

**ISSUE BRIEF**

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# Improving Incentives

## Prologue

### **You Can't Buy Heroes: Aligning Physician Incentives Doesn't Do It<sup>1</sup>**

By Michael W. Painter, JD, MD<sup>2</sup>

Recently, my wife Mary and I got a series of early morning calls about the declining health of her mother, who was in her 90s and had been ill for months. Later that week, she died comfortably, with dignity, and on her own terms, at her home in San Francisco's Sunset District. We were stricken and so sad for the separation, loss and goodbyes but not about the process of dying or the care she received.

Ten years ago, we received a very different early morning call. As it happens day after day for so many people, health care's dysfunction reached into our family and devastated us. My 72-year-old father, an otherwise healthy and vigorous man, had fallen in his closet. Mom had found him, still conscious and communicating. What followed were desperate, panicked hours and days.

Paramedics who used a power saw to cut the closet door to get to him presumed he'd had a stroke. They took Dad, who was talking and responsive, to a neurosurgery specialty hospital rather than the university trauma center. That decision proved fatal.

By the time I arrived from Seattle the next day, Dad was in the intensive care unit on a ventilator. Although I was a family physician, the hospital staff only very reluctantly let me see his head CT, which showed a massive intracranial hemorrhage. That finding raised a number of issues, such as why he hadn't been a candidate many hours prior for emergent surgery to relieve pressure from bleeding. The following day, the staff asked to remove Dad from the ventilator. He stopped breathing that night.

We asked a lot of questions. We were profoundly upset by his care. The experience was brutal. The staff was defensive, patronizing, unhelpful, and, at times, antagonistic. Why had they insisted Dad was a stroke victim rather than entertain the possibility of traumatic injury from a fall? Why did they ignore the large, obvious contusion on his forehead?

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We weren't interested in retribution, blame or lawsuits. That was far from our thinking. Dad was gone. Our lives were irrevocably changed. Nothing was going to bring him back.

We did, however, want answers.

What went wrong?

Why was there such a difference between the appearance of great care—the hospital was in a beautiful building, in a nice part of town—and the actual experience?

Why didn't he get timely help that might have saved his life?

I've spent the last 10 years searching for those answers, for myself and on behalf of countless others. How could health care that should be so great be this bad?

I have been honored to work with so many people pushing health care toward high value, at the Robert Wood Johnson Foundation (RWJF) and elsewhere. We've worked hard to find solutions. We all get it: The health care problem is a big, complex one without silver bullet answers.

We've tried to analyze the puzzle and find, prompt, develop or procure the pieces. We've made incredible progress with efforts like the RWJF Aligning Forces for Quality Initiative.<sup>3</sup> During that decade-long effort, the Foundation has been collaborating with community leaders across the country in the relentless quest for health care value.

We're searching for information to help us all become better at making smart health care decisions. We've worked to help health care professionals improve, and to help patients and families be more proactive. We've worked to develop information on the price and cost of care and to understand how much to spend on care. We've worked to automate health care information by adding health information technology.

And finally, the Holy Grail: We've worked to align the incentives that health care professionals need to support and deliver great care. We strongly believe that unless we reward great results, we won't get them. That means payment reform with a focus on financial incentives for good care. It's the right way to go.

But what if that's not exactly right? What if incentives are important, but simply aligning them isn't enough? What if getting the financial incentives right isn't sufficient? And what if focusing so hard on those financial incentives might make care even worse?

*How could health care that should be so great be this bad?*

Don't get me wrong. I was an early proponent of urging a strong focus on payment reform in our improvement efforts. If we want to prompt professionals to hunt for waste, resolve safety problems, sustain improvement, and, most of all, save more lives, we need to pay them the right way.

It's so obvious. But what if the obvious thing is the wrong thing?

In his book, "Drive: The Surprising Truth about what Motivates Us," Daniel Pink makes the emphatic and, in some ways, counter-intuitive point that financial incentives designed to promote and reward behavior all too often do not work.<sup>4</sup>

Research shows of course that financial incentives do work—for narrow, routine tasks.<sup>5</sup> If you do this mechanistic assignment, you will get this reward.

But the evidence is clear that the more complex the task, the less effective financial incentives directed at it are. In fact, they may even degrade desirable behavior.<sup>6</sup> Financial incentives seem to dull creativity and inhibit motivation. That's a problem when we're trying to solve big complex problems. There are probably few challenges more complicated than fixing the extreme dysfunction in health care—getting health professionals, patients, consumers, purchasers, insurance plans and others to work together in new, powerful ways, driving toward the best possible outcomes at the lowest expense.

But there is hope. Motivators other than dollars—and other than carrot-and-stick systems of reward and punishment—matter tremendously.

If you have a clear set of rules and an obvious solution, and it's just a race to that solution—like increasing the volume of a certain medical procedure or service—then by all means use carrot-and-stick incentives. Fee-for-service payment works terrifically well here, for instance.

If your problem, however, requires even rudimentary cognitive skills, then rewards do not work.<sup>7</sup> Plus, here's the kicker: Larger rewards lead to worse performance.

To solve your particular problem, do you need high levels of engagement and creativity, innovation and new approaches? Then don't use carrots and sticks. Instead promote self-direction. That works better than external direction and reward.<sup>8</sup>

Pink notes that, rather than rely on financial rewards for complex work, we should focus on things that really matter to the people we are trying to motivate, like autonomy, mastery and purpose.<sup>9</sup> Those are the kinds of

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approaches that prompt human beings to look broadly, get creative and innovate.

What are those motivators again?

Autonomy: the ability to direct our own lives.

Mastery: the desire to get better at something that matters.

Purpose: the opportunity to do what we do in service of something larger than ourselves.

These are the kinds of human capabilities we desperately need to solve complex, 21<sup>st</sup> century problems like our health care value challenge.

And that brings me back to my Dad. In 2005, several years after he died, I'd completed my RWJF health policy fellowship and become an RWJF senior program officer. Several of us were traveling the country trying to understand what was happening in health care markets. We were gathering information to develop RWJF's national Aligning Forces initiative, and that work led me to my hometown. During interviews at the university, one leader volunteered several major problems they were experiencing, including access to some emergency specialty services. High on the list of those services was access to neurosurgery specialty care for emergent but unprofitable craniotomies. That's that surgery my Dad desperately, urgently needed—the one he didn't get—the one the doctors didn't offer us. We also learned that many of the neurosurgeons in town had moved their services to the local specialty hospital, the place where Dad had died two years prior.

In 2004, a national survey by the American College of Emergency Physicians highlighted a growing reluctance by specialty physicians to provide emergency on-call coverage.<sup>10,11</sup> Two-thirds of emergency departments reported a significant problem obtaining on-call coverage. Another 2004 national survey, the Neurosurgical Emergency and Trauma Services Survey by the American Association of Neurological Surgeons and the Congress of Neurological Surgeons (AANS/CNS) found that half of neurosurgeons who served on call had unfortunately limited their emergency calls. One third of them refused to offer craniotomies.

To fix this specialty on-call problem, some like the American Association of Neurological Surgeons advocated as far back as 2001 for an incentive adjustment, a payment change.<sup>12</sup> The idea was to provide a bonus or stipend to surgeons to entice them to provide on-call coverage for these critical services. But the 2004 AANS/CNS survey showed that, while stipends might be attractive, they weren't the solution. Large

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numbers of neurosurgeons were still limiting their call in significant ways, like not providing craniotomies. At that time only about one third of neurosurgeons received a call stipend. That means that nearly 70 percent of surgeons did not.<sup>13</sup>

The subsequent 2006 AANS/CNS Workforce Survey again examining the neurosurgeon on-call issue highlighted persistent problems. By that time 76 percent of neurosurgeon respondents noted that on-call coverage was a problem in their area. Even though by 2006, most neurosurgeon respondents reported that they did take call, nearly 40 percent still limited their call by, for instance, not providing trauma services or craniotomies. That gap persisted in spite of a 17 percent increase in available stipends for on-call care. A 2006 IOM report also highlighted this national on-call specialty problem and noted that it was getting worse.<sup>14</sup> Finally, years later in spite of increasing use of stipend payments on-call specialty problems continue. A brief by the California Healthcare Foundation noted that as of 2010, specialty coverage options for California emergency rooms had deteriorated from several years prior.<sup>15</sup>

Clearly, an extrinsic incentive—in this case, paying highly trained, extraordinarily bright, compassionate professionals to change their behavior—wasn't sufficient. And people, patients like my father, get caught in this incentive crossfire. People are dying because we can't get the incentives right.

What's really motivating this undesirable behavior, like the surgeons' refusal to offer craniotomies? No doubt part of the reason they were limiting their on-call exposure was because they believed payment for on-call care was inadequate and untenable. It took them away from non-emergent, profitable care. It hit their bottom line.

But, that reason is almost certainly too simplistic. It does not sync with the experience we've all had with individual physicians and surgeons we've met and know. They are some of the hardest working, most dedicated, compassionate professionals in our society. Even when I think back to those horrible hours during my Dad's death, I find myself wondering, "But those were obviously good people. Why did they behave that way?"

Why do great people act in ways that end up hurting patients?

Perhaps by putting these surgeons in extremely difficult situations, in trying to force or entice them to do these procedures, we degrade their sense of control, their autonomy and mastery and, ultimately, their

incredible sense of purpose. Basically, our message to them might be, “Just do it. Just cover the call. You can get a bonus. Stop complaining.”

I'm going to make a bold assertion: Until we get these human motivators right in health care and find ways to enhance autonomy and purpose, we can try all sorts of complicated, elegant payment models and formulas and ultimately still not get to the goal of sustainable high value. It will always be just over the horizon.

What we should do is figure out how to pay health care professionals reasonably, fairly, rationally and well, and move away from the money issue. Then we should figure out how to motivate them to improve care.

Pink gives another example that is possibly instructive.<sup>16</sup> In the early days of the Internet, Microsoft created Encarta, a highly managed, corporate effort to build a big online knowledge source. It was fine. It's also gone now. Compare that to Wikipedia. It's alive and well. It's also not just fine; it's an astounding, decentralized, self-motivated, creative, massive, all-volunteer, ever-improving human knowledge source for the world. Which approach do we need in health care—an Encarta-managed model or a Wikipedia self-directed engine—a Wikipedia community of change?

As a nation, I think we're on our way to putting all of the pieces of this health care puzzle together. Maybe even well on our way. But I also think, even at this late stage, that we must pause and make sure we aren't missing something critical. I don't think we have figured out how to motivate creativity and innovation in health care improvement—not yet. We must be very careful that we don't miss something so basic, like for instance, the core drivers of human creativity and innovation needed for this sort of complex problem solving. You can't simply align incentives to get that. We need something more—something much better and much more powerful—something like a Wikipedia change community for health care improvement.

Let's absolutely be smart about incentives in health care, but let's also get away from talking about simple carrots and sticks. Instead, let's find the right mix of motivators to promote the creativity we need to get the best care every single time for people who are relying on us, like my Dad.

I believe we can do it. I must believe. Because for me, as you can see, it's personal.



# Improving Incentives to Free Motivation

By François de Brantes MS, MBA and Stacey Eccleston<sup>17</sup>

“I can charge a person’s battery, and then recharge it, and recharge it again. But it is only when one has a generator of one’s own that we can talk about motivation. One then needs no outside stimulation. One *wants* to do it.” Frederick Herzberg, “One More Time: How Do You Motivate Employees?” *Harvard Business Review*, 1968.

## Introduction

At the core of the debate over how to improve the quality and affordability of health care in the United States is an old fight about what drives human behaviors. Consider that during any health care interaction there, on one side are clinicians—highly trained professionals who have dedicated their careers to caring for the sick—and, on the other, patients—diverse people who want to get better when they are ill. These two groups are the principal “agents” in the health care market. And each has an internal “generator” that drives towards a shared goal: better health.

Yet, decades of empirical observations and thoughtful studies have shown that many patients fail to comply with physician recommendations, and that physicians often overuse, misuse and underuse services in caring for the sick. The conclusion must therefore be that the internal “generator” isn’t working and should be replaced with batteries that have to be charged and recharged, and recharged again. The solutions then turn to the carrot and stick approach, in which an external charge—rewards or punishment—is used to replenish the battery. In health care, these charges have been called pay-for-performance, capitation, consumer-directed health plans, reference pricing, wellness bonuses, bundled payments, trend-based targets, and so on. And the discussion, studies and debates have all focused on which carrots and sticks—incentives—will work best to achieve the desired charge.

We submit that the premise of the debate is wrong. The generator—the internal motivating engine for patients and clinicians—is not broken. Rather, it has been slowly sapped of its energy by external factors (the strongest of which is money) designed unwittingly to run counter to their internal motivation. Payment for health care services is primarily designed to encourage the delivery of as many services as possible, irrespective of a service’s value to the patient (or society). And the

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combination of third-party payment and benevolent employers has insulated the patient from sensitivity to the rational demand for services, and injected moral hazard—the tendency for an individual to take risks because he or she won't be paying the costs of their consequences.

In his life's work, Professor Herzberg, a psychologist and business management professor, showed that external factors can, at best, avoid sapping an internal generator's charge. However, and herein lies the dilemma, the absence of these factors usually creates human dissatisfaction. As such, Herzberg's numerous studies show us that improving incentives is not about optimizing the battery's charge, but rather about not sapping the generator's power.

In this brief we first examine the factors that lead today to the sapping of the power of clinicians' and patients' respective generators, and then propose a framework for how to redesign these factors so that they minimize the sap. For clarity's sake, we will refer to the external factors—the battery charges—as incentives (financial and non-financial), and we will refer to the internal generators as motivators. Motivation is inherently internal, whereas an incentive is inherently external, and while many confuse the two and blend them inappropriately, we will try to distinguish them in a consistent way.

### **Some Basic Facts And Theories**

Given the significant number of research papers and popular news articles that remind us of the high cost of health care in the U.S. and its long term impact on the federal budget, let's focus instead on the current impact of that high cost:

- If every dollar spent on health care was paid for by the federal government (as is the case in most other developed economies), every cent of current taxes collected would have to go toward that single expense. As Figure 1 below illustrates, the total intake of taxes has stayed pretty constant at 18 percent of the Gross Domestic Product. And today, after decades of inflation, health care spending has reached 18 percent of the GDP.



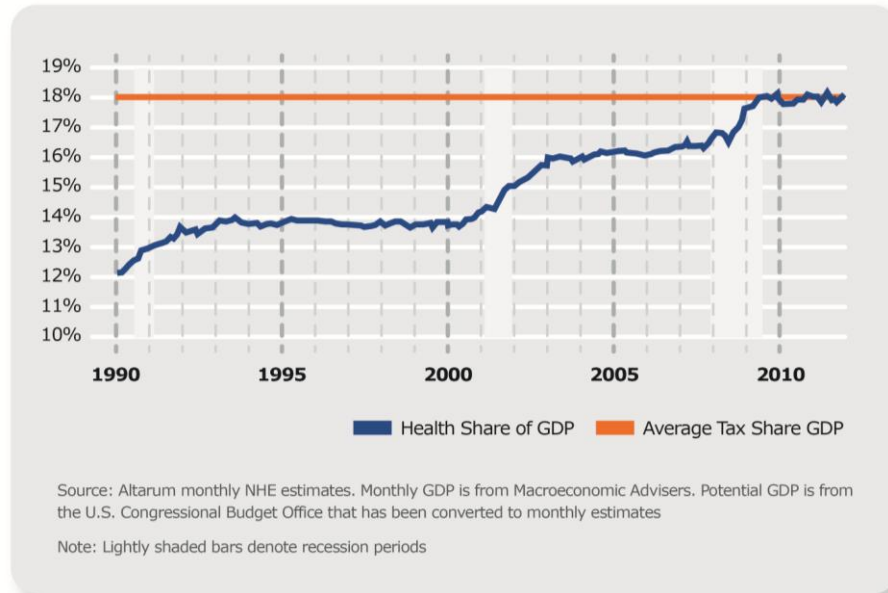


Figure 1

- Average American families spend 20 percent of the family income on health care costs, which include premiums and out-of-pocket expenses. That number has doubled in two decades. In other words, income and health care costs haven't increased at the same pace. As a result, just as those costs are eating up a large chunk of the nation's economy, they're also eating up a large chunk of the family budget, crowding out families' ability to buy other necessary items.

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This rise in costs isn't the result of one single policy but rather the convergence of many policies that have injected incentives that push the production of health care services inexorably higher, and encourage price gouging as well. The two main culprits are the lack of open and transparent information between the principal agents in the health care market—health care professionals and consumers—and the fact that the third party payer (the insurance plan) pays a fee for each service delivered, irrespective of its value to the patient or to society.

As a result, in traditional economic terms, opportunity cost, moral hazard, marginal benefit, and information asymmetries affect decision-making by health care professionals and consumers. This has led to a well-documented inefficiency in health care.

For example, Don Berwick and Andrew Hackbarth<sup>18</sup> have identified and estimated major sources of what they call “wasteful spending,” including

failures of care delivery and coordination, over-treatment, administrative complexity, pricing failures, and fraud and abuse. In 2012, David Cutler offered a similar typology in a presentation to the U.S. Senate about his account of sources of inefficiencies.<sup>19</sup> His indirect assessment of inefficiency was made by estimating the excessive Medicare spending in four major areas: poor care delivery, excessive administrative costs, prices that are too high, and fraud. The total excessive dollars in his study accounted for 31 percent of the total Medicare spending (see Table 1), with almost half of it coming from poor care delivery, which was further divided into unnecessary services (8% of total Medicare spending), inefficiently delivered services (5%), and missed prevention opportunities (2%). Administrative costs, high prices and fraud accounted for eight, four, and three percent of total Medicare spending, respectively.

<b>Area</b>	<b>Dollars* (billion)</b>	<b>Percent of medical spending</b>
<b>Poor care delivery</b>		
Unnecessary services	\$210	8%
Inefficiently delivered services	\$130	5%
Missed prevention opportunities	\$55	2%
<b>Excessive administrative costs</b>	\$190	8%
<b>Prices that are too high</b>	\$105	4%
<b>Fraud</b>	\$75	3%
<b>TOTAL</b>	\$765	31%

\* Estimates are for 2009. Data are from the Institute of Medicine.<sup>2</sup>

The upshot of these theories is that the price, quantity and mix of services used in the care of a patient for a specific medical episode—such as the treatment of breast cancer or a heart condition—varies greatly within a community and between communities.

Figure 2 below illustrates variability in the cost of certain medical episodes of care, within a defined population and adjusted for patient severity. These varying costs resulted from differences in prices of services and in the volume and mix of services used to manage a patient for that episode.

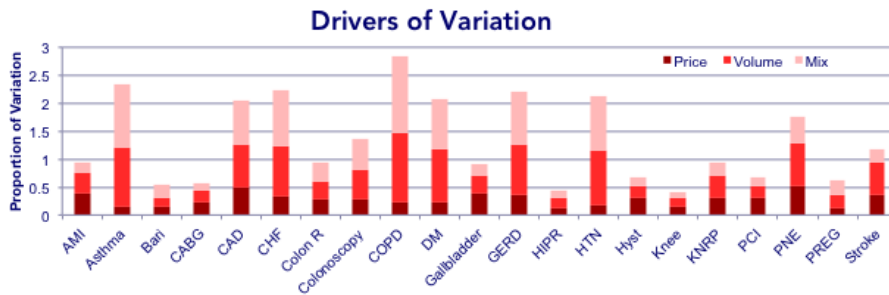


Figure 2

That variability and, in particular, its disconnection from measures of health benefit, provide some of the most convincing evidence of both waste and the power of existing incentive structures to direct health care resources in perverse ways. As such, these findings provide insight into what not to do in health care, but not necessarily into the change needed for better results.

Since we've identified the main culprits, one might conclude that flipping them on their heads might solve the problem. However, only one of these inefficient practices—the lack of information between health care professionals and consumers—can be flipped safely. Improving communication between providers and customers is a fundamental principle of all markets. But for health care information to be easily understood by the majority of health care consumers, much work needs to be done, and we'll come back to that topic.

The other faulty policy—fee for service payments—can and should be changed, but only if the changes are considered in the context of the “charge’s” effect on the “generator.” As mentioned above we shouldn't try to tweak payments or other financial incentives directed towards health care professionals to optimize a “charge.” Instead we should make certain that they don't sap the generator. Fee-for-service saps the generator by creating an incentive that runs counter to the professional's motivation, and that's why we spend billions of dollars on poor care delivery, as shown in Table 1. Every time the health care professional is motivated to avoid an unneeded test, prevent a hospitalization, or spend a lot of extra time with a patient, the prevailing fee-for-service payments charge them to do the opposite.

Simultaneously, the faulty incentives directed to the consumer-patients (such as low or no out-of-pocket expenses) are often charging them to seek the most expensive treatments in the most expensive settings. It's a perfect recipe for inflation, and that's exactly what we've gotten.

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## The Case for Improving Physician Incentives

Undeniably, for health care providers, the motivation to properly care for patients and “do no harm” significantly impacts the treatment decision-making process. However, this motivation has been sapped by poorly designed incentives. The challenge we face in health care is to figure out how to reverse the incentives that currently encourage doctors, nurses and others to make inefficient and potentially harmful health care choices.

Some studies have conclusively shown that health care professionals consider the relative profitability of providing a particular service when deciding whether to provide it. A 2009 Institute of Medicine report<sup>20</sup> highlights a number of studies illustrating how financial incentives can create potential conflicts for physicians with both their professional standards and their motivation in caring for patients. For example, some physicians may have a financial relationship, such as an ownership or interest, in pharmaceutical, medical device, or biotechnology companies that produce products they use in their practice. Physician ownership of ambulatory surgical, imaging, and other freestanding facilities also creates potential conflicts of interest to the extent that physicians may “self-refer” to those facilities, which may not be the best choice for the patient. The study also cites conflicts of interest that emerge from the fee-for-service payment model.

While fee-for-service payments can be the right incentive for some aspects of health care—for example, we generally want to maintain the physician’s motivation to provide preventive care, and volume-based payments won’t reduce that motivation—it is often the wrong policy, as illustrated in the recent ABIM Foundation’s Choosing Wisely campaign,<sup>21</sup> which seeks to help physicians and patients to reduce overuse of tests and procedures, and in a large number of studies.

The flaws in the base financial incentives, the lack of published guidelines in many areas of care, and the lack of easily accessible information on the value of treatments, create opportunities for physicians to impute their choices on consumer-patients. Studies by the Dartmouth Atlas of Health Care have, for example, shown the impact of supply-sensitive<sup>22</sup> and preference-sensitive<sup>23</sup> care on the total variation in costs of care.

In their totality, these incentives negatively affect the professional’s motivation by influencing provider treatment choices and potentially harming patients who receive unnecessary services. Said plainly, it’s tough to be good when you’re constantly encouraged to be bad.

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## The Case for Improving Consumer Incentives

While many consumer-patients are motivated to maintain or improve their health status, incentives can sometimes negatively affect that drive, since they come from various sources and may create conflict. For example, a consumer's take-home pay may create budgetary constraints that force trade-offs in his or her health care choices. Patients at the bottom of the income ladder, for example, may be more motivated to feed their families than to improve their health. Similarly, consumers' educational and social backgrounds can affect how they use health care information and act on it, and the way they interact with health care professionals. Further, the type of health insurance they have impacts their decisions about seeking care or following a particular treatment.

The RAND Health Insurance Experiment, a long-term study of cost sharing and its impact on patient behavior and health care service use, found that patients who paid a share of their health care costs sought fewer health services—reducing the use of both highly effective and less effective services.<sup>24</sup> This finding, which is not particularly surprising, has significant implications for how financial incentives directed to consumers could, in some instances, lead to lower consumption of unneeded services, but also, if used indiscriminately, create as much harm as good. Conversely, reducing or eliminating all consumer costs for health care services leads to over-consumption that can harm the patient or simply contribute to market inefficiencies. For example, until employers started charging employees for the difference in price between a brand-name drug and a generic substitute, the generic substitution rate was very low. After the incentives were changed, the rate of substitution increased significantly.

Financial incentives embedded in benefit design are not the only incentives impacting consumers, as mentioned above. Others influence the manner in which consumers use and act on health information, or devote time, energy and resources to improving their health status. For example, the use of shared decision-making tools has proven to be very effective at getting consumers to select more efficient treatment decisions. But without incentives encouraging this use, it has proven difficult to spread their adoption.

Many employers also have used incentives to discourage employees' perceived bad health habits or to encourage good health habits<sup>25</sup>, applying the "charge" because they are unsure of the employees' personal motivations. For example, employers have provided bonuses to employees who fill out health risk assessments because they didn't think the employees would be motivated to do so and/or because studies have

shown that the voluntary rate for filling out these forms is very low. In refusing to do an assessment, even with a cash incentive, consumers demonstrate they are more motivated to keep their personal health history to themselves than to collaborate with health care professionals and/or their employers to improve their health status. That may be why CVS-Caremark recently announced that employees who don't fill out a health risk appraisal will have to pay an additional premium cost of \$600. In this instance, the incentive is a penalty that can be very effective at sapping one's motivation to not share health information and instead motivating the employee to improve or maintain his or her health.

In a recent study, some evidence indicated that incentives to encourage employees to stop smoking proved effective, although generally the smoking cessation rate in the U.S. has stayed constant for more than a decade. However motivated consumers might be to stop smoking, the incentive they receive from smoking appears to be strong, and a counter incentive such as cash might help the core motivating force to win out. Other employers have implemented financial penalties for smokers by raising their insurance premiums.

Similarly, employers and health plans experimenting with reference pricing for certain common treatments or procedures will penalize plan members that select more expensive providers in a manner similar to the one described above for generic and brand drugs. Such incentives are designed to counter the otherwise documented tendency of consumers to equate higher price with better quality when there isn't any other objective measure of quality. A body of research has shown that consumer literacy in health care matters is very low, impacting one's ability to understand the clinical nuances of recommended services or of differentiating the quality of the services delivered.

While the broad access of health care information has reduced some asymmetry in information between consumers and providers of health care services, gaps in communication and understanding remain significant. One mechanism to counter this unevenness is to increase the availability of public information about providers' professional competence. Results from a Wisconsin study<sup>26</sup> indicated that making quality performance information public stimulates quality improvement on the part of providers. Another study<sup>27</sup> showed that properly framed information on the cost and quality performance of physicians and hospitals could lead consumers to make different selections than they otherwise would—selecting lower priced, better quality physicians over higher priced ones. However, information without a reason to use it (or a risk for not using it) isn't effective.



A combination of better-designed health insurance plans and accessible information on health care services (their usefulness, cost and benefit) can reduce the potential for consumers to neglect their motivations to improve or maintain their health status.

### **The Case for a Synthesis**

Provider and patient motivation are not only affected by financial incentives and the availability of information on cost and quality of care, they also are affected by other, sometimes more idiosyncratic or environmental factors. For the provider, these may include professional standards enforced by his or her specialty medical society, the type of organizational structure in which they practice (large medical group or small independent practice), and the level of local market competition. These environmental factors are filters, of sorts, that can either amplify or attenuate the external signals created by financial incentives and the availability of information.

For example, the organization to which the provider belongs might completely insulate him or her from financial incentives. That's often the case for clinicians employed by large medical groups or health systems. As such, external payment incentives are filtered by the organization which decides how to convert those incentives into salaries and other payments for clinicians. This filtering action might have a very different impact on a clinician's motivation than the original, unfiltered incentive.

For the patient, environmental factors affecting motivation may include social, demographic and economic conditions, education level, and the nature of individual health care choices. Again, these filters can either amplify or attenuate external incentives. For example, a state might have a very well-developed website with comparative information on the price and quality of health care, but that information might be inaccessible to those without computers. Similarly, a low-wage worker might react more sensitively than a highly compensated professional would to a plan design that penalizes the consumption of certain health care services.

All these factors—the direct incentives and their filters—converge at the point of care—the point of interaction between the patient and the provider where health care services delivery and consumption decisions are made. Figure 3 illustrates a proposed framework for synthesizing how these factors interact.

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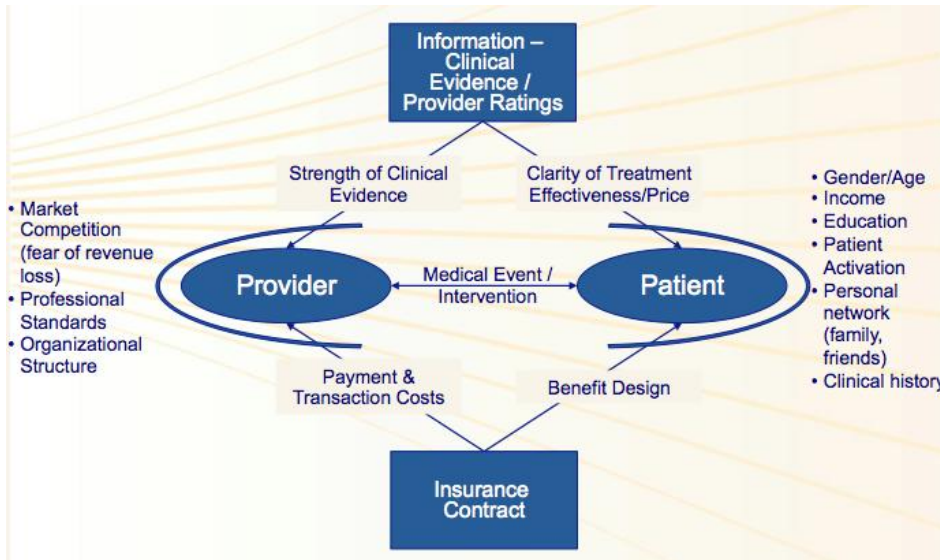


Figure 3

On one side of this convergence is the availability of information on the competence of providers and the benefit of treatments. The stronger the clinical evidence on the benefit of a medical intervention, for example, the less ambiguity there is in choosing treatment pathways for both the patient and the provider. Similarly, the availability of price and quality information helps both providers and patients make more informed decisions on the relative financial cost/benefit for each treatment. The manner in which information flows can reduce the potential for motivation distortion. For example, knowing the effectiveness of treatments might bolster the motivation for physicians to select the right treatments for their patients and the motivation of some consumers to comply with their doctors.

The strength of the signal created by this information will depend partially on environmental factors surrounding provider and consumer. For example, if the provider’s medical specialty society has a national campaign to encourage adherence to clinical guidelines and uses proof of that adherence as part of its board certification and re-certification process, the external signal likely will be amplified. Similarly, if the consumer’s employer gathers information on price and quality of care and takes great care to deploy it to all employees, the external signal will be amplified. In other instances, the signal might be attenuated. Further, we know from studies published on the activation of consumers<sup>28</sup> that age, gender, personal health history, and family support have an effect on the level of activation, and that the level of activation has an impact on

*The manner in which information flows can reduce the potential for motivation distortion.*

how the patient interacts with the system and makes health care choices, thus affecting the cost of care.<sup>29</sup>

At the other end of the point of convergence are the terms defined in the provider's payment contract and the patient's health plan benefits. The manner in which these financial incentives are designed will have a direct impact on the motivation of the professional to deliver the right services at the right time and the motivation of the patient to "consume" them. Unfortunately, in most situations, incentives such as provider payment terms and member benefits that are created by insurance contracts are not aligned with the strength of clinical evidence and do not reward care that has proven efficacy and cost-effectiveness. For example, a provider may be paid the same for every given intervention, irrespective of its medical benefit, and a patient may be charged the same co-pay for any given service, irrespective of its benefit.

Additionally, the incentives that exist in the provider contracts and the incentives that exist in member benefits are negotiated independently of one another, and are often disconnected or, worse, are in direct conflict. For example, a provider might receive a very high marginal benefit from ordering a diagnostic imaging test, while the benefit to the patient might be negative, such as a high co-pay or unnecessary exposure to radiation. Conversely, a diagnostic test that is important for the patient might have very little marginal benefit for the provider. Either way, in general, the relative health benefit of services is not taken into account in most payment models or benefit designs.

Again, the signal created by the financial incentive can be impacted by environmental factors surrounding provider and consumer. And while little is known about the specific effect—amplification or attenuation—of each of these factors on external incentives and, by consequence, on the motivation of patients and providers, we can hypothesize that some of these factors have more of an effect on direct financial incentives such as organizational structure for providers and income for patients. And some, including professional standards for providers and patients' level of education, affect the way information is processed and used.

Taken together, the signals and filters create an effect today that often leads to a conflict between provider and consumer, or a "conspiracy" to over-produce and consume. In other words, the results of provider-consumer interaction, which are health outcomes for the patient and medical claims billed by the provider, show an overproduction of services with marginal health benefit to the patient. These consequences are evident in the high degree of variability in costs and in the quality of care.

*Unfortunately, in most situations, incentives such as provider payment terms and member benefits that are created by insurance contracts often are not aligned with the strength of clinical evidence and do not reward care that has proven efficacy and cost-effectiveness.*

Changing incentives for providers and patients requires an understanding that modifying either will have an effect on the other, and that, wherever possible, we must reduce the potential for conflict between the two. In addition, the specific goal of improving incentives for either should be to minimize the negative impact on motivation. A well-designed incentives program should simply avoid sapping the motivation, or “generator.” The outcome of such improvement should be significantly decreased variability in the cost and quality of health care.

### **From Synthesis to Implementation**

Turning these principles and concepts into action is the next step. As is, the proposed framework should help providers, payers, employers, and consumers better understand the forces that drive unwarranted variation in the production and consumption of health care services, especially in non-emergency situations.

Reduced variation is the desired outcome because it would indicate that the incentive forces that cause it have begun to be neutralized. As one starts designing payment and benefit design programs to achieve the desired goal, it’s important to consider a few essential features.

Ideally, provider and patient incentives should be clinically nuanced, appropriately reflecting the complexity of medical care and the relative effectiveness of specific interventions on certain patients and not others. An example would be discouraging the provision of services listed in the Choosing Wisely campaign but only for patients to which the criteria apply. In addition, incentives should be designed to avoid action or inaction that will harm health, and the profitability of care interventions should be tied to outcomes. Well-designed payment would allow for decreases in profitability when unnecessary care is given and increases when interventions lead to better health. Ultimately, the combination of these effects, when they work, should result in very little unwarranted variability in the cost of a medical episode of care. We should still expect some variability, particularly in price, but also in the mix of services. For example, new innovations in the delivery of care might reduce the need for certain services and increase the need for others. This type of variation is explainable and a normal by-product of any functional market.

*Provider and patient incentives should be clinically nuanced, appropriately reflecting the complexity of medical care and the relative effectiveness of specific interventions on certain patients and not others.*

### **Harvesting the Low-Hanging Fruit**

Not all care requires “fixing.” For example, an analysis of commercial datasets shows that there is very little variability in the quantity or type of resources used to treat a simple fracture or routine vaginal deliveries.

It doesn't mean these areas can't be improved upon, but they simply might not deserve the same attention as other medical episodes for which there is considerable variation. For example, that same data source reveals significant variation in resources used, after adjusting for patient severity, for the management of certain chronic conditions.

For more than 20 years, The Dartmouth Atlas has documented the variation in the production and consumption of health care across the U.S., finding more than a two-fold difference in Medicare spending from one region of the country to another.<sup>30</sup> Since Medicare prices are regulated, the price-adjusted variation is still significant, an indication that the variation is largely due to differences in the utilization (volume and type) of services delivered. In addition, analyses using commercial datasets find that another significant driver of variation in costs is the variation in the price of services.<sup>31</sup> As such, employers, providers, and private and public sector health plans could use the magnitude of variability in episodes of care as a means to create a list of targets on which to focus. There are three elements to consider when creating such a list:

- *Episode Cost Variation*: Variation in episode costs can be due to three factors: price per unit of service, quantity of services, and mix of services. Understanding the contribution of each on total variability would help map out potential interventions.
- *Proportion of Total Costs*: It stands to reason that achieving reductions in costs of expensive episodes will yield greater savings, and improving the quality of care for more common episodes has the opportunity to positively impact a larger segment of the patient population.
- *Complication Rate*: One obvious target for improvement is the rate of potentially avoidable complications (PACs)<sup>32</sup> within each episode of care. By focusing on episodes of care where the rate of complications is relatively high, there is the potential for savings and improvements in care quality.

These three elements are synthesized in Figure 4 below.

*Employers, providers, and private and public sector health plans could use the magnitude of variability in episodes of care as a means to create a list of targets on which to focus.*

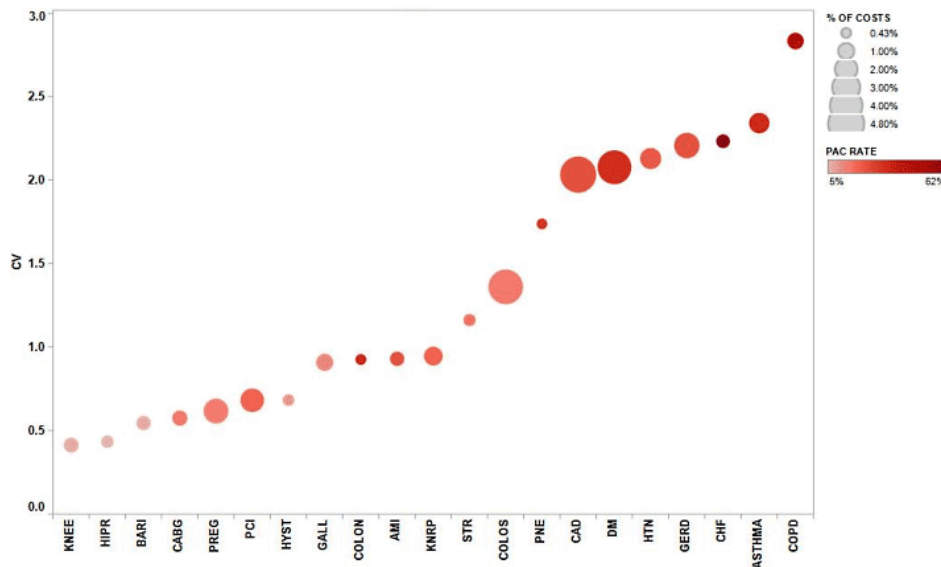


Figure 4

In the figure above, diabetes and coronary heart disease (CAD) seem to be important targets because they have high variability (a coefficient of variation of more than 2.0), represent a significant percentage of total costs (as represented by the size of the bubble), and have a high percentage of costs associated with potentially avoidable complications (as illustrated by the red hue). The figure, however, does not in itself help us understand whether the incentives that might be driving the variation and that need improvement are those of providers, patients, or both.

It is, however, an illustration that current incentives might be having a negative impact on the motivation of providers and consumers, and an indication that modifying these incentives could attenuate that negative impact. To get to more concrete action, it's important to understand the source of the variation for these targeted episodes—price, frequency, and mix of services—and then create reasonable hypotheses for the main causes of the variation and designs for experiments to test them.

For example, if the variability in episode costs is almost entirely due to price variation rather than resource use, one could hypothesize that the motivation of individual clinicians to provide services that will benefit consumers is working well. In these instances, there might be other forces at work that require a different approach. One such force is the consolidation of provider organizations, or simply the desire of any organization to optimize its profitability by raising prices. In these



instances, creating pricing and quality transparency and sensitivity for the patient might lead patients to seek care from lower priced, high quality organizations, and create a market penalty for high prices.

Conversely, if the variability is due to the mix and frequency of services, it's reasonable to hypothesize that clinician motivation is being sapped by poorly designed financial incentives, and that moving away from fee-for-service to more bundled approaches could reduce that variability. Similarly, episodes with a high proportion of patient safety failures also could be improved with better provider incentives, while episodes with "care transition" based complications, such as acute exacerbations of a chronic condition, could be improved through a combination of less toxic provider and patient incentives.

### **Conclusion**

Our framework offers insights on how consumer and provider incentives—those caused by insurance contracts, and those caused by the availability of information on treatment effectiveness and efficiency—affect both parties today. Those effects converge at the point of care, causing, in many instances, providers to overuse or underuse some services, and patients to ask for unneeded services or to fail to consume needed ones. Together, they are responsible for creating significant variations in costs of medical episodes of care, a situation that has led to well-documented waste in resources and harm to patients. A tangible outcome of such poorly designed incentives is great variability in cost and quality of health care, and instances in which the most variability occurs with medical episodes requiring the most pressing attention.

To start solving these problems, we suggest that incentives be redesigned to reduce their negative impact on motivation. Factors can amplify or weaken the signal from these incentives, and little is known about each. As such, more research through natural experiments must be done, and our framework can help focus those experiments where they are needed most—where there is the greatest variability in cost and quality.

As these experiments get under way, we offer suggestions on how to conduct them. First, focus on episodes of medical care that have (1) a high degree of variability, (2) represent a significant portion of total medical expenditure, and (3) contain high rates of potentially avoidable complications. Second, understand the source of the variability—price, mix of services, or frequency of services—because that source may offer insights on which party or parties to focus incentive changes. Third, consider the importance of clinical nuance in redesigning incentives so that the health benefit of a service becomes tied to its financial benefit to

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*Most importantly, consider that neither the carrot nor the stick is particularly effective at creating a lasting incentive, or "charge."*

providers and its financial cost to plan members. Most importantly, consider that neither the carrot nor the stick is particularly effective at creating a lasting incentive, or “charge.” Each has the potential to instead reduce or eliminate the motivation that is the “generator” of professional and human behavior.

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## ENDNOTES

1. Adapted from Michael Painter’s talk at HCI3 10 Year Anniversary Meeting, National Press Club, Washington, DC, Mar. 27, 2013.
2. Michael Painter is a senior program officer at the Robert Wood Johnson Foundation.
3. Aligning Forces for Quality (AF4Q) is the Robert Wood Johnson Foundation’s signature effort to lift the overall quality of health care in targeted communities, reduce racial and ethnic disparities and provide models for national reform. The 16 geographically, demographically, and economically diverse communities participating in AF4Q together cover 12.5 percent of the U.S. population. Visit [www.forces4quality.org](http://www.forces4quality.org) to learn more.
4. Pink, DH. *Drive: The Surprising Truth About What Motivates Us*. New York: Riverhead Books, 2009.
5. For a comprehensive review of incentive research to date, see Gneezy U, Meier S and Rey-Biel P. “When and Why Incentives (Don’t) Work to Modify Behavior.” *Journal of Economic Perspectives*, 25(4): 191-210, 2011.
6. Alfie Kohn’s book *Punished by Rewards* makes one such strong case, built on his review of hundreds of studies, for just how ineffective and even destructive extrinsic motivators can be (Kohn, A. *Punished by Rewards*. Boston: Houghton Mifflin, 1993.)
7. Pink.
8. *ibid.*
9. *ibid.*
10. In 2004, the American College of Emergency Physicians’ (ACEP) Emergency Medicine Foundation received a grant from the Robert Wood Johnson Foundation to survey medical directors of hospital emergency departments to assess the effects of current regulations and the practice climate on the availability of medical specialists who provide care in the nation’s emergency departments. Results can be accessed at [www.acep.org/workarea/downloadasset.aspx?id=8974](http://www.acep.org/workarea/downloadasset.aspx?id=8974).
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16. Pink, 2009.

17. François de Brantes is the executive director of the Health Care Incentives Improvement Institute (HCI3). Stacey Eccleston, is the program implementation and research leader for HCI3.

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28. See Skolasky R, Green AF, Scharfstein D, et al. "Psychometric Properties of the Patient Activation Measure among Older Adults." *Health Services Research* 46(2): 457-478, 2011, <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3064914/> and <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3064914/table/tb11/>.

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