polansky had a duty to advocate aggressively for her care through the Medi-Cal system. Although the opportunity was available for him to request additional hospitalization coverage for her care, he did not, which may have resulted in her negative clinical sequelae. It should be explicitly noted that Ms Wickline, a patient and participant in the Medi-Cal program, was particularly vulnerable due to her socioeconomic status and limited education—she was very much in need of educated medical advocacy on her behalf. The court might have been exercising some hindsight bias in the matter when it wrote that Dr Polansky was in the position to consider—and according to medical ethics guidance, should have aggressively placed—his patient's individual interests above the cost of the care necessary to protect those interests. The court believed that since he thought that Ms Wickline needed an extended period of observation as an inpatient, it was incumbent on him to pursue that course of care to the best of his ability.

Although the State of California was the lone defendant in Ms Wickline's case, today Dr Polansky would likely be at least 1 of the defendants in the case. He would be subject to the vagaries of the medical malpractice system and might or might not prevail, depending upon a wide array of clinical and nonclinical factors [7, 8]. Further, under the current state of law, if Dr Polansky were under contract with a managed care organization to provide for Ms Wickline's care, it would be likely that he would face liability alone, regardless of whether or not the managed care organization refused to cover the recommended hospital stay as Medi-Cal did in the actual case [1, 2].

Overall, physicians have a legal and ethical obligation to consider the patient's welfare, regardless of cost-containment or payor considerations. This obligation requires aggressive advocacy for clinical care provision that is in the patient's best interest. Although circumstances may make it inconvenient, difficult, and even potentially arduous, it is an appropriate duty. It merely puts into action the social contract that allows us the privilege to practice medicine in exchange for the trust patients place with us to achieve their health care goals.

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Policy Forum
How Will Paying for Performance Affect Patient Care?
by Meredith B. Rosenthal, PhD

Pay-for-performance programs are now common elements of the payment systems of public and private insurers alike. While pay-for-performance sponsors are most often individual health plans, the programs are being introduced by a variety of purchaser and multistakeholder coalitions in a number of markets. Perhaps most significantly, through a series of demonstration projects and public statements, the Center for Medicare and Medicaid Services (CMS), has made clear its intention to phase in pay-for-performance for physicians, hospitals, and other institutional providers.

In the nearly 5 years since the Institute of Medicine's 2001 report, "Crossing the Quality Chasm" gave momentum to a nascent payment reform movement, widespread experimentation has yielded a number of early lessons and highlighted critical challenges to paying for performance [1]. There are still many unanswered questions about the impact this model will have on the overall quality and experience of care, but economic theory and a growing body of empirical evidence suggest a number of key points.

The Reimbursement Context
While pay-for-performance programs are efforts to introduce new incentives into health care, the underlying structure of the payment system already generates many incentives of its own. Currently, most physicians in the US are paid on a fee-for-service basis, which encourages a high volume of services, without regard to the value of the service to the particular patient [2]. In practice, because some services are reimbursed more generously than others, the payment system also influences the choice of treatment among therapeutic options and generally favors procedure-based care. Under salary or capitation arrangements—the current mainstream alternatives to fee-for-service payment—physician pay is not tied to services rendered, so there is no direct financial incentive to provide services. These payment structures have led to concerns about undersupply of needed services. In whatever setting it is introduced then, pay-for-performance alters the financial incentives that influence physicians (either consciously or unconsciously) and should be considered in light of existing incentives that either reinforce or deter delivery of services.

Is Paying for Performance a Good Idea?
While some object to pay-for-performance as running counter to notions of professionalism by "paying physicians twice for the same job," it may be more appropriate to think of it as the latest refinement in fee-for-service and capitation. Pay-

for-performance will not replace the existing payment structure in either system, but it will allow payors to take into account a set of quality indicators in addition to volume of service (as fee-for-service does now) or the number of covered lives (in the case of capitation). In this view, pay-for-performance can be viewed as a mechanism to correct some of the distortionary incentives that already exist in the reimbursement system. For example, by rewarding activities connected to managing the health of populations (eg, screening, managing chronically ill patients) that have been historically under-reimbursed relative to the technical challenge they pose to the average office-based physician, many pay-for-performance programs are attempting to encourage realignment of physician priorities towards prevention.

Is There Any Evidence that Pay-for-Performance Works?

There are few rigorous studies of pay-for-performance in health care. Prior to the recent surge in adoption of pay-for-performance strategies, only a handful of controlled studies were published in the health care literature. Among these were a number of null findings [3-5]. Two controlled studies found modest improvements in evidence-based process measures of quality under pay-for-performance plans [6, 7]. Recently published evaluations of the current generation of pay-for-performance programs have also been mixed [8, 9]. It is reasonable to conclude therefore that pay-for-performance *can* positively affect quality of care, but payors have a lot to learn about how to do so effectively.

Could Pay-for-Performance Be Harmful?

The design challenges facing responsible payors attempting to use pay-for-performance to improve the quality or value of health care are not limited to eliciting the desired response from health professionals. There are also possible unintended consequences. The 2 most important challenges for pay-for-performance from the point of view of patient care are: (1) dealing appropriately with diverse patient populations to minimize incentives to avoid some patients, and (2) making sure that "teaching to the test" does not actually result in worse care.

Many physicians who object to pay-for-performance are concerned that the quality measures upon which payment is based are confounded by differences in severity of illness and patient behavior. It is well-known that physicians who treat sicker or less compliant populations are likely to have lower scores on process and outcome measures, despite working hard to provide high-quality care. Thus a critical challenge for pay-for-performance is to use risk adjustment or other tailored approaches to account for these differences fairly and thus minimize physicians' incentives to avoid certain types of illnesses and patients [10].

Rewarding a few (or even many) specific, easy-to-document quality processes will almost surely discourage unrewarded activities, some of which may be important to patient health but difficult to measure. In education, this response to being graded on test performance is called "teaching to the test," and critics worry that important dimensions of the educational experience are lost when school districts pay too much attention to test scores. Similarly, since pay-for-performance programs focus, by necessity, on the few clinical areas where there is good consensus on what constitutes

high-quality care, there is a risk that other aspects of care will suffer. To some extent payors can address this by establishing broad measure sets that include patient experience as well as individual processes of care. At a minimum, this problem suggests that payors should consider tradeoffs and interrelationships among targeted and untargeted domains of performance.

The Future of Pay-for-Performance

In many ways, pay-for-performance is the inevitable result of several decades of refinements in quality measurement and reporting. Now that there is sufficient data to convince most people (including Congress and major purchasers of health benefits) that there is a quality problem in the US health care system, it will be hard to resist the widespread urge to use that same information to reform an obviously imperfect payment system. Used effectively, pay-for-performance could remove some of the well-known distortions that are generated by the underlying structure of current payment systems and help refocus delivery on critical aspects of population health. If it is to succeed in promoting patient health and value for the health care dollar, pay-for-performance will require careful design and effective safeguards against potential unintended consequences including those associated with patient selection incentives (and the associated fairness concerns) and "teaching to the test" to ensure that these positive objectives are not achieved at too great a cost.

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Medicine and Society
Medical Debt, Health Care Access, and Professional Responsibility
by Katie Plax, MD, and Robert W. Seifert

Health care is expensive. People who need care but cannot afford it deal with this truth in a variety of ways; they may delay or forgo care, or they may seek care from alternative, lower-cost providers. Emerging research has shown that it is also common for people to go into debt—either to physicians and hospitals directly or to a third party such as a credit card company—to avail themselves of medical care.

Medical debt is surprisingly common. A recent national survey found that 1 out of 6 non-elderly adults—about 28 million people—had medical debt [1]. The risk of medical debt is greater for people without health insurance, but those who are insured are not immune; 15 percent of those who had insurance for all of the preceding 12 months reported having some medical debt. And 70 percent of all those with debt said they were insured at the time the debt was incurred [1]. Many of these people could be characterized as "underinsured," meaning that they were nominally covered but inadequately protected [2].

Community-based research conducted by The Access Project, a national resource center for local organizations working to improve health care access, supports these data. In a 2000 study conducted in 24 communities around the country, almost half of the nearly 7000 uninsured respondents had unpaid medical bills or were in debt to a particular safety net facility in their community [3]. The Access Project's 2005 study of low-income, insured taxpayers in 7 communities, again found that 46 percent had medical debt [4].

Medical debt has an impact on patient behavior. People with medical debt are far less likely to fill a prescription, see a specialist when needed, or visit a doctor or clinic for a medical problem. They are more likely to skip a needed test, treatment, or follow-up visit [1]. Among uninsured people who owed money to a community clinic or other safety net provider, one quarter said that having the debt would deter them from seeking care at that facility in the future [3].

While analyses of access to care often compare insured and uninsured groups, it appears that the care-seeking behavior of privately insured adults with medical debt is similar to that of uninsured people. On a number of standard access measures—skipping tests, not filling prescriptions, and postponing care—respondents to a national survey reported that medical debt presented nearly as high a barrier to access as having no

access at all, even among insured people with a consistent place for care—a "medical home"[5].

Many of the debt-related reasons for doing without needed care are self-imposed: pride, embarrassment, or simply reluctance to add to the debt burden. Other pressures, though, are external. A physician, for example, might require a deposit or full payment in advance from patients who owe for past services. Some offices refuse services outright—sometimes to all family members, not just to the person with the bill—until past due balances are paid [6]. And many hospitals employ aggressive, punitive debt-collection practices—including outside collection agencies and lawsuits—that deter patients who are unable to pay promptly from seeking further care [7].

While there is a clear line connecting medical debt to access and, thus, to health, the effects of medical debt reach beyond access. A national survey found that large numbers of people with unpaid medical bills drain their savings, take on large credit card debt, borrow against their homes, and significantly change their lifestyles to pay down the bills [8]. In the Access Project's 2005 community-based research, more than a quarter of survey respondents reported that medical debt had led to housing problems such as failure to qualify for a mortgage, inability to pay housing costs, and denial of application for rental. Many said it had damaged their credit ratings, which has long-term effects on the ability to accumulate assets, buy a car, or secure employment. Slightly more than half said they had health insurance at the time they received the services for which they owed money [4]. These financial problems may contribute to health problems because they compound the more direct health effects of access barriers resulting from medical debt [9].

The Physician's Role: Professional Responsibility and Values

Should clinicians be concerned with this trend? Some might argue that it is better if physicians do not know patients' financial circumstances and treat everyone equally without regard to their ability to pay. In an ideal world this argument might hold, but in the real world medical debt affects people's access to care and, by extension, their health. Hence, physicians have a responsibility to act to reduce it. In his call to reinvigorate medical professionalism, David Rothman describes 2 ways for physicians to fulfill their professional responsibilities as they relate to reducing the problem of medical debt: commitment to the patient's interests over the physician's and civic engagement, ie, advocating for systemic change to improve health and health care [10]. The authors of "Physician-Citizens—Public Roles and Professional Obligations," describe widening "domains of [physician] obligation," that range from direct patient care, to access to care, and finally to socioeconomic issues like housing conditions or domestic violence that affect patients directly [11]. Because medical debt is a socioeconomic factor that has a direct influence on patients' interests, these principles of professionalism charge physicians with a duty to help patients manage the problem.

Professional values dictate *why* physicians should be involved, but questions remain about *what* physicians can do to minimize medical debt. There is a range of solutions, from the level of the individual physician, to policy changes at the local level, to larger systemic change. Physicians should, at a minimum, be aware of their institution's or

office's charity care policy, sliding scale provisions, or reduced bill payment options. On a local or national scale, the Community Catalyst organization offers principles to guide effective community advocacy on behalf of patients and families who need assistance in reducing medical debt. These principles include information about the specific eligibility criteria for charity care, making charity policies well known to the general public and to patients, allowing for reasonable payment plans, and covering all medically necessary services without a charge to the patient when appropriate [12]. At the institutional level, the American Hospital Association has issued guidelines on billing and collections for its members, encouraging them to adopt reasonable, equitable, and respectful policies and to communicate those policies clearly to patients [13]. Other community, institutional, and professional organizations have also published principles and guidelines in this area. Physicians should lead in disseminating and implementing these ideas and should work in partnership with active community organizations to improve health care access, coverage, and services.

Recognizing the significant health consequences of medical debt to patients' health and health care access, physicians and other health professionals have a public responsibility to engage in making change on the individual, local, and national level.

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Op-Ed

Consumer-Driven Health Care Done Right: Prevention, Evidence-Based Care, and Supportive Patient-Physician Relationships

by Michael D. Parkinson, MD, MPH

The adages *primum non nocere* or "first do no harm" and *caveat emptor* or "buyer beware" apply to the broadly used but often misunderstood term, "consumer-driven health care."

Consumer-driven health care can be good medicine if it is properly designed, implemented, communicated, and embraced by physicians and health systems as well as by patients. To insure the best possible outcomes, physicians need to understand and lead the consumer-driven health care movement.

This new movement in health care financing creates short- and long-term incentives for preventive care, behavior change, and risk factor reduction. It can also motivate better patient understanding and ownership of acute and chronic care decisions made in partnership with physicians. Models of consumer-driven health care—either the employer-funded health reimbursement arrangements (HRA) or employee- and employer-funded health savings accounts (HSA)—can offer unique opportunities to improve the health of patients, the effectiveness and efficiency of the health care system, and the patient-physician relationship. But it must be done right.

Let's be clear, consumer-driven health care is a major movement and strategy, not merely a benefit design or cost shift. Cost-shifting, in which patients pay more of the direct costs of their health care, is not a necessary feature of consumer-driven health care. Cost-shifting has been used bluntly over the past decade to decrease utilization indiscriminately for effective and ineffective, as well as efficient and inefficient care. Preferred provider organizations (PPOs) and HMOs with higher premiums, higher copayments, and higher deductibles, are increasingly becoming de facto "high deductible health plans." These plan designs start with a yearly deductible without the benefit of annual employer-funding of HRAs, the potential for accumulation of personally owned funds afforded by HSAs, or the rollover of balances from year-to-year provided by both HRAs and HSAs.

Clinically effective consumer-driven models should respond to the needs of low-, middle- and high-users across the full spectrum of illness. The success of this form of consumer (ie, patient) involvement in treatment and payment decisions depends, in part, on open, candid discussions between patients and their physicians about cost of care.

Physicians must make the effort to be informed about the specifics of their patients' health plans, and they should be able to assess a plan's adequacy using 3 benefit design principles:

Employer funding with 100 percent of first-dollar coverage for evidence-based preventive care. Periodic health examinations, tailored to age- and gender-specific groups and based on authoritative recommendations like those made by the US Preventive Services Task Force, are the cornerstone of consumer-driven care models. Patients should never forgo preventive care that has been proven to prevent disease, disability, and premature death. Behavior change programs for the leading causes of death and preventable medical costs, such as tobacco cessation and weight management, can and should be reimbursed 100 percent under either health reimbursement accounts or IRS-regulated health savings accounts.

"Clinically credible" amounts in the funded account, particularly in the transition year(s) as individuals move from more traditional plan designs. The amount in the account, funded either through the employer contribution to the HRA or in real dollars into the HSA, should allow for the majority of predictable expenses to be covered in the initial years or until rollover of unspent dollars into subsequent years occurs (as it typically does for 60 percent of any full-risk population). Additional dollar incentives can be created to supplement the account for behaviors such as completing a health risk appraisal, participating in a behavior change program, becoming more knowledgeable about one's chronic disease, or receiving evidence-based care. One provider, Lumenos, supplements subscribers' accounts by $100 for completing a health risk appraisal to better understand and improve health behaviors. Lumenos will add an additional $100 to the accounts of those with chronic illness who enroll in a personal health coaching program to understand and improve compliance with evidence-based care. Upon demonstration of improved knowledge, skills, and behaviors associated with that condition, patient accounts receive an additional $200.

A total out-of-pocket maximum that is equal to or less than the typical out-of-pocket expenditure under the previous plan's experience. Under almost any health plans today, those with chronic illness pay more. Clearly they would like to pay less, and most want to get help in better understanding their disease, medications, behavioral improvement options, and medical care options [1, 2]. Many high utilizers may be able to lower their out-of-pocket costs through increased compliance with evidence-based medical advice if they have a better understanding of their medical needs since approximately 30 percent of health care expenditure is wasteful or inefficient. High utilizers and chronically ill patients "solve" for the out-of-pocket maximum exposure when given an option [3].

The vast majority of patients and physicians believe they should discuss both clinical options and the costs of health care choices with each other. Yet, they rarely, if ever, do [4]. The third-party payment system has inadvertently built a wall of silence around cost and value leaving the critical stakeholders—the physician and the patient—with no real opportunity to discuss how cost affects treatment. Consumer-driven models, in which patients are directly responsible for payment, promotes greater information sharing about cost and quality and creates the infrastructure and incentive to do so with greater

ease—and increasingly more accurately. "Counter-detailing"—the exchange of more objective information—about expensive copycat drugs and clinical interventions of marginal benefit becomes a welcome, not a restrictive, clinical interaction, informed but not dictated by financial concerns [5]. Rather than seeking more, the patient will be seeking appropriate care; properly designed consumer-driven plans can help insure adequate resources to get that care.

The future of the patient-physician relationship is brighter under the consumer-driven health care model than in the currently onerous, administratively burdensome, low-trust environment of today's practice. But all stakeholders in the medical-industrial complex must embrace transparency in quality, cost, and service. As more patients request information from physicians (as they are doing with greater frequency), physician practices must demand complete and accurate information from payors, health plans, consultants, brokers, and other middle men in the health care financing system; payors are beginning to provide these resources to physicians to help them support their patients. Health plans should also assist subscribers and their physicians in encouraging and rewarding clinical, care delivery, and payment innovations that contribute to better outcomes at lower cost. The patients, aware of and spending more of their own money, can and should be on the same "side" as their physicians.

Consumer-driven health care is not a silver bullet for the health care system. But it can be a major driver in realigning incentives, creating personal behavior change, promoting better care management, and encouraging patient-centered innovations in a way that current third-party payment systems cannot.

Many questions about consumer-driven health care remain unanswered. What would really be in the best health and financial interests of patients? Do they know their options and are they willing to pay for them? Can physicians leverage the financial options and consequences of consumer-driven plans to promote better clinical practices [5]? Under the uncomfortable glare of more publicly available information on medical costs, should cost-shifting from the public sector to the private sector continue? Will consumers tolerate different prices charged to public payors (ie, the government) than to private sector employers (ie, themselves) for the same service? Who should pay for graduate medical education if patients choose not to receive care in academically affiliated systems which can do more and charge more, often with no apparent difference in outcome? What will be the impact on the research and development by drug and device manufacturers if their prices become transparent to the actual purchaser of care?

Patients, as always, can and should look to their physicians as trusted professionals and partners. By becoming more knowledgeable about consumer-driven care, by advocating in our communities for "doing it right," and by embracing the incentives, empowerment, and transparency it creates for our patients, physicians can strengthen the patient-doctor relationship and be true to the profession's core values of doing no harm and always acting in our patients' best interests.

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Op-Ed
Consumer-Directed Health Plans
by Joseph P. Newhouse, PhD

Consumer-directed health plans are certainly attracting attention, but what effects will they actually have on health and health spending if they catch on? Forecasts are often wrong, but in this case we have strong evidence about the probable effect of a key component of such plans—namely the large deductible that is partially or perhaps even wholly funded by an employer.

This strong evidence comes from the RAND Health Insurance Experiment, for which I served as principal investigator, and, as I will explain, it accounts for the provision in many such plans whereby any unused dollars in the account can be preserved over time, accumulate tax free, and perhaps even be owned by the individual [1]. This experiment, conducted 30 years ago, randomly assigned families to plans with varying cost-sharing arrangements. Some families received all their medical care for free; others were enrolled in a plan that required a large deductible. In today's dollars the deductible in the RAND Experiment was larger than that in most contemporary consumer-directed plans. The experiment's deductible was reduced for lower-income families, whereas this is not a feature in most of today's consumer-directed plans. The study subjects were all under 65 years of age and participated in the experiment for either 3 or 5 years.

In addition to the large deductible, the experiment had another feature that mimicked employer-funded accounts. We wanted to prevent sick individuals from declining to participate if offered the deductible plan but accepting if offered the plan with free care, which would skew the results to show an excessively large effect of the deductible. To avoid this bias, the participants with deductible plans received a "hold-harmless" side payment, independent of any medical spending, so that they would never have less to spend on nonmedical goods and services than if they remained on their prior insurance. Indeed, they would almost always be better off by enrolling in the experiment. Instead of coming as a deposit in an employer-funded account, however, the hold-harmless payments came as monthly checks to the families. These payments were found to have negligible effect on use of medical services.

The results of the experiment showed that families with the large deductible spent about 30 percent less on medical care in each year than families with free care. Each person in the deductible group made about 2 fewer physician visits annually and had fewer hospitalizations. For the great majority of participants there were no measurable adverse health consequences from the reduction in use, but hypertension was less well

controlled in those with high blood pressure. This poorer control of hypertension was estimated to raise mortality about 10 percent in the affected group.

Based on these results, it is reasonable to expect the deductible feature of consumer-directed plans to reduce spending substantially. The reduction, however, is likely to be a one-time phenomenon; although there is no evidence of this in the experiment, it is not likely in my view that the steady rate of increase in annual medical spending will be much affected. Even so, the one-off reduction in spending of the magnitude seen in the experiment is notable.

The advocates of consumer-directed plans believe that the large deductibles will induce individuals to take better care of themselves, but there was no evidence of this in the experiment. Smoking rates and weight, for example, were unaffected by the large deductible.

What about the negative health effects? Disease management, which was not part of the experiment, should be part of such plans; better management of chronic disease could mitigate such negative effects as poorly controlled hypertension. We know from studies of savings behavior that unaided consumers do not always make wise decisions, especially when those decisions entail present sacrifices for future gain, as, for example, complying with a prescribed antihypertensive regimen that causes side effects. The ability to improve compliance affords an opportunity for disease management.

Advocates of consumer-directed plans also claim that prices for medical services will become more competitive, with corresponding benefits for patients. But in the experiment those on the large deductible plan did not choose physicians whose services cost less per relative value unit than did those in the fully subsidized care arm of the experiment. Some consumer-directed plans are making an effort to inform patients about prices or at least to tier physicians based on price. Whether the experiment's results would have differed had patients had better information about cost differences among physicians is unknowable.

A question looming over all the prior results is whether the findings of the RAND experiment would hold if it were repeated today, some 30 years later. Doubtless there would be differences—if for no other reason than that medical technology has advanced in the past 3 decades—but would these differences be material? Damon Runyon once said that, in a fight between a big guy and a little guy, the big guy does not always win, but that's the way to bet. In a similar vein, I would be willing to bet that if the experiment were rerun today, the large deductible would continue to cause a major reduction in use with minimal adverse health consequences among much of the employed population. And those consequences could be mitigated by smarter cost-sharing, such as exempting chronic maintenance drugs from the deductible.

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Virtual Mentor

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Op-Ed

Empowering Patients through Consumer-Driven Health Care

by Devon M. Herrick, PhD

Consumer-driven health care refers to plans in which employees manage their own health care dollars rather than cede control to third parties, as they do with traditional health plans. These new coverage options empower patients to express their priorities and preferences and to make trade-offs between heath care and other uses for their money instead of having these choices made for them by others.

Most Americans still receive clinical care in much the same way as they did 4 decades ago. This is because the setting in which patients receive medical care is largely a function of how physicians are paid, and the way physicians are paid has remained fundamentally unchanged since the rise of private health insurance and the passage of Medicare and Medicaid in the mid-1960s. Insurers (both commercial and government) pay nearly 90 percent of physician bills and have little incentive to expand the services they cover because doing so might increase their expenditures. Many insurers, for example, do not reimburse physicians for telephone consultations or e-mail exchanges, so physicians often avoid communicating with patients in these ways. In fact, health economists have theorized that forcing patients to take time off from work and wait in crowded physicians' offices is a way of rationing health care using time rather than money [1].

The 40-year-old model of health care financing is changing, however. Consumer-driven health plans, which generally include a personal health spending account, are leading to new models of care delivery that are both convenient and efficient. Patients with personal health accounts, such as a flexible spending account (FSA), a health savings account (HSA), or a health reimbursement arrangement (HRA) often have debit card access to their accounts so physician reimbursement takes place at the time of service. Because of the speedy cash flow and reduced paperwork, many physicians will seek out these paying patients by catering to their needs.

Some of the new ways patients can receive medical care include: Internet-based practices, e-mail consultations, phone consultations, and nurse practitioner-staffed "quick-clinics" located in pharmacies and large retail stores. Given these alternatives, patients suffering from minor ailments who are armed with instant access to HSAs may not be content waiting in crowded physicians' offices when a retail store-based health clinic is less expensive, more convenient, and has a shorter wait time. Patients may also want to spend more time discussing the relative merits and costs of prescribed drugs.

Patients with consumer-driven health plans have the incentive to question the need for expensive screenings they deem unnecessary because it is their own money they are spending. When their money is at stake, patients will ask tough questions about the prices and efficacy of recommended treatments and services [2].

When patients become more involved in decisions about their health care, the result will be a health care system that is both responsive and sustainable. Physicians will increasingly expect their patients to pay directly for routine services and will treat them more like customers. Patients will finally begin to place a monetary value on the medical care they receive and will demand "bang for their buck." Patients may even begin to take greater responsibility for management of their chronic conditions when they have Internet-based management tools and control of the funds that pay for their day-to-day medical care. For instance, an individual with asthma who uses an HSA might more closely monitor his or her condition, knowing that a trip to the emergency room could wipe out the accumulated balance. Someone with diabetes may monitor blood glucose levels as an easy way to avoid costly complications. These attributes are important traits of consumer-driven health care. This is similar to what people do in every other area in which they consume goods and services—ask questions, compare services, and consider prices.

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To read one doctor's account of treating patients covered by HSAs, see Brewer B. A family doctor adapts to health savings accounts. *Wall Street Journal.* January 24, 2006.

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Virtual Mentor

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