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Visions For The Future

Of The U.S. Health Care System

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Introduction

The current spotlight on health care reform provides an excellent platform for actuaries to demonstrate the contributions they can bring to the table as the debate over key health issues continues. To showcase some of these ideas, the Health Section of the Society of Actuaries issued a call for essays on "Visions for the Future of the U.S. Health Care System." We were thrilled with the outstanding quality and quantity of essays received and appreciate all of the time and energy the many authors invested in their work. It is with pride that we are able to publish approximately half of them in this collection of essays.

The invitation to submit essays went out to members of: the SOA Health Section, the SOA Long-Term Care Insurance Section, the DMAA: The Care Continuum Alliance, the American Society of Health Economists and the American Society for Healthcare Risk Management. From this diverse field, we received a wide variety of submissions, some of which are included in this publication. The Health Section sponsored prizes for the top three essays by Health Section members. Congratulations to Jim Mange, Ian Duncan and Jon Shreve for their award-winning efforts!

We initially intended to categorize these essays into common themes. As we read and reread the essays, it became increasingly apparent that categorization was an impossible task as these papers cover such a vast array of interesting, different and far-reaching topics. As you read the essays, I encourage you to consider the ideas presented from a variety of angles:

- Do they address one or more of the frequently mentioned sides of the access/cost/quality triangle?
- What is the proposed role of the government—funding source, sole payer, enforcer of mandates, etc?
- Do they spell out principles for evaluating reform proposals?
- How do they address actuarial concepts such as risk pooling and risk adjustment?
- Are they offering solutions for efficiency through data?
- How can evidence-based medicine and outcomes-driven payment methods address the problem?
- Do they rely on personal responsibility? Is it about an enhanced role for wellness?

Many of these ideas presented in the papers are not mutually exclusive, but could be woven together, perhaps using the principles stated in other essays.

Another interesting way to think about the ideas presented in this collection of essays is whether they could possibly be "tested" on a scale smaller than federal. The laboratory might be a state, as has historically happened, but it might also be a hospital system, an insurance company or even a community.

Actuaries and related health professionals have an understanding of the complexities of the current health care system and the interrelated nature of the various segments. We need to bring this knowledge to health reform debates at the corporate, local, state and federal levels. We hope that this collection of essays will serve as a springboard for sharing ideas and bringing our insights with regard to health care reform to the forefront.

Ponder and Enjoy!

Jennifer Gillespie, FSA, MAAA, *Chair*
HEALTH SECTION OF THE SOCIETY OF ACTUARIES

Note: *The thoughts, insights and opinions shared in these essays are not necessarily representative of the views of the Society of Actuaries or the authors' employers.*

Can We Capture Potential Health Care Savings Without A Federal Takeover?

by David V. Axene

Most proposals for reforming the U.S. health care system of today focus on reducing the high cost of care. The standard thought process assumes that reducing costs will increase access to care by improving the affordability of health care and perhaps funding more care for the uninsured. An endless number of proposals focus on this issue. In fact, most of today's initiatives are based upon lowering costs and/or "bending the trend." Too few proposals address the core of this essay, "How do we capture those savings?"

Most insured and/or government run programs directly capture savings since the programs are directly and independently funded by premiums and/or taxes and savings result in surplus that can be readily captured. Self-funded, most experience-rated and self-pay programs create much more challenging issues. The reduced cost flows directly back to the entity or individual without being captured for broader public policy uses. Who owns these "saved" funds? Is it the employer, the covered employees, the labor union, the individual? The plan sponsor very much considers these dollars as its own. After all, it reduced its cost of care; therefore, it is the plan sponsor's money! Plan sponsors cringe during discussions about potential taxes on such programs since they view their right to self-fund the coverage an important freedom.

Capturing Savings

The challenging public policy dilemma becomes how to capture savings achieved through health care reform efforts without bringing all programs in under a common umbrella—the end result being to accumulate savings to fund broader initiatives. Is there a solution that accomplishes this without painful aggregation? Is it possible to do this without nationalizing the entire health care system?

Today there are more than 45 million uninsureds in the United States. With the challenging economy and increased job loss, this number is expected to increase. It is in our country's best interest to minimize the number of people without health insurance. To the extent that funds within today's delivery system can be used to pay for the cost of the uninsured, it seems a wise choice to use these funds to do so. Studies of the existing U.S. health care system show several opportunities to reduce the cost of care including improvements in efficiency and individual health status, as well as focusing on wellness, reduction in unnecessary administrative costs, and the introduction of technology to improve the efficiency of our record-keeping (e.g., electronic medical records). The new administration's direction to date is to pursue many, if not all, of these.

If we assume that any or all of these initiatives are successful at reducing the cost of health care, monies will be available only if they can be captured and used elsewhere in the system. Unfortunately, much of this money is filtered through a variety of mechanisms and may never be seen as cost savings. In the case of an insured program, the money shows up as reduced future premium rates. In the Medicare program, the money shows up as reduced costs. With significant deficits and Medicare program funding concerns, these funds may be gobbled up prior to being applied for other purposes. The already mentioned self-funded employer absorbs the savings as a reward for their willingness to assume risk.

Reducing The Number Of Uninsureds

One approach to eliminate uninsureds and fold them into the overall health care system is to mandate that everyone have health coverage of some kind. This is not unlike the mandates in most states where everyone is required to have some type of car insurance. Under this approach, those without coverage would be required to purchase coverage either through their employer or from another insurance source. To be successful, this would require a viable market for individuals to purchase coverage, the resources for individuals to purchase such coverage, and some way to measure the impact on providers of care who have either waived charges in the past or substantially reduced them in response to an individual's lack of coverage. To further reduce the burden for individuals to purchase coverage, potential delivery system cost reductions could be used to subsidize the cost or to reduce the underlying claims and/or administrative cost of the coverage. Everyone's cost

to obtain health coverage should go down if more people are covered by some form of health benefit plan—there would be significant savings just from the reduced write-offs of health care providers. The combination of capturing some of the cost savings with the inherent reductions from broadening coverage is key to funding such an initiative during challenging financial times.

Potential Approaches

So how do we capture the savings? Assuming the likely savings could be accurately predicted, one approach takes the form of a tax. For discussion purposes, let's assume that the cost-saving initiatives can save 10 percent and the elimination of the uninsureds an additional 5 percent from reduced provider costs. Each insurance company would be required to pay a tax to fund the savings, equivalent to 15 percent of the cost, or reduce premiums by an equivalent amount. Plan sponsors/individuals would pay an equivalent tax, while at the same time, providers would be required to reduce their net fees by 5 percent since their uninsured write-off would not exist. (This might be used to subsidize the cost of the uninsured). To be equitable for all individuals, the self-funded employer or health and welfare trust would have a similar tax since there is no insurance company involved. The likelihood of such a tax, or the disbelief that the cost savings would actually result in savings, or the reaction by carriers and providers to continue to increase costs until savings emerges, etc. would, for the short-term, increase the cost of care, thus dismantling much hope of reforming the system overall.

Another alternative might take the "Hawaii" approach, in which all employers are required to provide coverage and those not employed are required to obtain coverage elsewhere, either by purchasing an individual policy or enrolling in a public health program. Benefit plans are standardized to ensure that coverage is adequate. With this course of action, enrollment in public programs would increase, and some tax increases might occur, but clearly the number of uninsured would be dramatically reduced. Individual businesses would pick up a substantial portion of the cost of this mandate since they have to provide benefits to their employees. Any savings that emerge flow directly to the benefit plan sponsor. This indirectly captures the cost.

The only other alternative is the establishment of a nationalized health care program where everyone is covered, everyone has benefits and the cost of the program is funneled through a single government agency. Other countries pursuing this have funded this through specific taxes. Cost savings automatically are captured. This doesn't necessarily have to impact employer-sponsored plans as long as the employer continues to contribute to the program. The tax deductibility to the business of these contributions is key to this approach.

In summary, it is very challenging to capture cost savings without nationalizing the health care system. Today's patchwork quilt model—where individuals and individual business have the choice to do what they want and how they want to do it—provides considerable flexibility but fails to meet the important public policy objective of universal coverage for all.

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The Other Side Of The Coin

by Dennis R. Barry

In today's health care arena in the United States, two seemingly inexorable, and conflicting, forces seem to be on a collision course. Politically, the cry is for universal insurance coverage, or more accurately access, for health care. Economically, the common perception is that health care in the United States costs too much and doesn't necessarily deliver as much bang for the buck as it should considering the price. Reconciling these forces seems at best difficult and at worst impossible, but there is a way.

Politically Speaking

On the political side, universal insurance coverage has great popular appeal. In practice, however, its effect will be to provide a new source of revenue from which medical costs might be covered. While some of those currently uninsured are poor, many have insurance available to them, but have chosen to forgo it. Of course they are at risk in the event that something catastrophic might happen; however, they have opted to take that risk rather than pay for insurance they see as largely unnecessary. For many of the voluntarily uninsured, universal coverage would be a net cost rather than a benefit—they may get some additional medical care, but overall it's doubtful they will cover their premiums. For the uninsured poor—for whom access to care is now generally available one way or another—there's not a lot of gain either.

The Cost Perspective

On the cost side, things are less clear. There are lots of good ideas about how to reduce costs. One with broad appeal is to change the practice of medicine to focus more on prevention rather than reaction to disease. That seems self-evident, but it will take time to happen. Another proposes to construct a nationwide database which in theory will make care more efficient. There are proposals to wring various kinds of overhead out of the system. There are many other proposals as well, all of which have merit in one way or another. However, it's important to recognize that one person's health care cost is someone else's health care income. In order to reduce health care costs, a way must be found to reduce health care incomes. Those changes are not going to come easily, especially when universal coverage—if it comes to pass—will be pushing costs in the other direction. To say that the "health income reducees" might resist is an understatement, but it does point out the difficulty of bringing costs down. Each constituency is going to hang on to what it has for as long as it can, as would the rest of us if our incomes were threatened.

It seems to this writer that there are two possibilities regarding the reduction of health care costs, and the associated incomes. One avenue to pursue—by far the less appealing—includes a series of bureaucracies establishing prices and/or treatment practices and/or administrative approaches and/or whatever else bureaucracies can think of to control. Whether those bureaucracies come from various parts of the federal government or from contractors who effectively fill the same roles, any practices established (including prices) would be artificial and costly both to determine and to enforce. The effect of this approach is visible today as Medicare administrators artificially push down reimbursements to providers, and the providers in turn refuse to accept any more new Medicare patients. Right now, those providers have other potential customers to whom costs can be shifted. But, if all care being provided was subject to the same bureaucratic processes, the ultimate result isn't very appealing. It's not unimaginable that all Medicare patients could end up in public hospitals that aren't legally allowed to turn anyone away, or maybe even that the entire health care industry could become a public utility. Perhaps in today's economic climate—with unemployment rising and employer-provided health insurance being lost—a solution that depends on artificial cost controls can be made to sound appealing, but in the long run it is not commendable.

The Other Side Of The Coin *by Dennis R. Barry*

The other possible route to reduce health care costs is through the actual health care services market, but it would require political action opposite to what would be popular. Suppose that there was no first-dollar health insurance for anyone but the very poor. If everybody had to pay for their health care—to the extent they can afford it—the market would very quickly shake out whose health care income should be reduced and whose shouldn't. This approach would require universal insurance, but only stop-loss insurance at different deductible levels depending on income. The two best points of this approach would be: 1) no one would be subject to economic catastrophe because of a medical problem; and 2) the market, rather than an appointed bureaucracy subject to political pressures, would decide which health care providers would thrive.

In my opinion, insurance, true insurance, has three defining characteristics:

- It applies to events that are random, and non-trivial.
- It applies to events that the insured prefer not happen (childbirth being perhaps the lone exception).
- It reimburses for an otherwise unaffordable economic loss.

Modern health insurance commonly violates all three of these characteristics in one way or another, but especially violates the last one noted above. There is no reason why someone making $50,000 per year needs health insurance to pay for a $100 doctor office visit or a $4 prescription. There is no reason why someone making $100,000 needs health insurance to pay for a $1,200 diagnostic test. There's no reason why Bill Gates needs health insurance at all! The need for insurance depends on the resources of the person being insured. One size does not fit all.

Successful Health Care Financing

As I wrote in an article recently published in *Contingencies,* any successful health care financing system should have at least the following characteristics:

- Universal access for everyone to *necessary* health care.
- Out-of-pocket limitations on *necessary* expenditures at the individual and/or family level. People shouldn't have to go broke acquiring needed health care. Nor should they get that care for free unless they cannot pay.
- A connection between the total amount an individual or family pays for its necessary health care and its ability to pay.
- Financial involvement of the patient/family in all treatment. There should always be some out-of-pocket cost—not reimbursable from any source—for every encounter with a health care provider.

Only the second and third bullet points above have anything to do with insurance. They deal with things insurance should always deal with—cushioning of individuals against losses they otherwise cannot afford. Modern medical insurance sometimes accomplishes this goal, but often does not. If small items are covered, that's not insurance. It is non-productive dollar swapping, an inefficient use of resources. If the medical insurance policy is limited at a relatively low maximum amount, the risk of catastrophe still exists.

A stop-loss program as described could readily provide the features people like in a health insurance program—freedom to choose a doctor or hospital, freedom to go to a specialist, freedom to insist on a CT scan, freedom to use a designer drug rather than a generic, etc. The only catch is that the patient would have to pay, except in catastrophic circumstances. That seems a perfectly natural approach to purchasing anything, including medical care. It would certainly winnow out the parts of the current treatment process that we could live without or with less of—and it would still protect us against the catastrophic medical events that threaten us all.

The Other Side Of The Coin *by Dennis R. Barry*

Insurance is personal to the insured. Our circumstances and resources are all different. And while it would be nice to have someone else pay for all our medical care needs, that's not realistic thinking. Insurance doesn't create money. It redistributes money, and that's all it can ever do. But as long as people see insurance as a pot of gold to be used, they have no incentive whatsoever to seek efficient treatment rather than intensive treatment. Until people have to invest their own money into their own treatment, the idea of containing costs is a pretty tough one to swallow.

During the recent presidential campaign, Senator John McCain said, in effect, that it makes no more sense to require someone to buy health insurance than it does to force them to buy a house. He's wrong, but only in part. Everyone should have insurance for the catastrophic health risks that we all face. One of the great tragedies of life is when a family is wiped out because one of its members had an uninsured medical problem. That shouldn't happen in the United States, to anyone. But, there is no reason why anyone should be compelled to buy health insurance that covers things the person could easily afford personally. That's a bad use of resources, and it breeds a lot of bad habits on the parts of both patients and providers. We can do better. We need to do better. What we're doing now isn't getting the job done—economically, socially or medically.

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A Solution, In Theory

by Damian A. Birnstihl

Americans agree that the health care system is in crisis, but there is no agreement on a solution. Proposals range from a single payer system to piecemeal improvements to the existing system.

Key Issues

One key issue in the current system is the fragmented risk pool. Most Americans obtain their health insurance through their employers. Others get coverage through public programs such as Medicare and Medicaid or through the individual insurance market. Many are unable to get coverage because they do not qualify for public programs and cannot find affordable individual policies due to various medical conditions. Still others who can afford individual policies forgo coverage. Making health insurance mandatory would address the issue of those forgoing coverage, but not the issue of those who cannot afford coverage. In a voluntary system, those who choose not to participate are likely to be those who do not perceive the need to participate, i.e., the healthy segment of the population.

Creating a single payer system would be one way to address the fragmented risk pool. However, those who advocate this option should be careful what they wish for: a monumental government bureaucracy and no consumer choice could be the end result.

Another problem with the current system is the lack of portability of coverage. When an employee loses his or her job, any employer-provided health insurance is also lost. Although the employee may be able to continue coverage through COBRA, there are limits on how long coverage can be continued and some people may not be able to afford the premiums.

Further, having employers provide health insurance to their employees is not economically efficient. Money that the employer spends on procuring and administering health insurance is money that cannot then be spent on production, research and development, marketing and other business functions. Also, small businesses are at a disadvantage relative to large business because the latter can negotiate more favorable premium rates or even self insure.

Another economically inefficient aspect of the current system is different payers paying different amounts to providers for the same service. Each private insurer negotiates reimbursement rates with every hospital and physician group in its network. Medicare and Medicaid establish their own fees, which tend to underpay the providers and thereby shift costs to private insurers. The time, effort and cost involved in the negotiation and administration of reimbursement arrangements is vast, and the end result is often frustration and finger-pointing between providers and insurers.

Effective health care reform must address these issues. The fragmented risk pool must be brought back together so that risk can be spread broadly. Coverage should be expanded to reduce the number of uninsured, ideally to zero. Employers should be removed from the business of providing health insurance to employees to improve efficiency across the system as a whole, to level the playing field among employers of different sizes, and to eliminate the problem of lack of portability. Finally, a standardized provider reimbursement methodology should be implemented.

A Proposal

One possible solution (in theory) would be to create a system similar to Medicare Advantage for the entire American population. Coverage would be mandatory, with the federal government subsidizing premiums and out-of-pocket costs on a sliding scale for low-income persons. Employer-provided insurance would be eliminated, as would Medicare and Medicaid.

Private insurers would submit competitive bids to provide coverage in specified geographic areas. The federal government would pay a risk-adjusted capitation rate to the private insurer for each person covered by that insurer.

Hospitals and other facilities would submit their proposed chargemasters to the federal government for advance approval. For physician services, a standard fee schedule would be established, with geographic factors and perhaps a rural/urban factor as well. A given hospital or physician would receive the same reimbursement from all insurers for the same service.

Private insurers would compete with each other on the basis of price and customer service. A given insurer's price would reflect its ability to control administrative expenses and the effectiveness of its medical management programs.

Consumers would have choice among the insurers selected by the government to provide coverage in their area.

Conclusion

The barriers to reform—whether this proposal or any other—are considerable. If reform were easy, it would have been done years ago and we would all have universal, portable coverage by now. This proposal does not purport to solve all of the problems with the current system, and admittedly has not been fully fleshed out. It is submitted merely as an idea for discussion, with no illusions that it will be or even could be implemented. But the longer we as a society do nothing, the worse the problem gets. It certainly appears that none of the reform proposals on the table provides a workable solution.

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Health Care Reform: What Problems Can We Realistically Solve?

by Howard J. Bolnick

Universal access to high quality, cost effective health care—these are goals that the United States shares with every developed country. While we do not have a political document clearly expressing these specific goals, they underlie much of what we hear from leaders of both political parties. Republicans and Democrats both press a need to address the severe problem of 45 million uninsured Americans, which embodies a goal for some type of universal access. Both parties praise the high quality of our health care, while at the same time decry its high and continually escalating costs, which encompasses a goal for cost effectiveness. Party leaders rail against uneven quality of care and medical errors that undermine health and cost lives. And, they decry unnecessary care, all of which address goals for high quality.

Health Care Issues At Hand

Despite the current severe recession, President Obama has made it clear that health care reform is high on his agenda, and, he has already embarked on an attempt to legislate major changes in the U.S. health care system. To help understand this laudable initiative we need to explore two basic issues. Is achieving our shared goals possible? What shape might a workable solution take?

There are fundamental cost, quality and access problems that need to be addressed in any health care reform.

- 45 million uninsured Americans fall into a huge and growing gap between public and private health coverage. The United States is the only developed country with this problem: All of our peer nations, and many developing countries, provide universal access to health care.
- Health care costs are very high and consume an ever-increasing proportion of the gross domestic product (GDP). The United States spends roughly twice the per person average of other developed nations. In addition, real health care costs have grown throughout the developed world faster than real GDP over the past 50 years. Our relatively high cost of care is a particularly American problem; but excessive trend is a universal problem.
- Our access and cost issues are intertwined with two vexing quality issues. Most visible is the issue of somehow squeezing out costly unnecessary care and inefficiencies from the system. Our health care debate is rife with anecdotes and statistics that demonstrate medical care can be improved. A much less visible issue is quality inequalities among various socioeconomic groups. There are huge differences in access and health between our richest citizens and those who find themselves uninsured. It is clear that the richer you are—as long as you have health coverage—the easier your access to high quality health care. Most of our peer nations strive for equality across their populations and look askance at our wide variation.

Over the past eight years, a conventional wisdom has begun to emerge about the solution to our problems based heavily on successful and unsuccessful state-level reforms. We will cut (or eliminate) the uninsured by mandating coverage (Democrat) or providing tax incentives (Republican). The parties also differ over a role for opening up public coverage as competition to private health insurance. Both parties, though, argue that we will control health care costs and, at the same time, improve quality eliminating unnecessary care and by developing resources —like electronic medical records—to make health care delivery more efficient.

Politicians argue these reforms are an effective solution to our cost, quality and access problems. They correctly recognize that expanding coverage will cost money; but they contend that higher costs will be offset by cost reductions derived from quality improvements. Thus, they maintain, we can have our cake and eat it too!

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Something Has To Give

A careful look at our health care problems and their underlying causes, though, results in a more skeptical view of what reform can accomplish. In fact, I will argue that it is probably impossible to attain universal access to high quality, cost effective health care. Something has to give. Unless some magic is found, there are inherent tradeoffs among our cost, quality and access goals. High quality care—the variety Americans strongly believe in—is expensive, and, universal access means spending money on Americans previously at the margins of our health care system.

We are fully capable of legislating a solution to our access problem. The uninsured can be covered at a cost of roughly $100 billion per year. Solving this problem requires agreement on how to expand coverage, who will provide coverage for the uninsured, and who will pay for it. Not an easy issue to resolve, but all quite doable.

Controlling cost, though, is a more intractable problem. The clearest explanation I have read of the interrelated parts to this problem is by economist Burton Weisbrod. In his essay, "The Health Care Quadrilema," Weisbrod argues that growth in health care costs is driven by interrelationships among technology, insurance and Americans' strong ideas about quality of care. As Americans, we have been raised on a belief that science and medical care will meet all of our health needs. When ill, we seek out and demand the newest technology and cutting-edge medical care. Our physicians are willing accomplices in this pursuit. Once patients and physicians create strong demand, it is typically only a matter of time before private insurance covers a new technology, regardless of whether or not it increases or decreases costs. Understanding this dynamic, tech companies are encouraged to bring new technologies (supply) to market since they can be quite confident that they will be met by strong demand from patients and physicians, and, perhaps after some relatively minor delay, covered by insurance.

This dynamic creates an unchecked engine of medical advances that for the entire post-World War II period have relentlessly driven health care costs upwards, while at the same time improving our health. Putting a stop to cost increases, then, would require either constraining introduction of most new technologies—which simply will not and should not happen—or, hoping that that science is on the verge of creating a flow of cost-saving technologies, which is not controllable through legislation and unlikely to happen in the near to intermediate future.

What about systemic inefficiencies and unnecessary care? Can focusing resources on these issues cut the level of health care costs? The answer is clearly yes; but, not by enough even to reduce excess health care trend to zero. Eliminating inefficiencies and unnecessary care has been the raison d'etre for managed care. Over its roughly 20-year history, and despite public controversies, managed care has been effective in reducing inefficiencies and addressing unnecessary care. Without managed care, today's health care costs would be even higher than they are. However, the scope and pace of implementation of effective managed care has not been sufficient to materially lower trend. Technology-driven cost increases are simply too engrained in our system and too large to be wiped out by improving efficiencies and eliminating unnecessary care. Washington's support for evidence-based medicine and health care electronic technology will certainly help; but, I see little evidence that these efforts will turn the tide in our fight to control costs.

Thus, a realistic assessment of the conventional wisdom is that almost any reform from Washington will make significant strides at improving access—providing public or private coverage for the uninsured—but the tools available to Congress will not be able to do much to control costs or to make major improvements in quality.

Health Care Reform: What Problems Can We Realistically Solve? *by Howard J. Bolnick*

Is There Really A Solution?

If the conventional wisdom reforms will not solve all of our problems, is there a creative solution that will do a better job? My sense is that there is a wide range of better solutions, but none with a realistic chance of being enacted. All of these alternatives would require significant disruption to at least some significant part of the existing health care system, albeit for everyone's benefit. The reason that disruptive approaches will not be enacted, no matter their merit, can be explained by the concept of path dependency. The essence of this concept was clearly described by Niccolo Macchiavelli in a famous quote from his political treatise, *The Prince*.

"There is nothing more difficult to carry out nor more doubtful of success nor more dangerous to manage than to introduce a new system of things; for the introducer has as his enemies all those who benefit from the old system, and lukewarm defenders in all those who would benefit from the new system."

The United States has a long and unfruitful history of attempts at health care reform. The lesson learned is that real or perceived changes are strenuously and effectively resisted by affected stakeholders. If the current conventional wisdom about the shape of reform is, in fact, accepted by stakeholders, we may well be able to enact partially effective health care reform; but, this is about as far as we will be able to stray from our 65-year historical path. We can resolve the problem of far too many Americans being excluded from access to health care by their lack of insurance, though, we will not be able to achieve our three goals of universal access to high quality, cost effective health care.

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Health Reform, American Style

by Hobson Carroll

Today's health care financing mess requires an American fix. We need a rational solution that recognizes where we have come from in paying and providing for health care in this country, as well as our government, history, culture, economic system and all the other things that define us as a nation. The entire world is struggling with health care financing. Solutions need to be locally relevant, and the United States is no exception. My proposal for reforming core elements in the health care system follows.

Everyone Is Charged The Same Amount

Currently, the same service from the same provider costs different parties different amounts depending on who is paying. This is patently ridiculous for something society has effectively stated is a right, or at least a social utility. We must require all-payer, transparent pricing from providers for their products and services. Each provider is free to set prices as they deem appropriate, but those prices must be the same to all purchasers.

I am referring to a price that represents the true, bottom-line net charge that the provider bills and collects. Payers won't be able to negotiate with providers for special discounts or pricing concessions for any reason. If a provider agrees to a particular schedule of fees or prices with a given payer, fine. But it then applies to every other payer as well.

This doesn't mean that insurance benefits must cover whatever the provider charges. Schedules of allowed maximum charges, or networks of providers for which the insurer will cover 100 percent of the provider's fees, will come into play. Applied against these will be the usual cost-sharing devices of copayments, deductibles and coinsurance.

Provider charges that exceed the insurer's allowed charge schedule, however, must be balance-billed to the patient and should be treated the same as other cost sharing under the benefit plan. This will be critical in bringing true competition to the marketplace of health care services.

Providers will be allowed to waive collection of the patient's portion of their bill, as a charity adjustment or for other economic need as perceived by the provider. However, provider flexibility on the patient's balance must not be used as a loophole to effectively discount charges of one group or another by, for example, promising to waive copayments for those in a particular network that has negotiated with the third-party payer for copay forgiveness. No deals will be allowed that essentially change the provider's charge schedule for persons covered by that payer's program.

The same goes for government programs, especially Medicare and Medicaid, except for some possible minor concessions for administrative savings. A full discussion of how important this is and why it is at the core of health care reform is larger than the scope of this essay. But Medicare and Medicaid are among the chief culprits creating the current turmoil and basic tenets of their design need to be corrected. Making these programs pay on the same basis as others is right, fair and necessary. There's no way we can have such a significant portion of medical services being paid for through a price-setting mechanism that dodges responsibility and creates cost-shifting distortions whose effect touches the rest of the economic sector.

Everyone Is Covered

A significant percentage of our population is either not covered by any formal insurance program or is inadequately covered. This flies in the face of effective risk pooling. The only way to reach anything approaching universal coverage is to require it, full stop. Everyone must be in the pool if the principles of social solidarity and individual equity are to be in balance. Details of how to mandate coverage, how it is enforced, how violations are punished, etc., are very solvable (if not simple) issues. Various financing mechanisms to provide necessary subsidies related to income and other measures can be established via tax policy.

Choice of coverage essentially should be left to an open and revitalized marketplace, which will grow out of new demand and other changes that I discuss herein. However, coverage must provide at least a minimum level of acceptable and reasonable insurance benefits. This can be monitored through a supervising entity that sets a minimum standard and oversees the demonstration of actuarial equivalence for benefit variations.

Everyone Is Eligible For Coverage

The current system not only requires underwriting by both group and individual insurers, but also the resulting inherent discontinuities that arise through actuarial discrimination (classification). This not only generates practical, ethical and economic distortions; it also undercuts the idea of pooling, a critical societal tool for managing health care finance. It also creates significant and unnecessary administrative, legal and marketing costs.

In both the individual and group market arena, we must do away with underwriting based on claim history and medical conditions. This will eliminate the need for so-called high-risk pools. To interweave these elements with universal coverage, there will be a need for risk-adjustment programs, such as reinsurance pools that ensure actuarial balance between insuring entities. With anti-selection eliminated, minimized or made equitable across the entire market through universal coverage, underwriting will no longer be necessary and the societal goals of broad coverage and relative equity can be maintained.

Everyone Receives Fair And Open Insurance Pricing

Pricing transparency must be established within the new insurance marketplace. In particular, mandatory full disclosure of all marketing/sales compensation—in whatever form—should be required for all medical expense insurance. In addition, serious consideration should be given to moving insurance product pricing to some variation of a modified community-rating basis. This can be integrated with changes in the tax system, so as to provide necessary cross-subsidization.

Everyone Is Taxed The Same Way On Health Costs

We must balance tax policy and health care financing costs by allowing qualified medical expenses, whether out-of-pocket claims or insurance premiums, to be deductible no matter who is paying them. The maximum deductible amount could vary based on taxpayer demographics. Tax policy could be integrated with a subsidy program so as to promote affordability of mandated universal coverage.

Maximum benefit levels for deductibility should be established in conjunction with the valuation of benefit plans against a minimum standard. The definitions of "affordability," "qualified," "minimum," "maximum," as well as other tax policy details are subject to practical resolution. (I recognize that deciding exactly who or what entity makes such decisions will prove to be an interesting challenge.)

Of course, a viable, though just as controversial, alternative is to eliminate any deductibility whatsoever. The key is fairness through consistency.

Everyone Has Information

Between "Everyone Is Charged the Same Amount" and "Everyone Receives Fair and Open Insurance Pricing," a foundation is laid for true consumer empowerment in the purchase of health care services and insurance. But there's still a piece missing—rational and efficient management of medical records and measurement of provider quality.

Everyone seems to agree that significant information technology advances are attainable in the health care arena. But writing about it doesn't make it happen and talking is about all that we get from the politicians, academicians and physicians who are active in the current movement for health care reform. Someone with authority needs

to make a decision on what the universal standards will be—incorporating a dynamic that anticipates continuous improvement—and then require all relevant parties to meet those standards in very short order and with no exceptions.

There are no acceptable excuses for why America can't revamp its health care system to harness the tremendous productivity and quality improvement that is available through the application of appropriate technology. In reality, the solution lies less in technical know-how than in political will.

A Solution That Works

Are these the only things that would contribute to improving the situation in which our country finds itself? What about an emphasis on primary and preventative care, the importance of individual responsibility, or controlling the apparent runaway increases in health care costs that confront us every day?

The first two are matters for benefit design, and the latter is a symptom of the underlying problems, not a cause. By addressing basic issues and allowing the resulting managed—but corrected—marketplace to come into being, primary care and individual responsibility will be emphasized and enhanced through meaningful, creative and cost-effective benefit packages. Innovation in reimbursement and information will follow.

The current system has stymied creativity and entrepreneurship, two of America's greatest strengths. The medical industrial and financial complex needs to be fixed at the core, not patched to death on the periphery. Goals for comprehensive care, a higher quality of care, the proper kind of care, and the most cost-effective care are actually different facets of the same single goal: financing and providing for the best care. This starts with simple and rational changes at the fundamental level, so as to create a health care financing system that's consistent with the history, cultural trajectory and creative powers of the American experience.

This essay was derived from a commentary originally written for publication in the March/April 2009 edition of Contingencies *magazine*.

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Value Based Insurance Design: Restoring Health To The Health Care Cost Debate

by Michael E. Chernew and A. Mark Fendrick

As health care premiums escalate, both private and public purchasers are forced to decide how to best address this unsustainable economic burden. Unfortunately, value—the clinical benefit achieved for the money spent—is frequently excluded from the dialogue on how to manage health care spending growth.

If the desirable clinical effects of health insurance are ignored, constraining health care cost growth can be simply achieved by providing less generous coverage or no coverage at all. In fact, the numbers of Americans who are uninsured or underinsured is at an all time high, reflecting the trade off between the high cost of health benefits and remaining viable in today's economy.[1] Although rising health care costs are the main impetus behind health benefit redesign, concerns regarding the quality of care share the limelight. This unresolved tension between cost containment and suboptimal quality has led to two prevailing trends in benefit design.

1. Cost containment strategies that use financial incentives to alter patient and provider behavior. This approach includes increases in cost sharing in existing plan designs, and the introduction of high deductible health plans (HDHP) that allow employees to set aside tax-free money for health expenses.

2. The second focuses on improving the quality of care and keeping individuals healthier longer. Employers and insurers are implementing wellness and disease management (DM) initiatives to help individuals manage their health in an effort to avoid more costly care. Pay-for-performance (P4P) programs, which pay providers more for adhering to evidence-based clinical practices are disseminating widely.

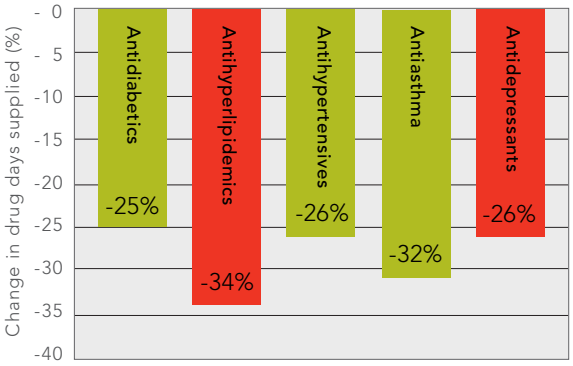
Since higher patient cost sharing discourages use of high-value medical services, these two trends inherently conflict. The main challenge is to devise benefit packages that openly address the problem of spending growth, yet explicitly aim to optimize the health of the beneficiaries through the incorporation of features which complement each other in the effective and efficient delivery of care.

Role Of Cost Sharing

From the patient perspective, increased cost sharing is the principle instrument of change. There is little debate over the economic theory that an increase in out-of-pocket expenses will lead to less consumption of health care services. Many studies demonstrate that when confronted with higher costs, individuals will purchase less care.[2] Ideally, higher patient copayments would discourage only the utilization of low-value care. For this important assumption to be achieved, patients must be able to distinguish between high-value and low-value interventions. However, when this ability to differentiate among services does not occur, increased cost sharing has the potential to cause negative clinical outcomes. A large and growing body of evidence demonstrates that, in response to increased cost sharing, patients decrease use of both high-value and low-value services, and may worsen health outcomes as a result.

INCREASED OUT-OF-POCKET COSTS REDUCE MEDICATION ADHERENCE

Percent change in days of medication supplied when co-pays were doubled.



Analysis of pharmacy claims data from 30 employers and 52 health plans. Adapted from Goldman DP et al. JAMA. 2004;291:2344-2350

Value Based Insurance Design: Restoring Health To The Health Care Cost Debate

by Michael E. Chernew and A. Mark Fendrick

Value-Based Insurance Design

In response to the adverse clinical effects of "one size fits all" cost shifting, we propose "value-based insurance design" (VBID), a system that bases patients' copayments on the relative value—not the cost—of the clinical intervention.[3,4] In this setting, cost sharing is still utilized, but a clinically sensitive approach is explicitly employed to mitigate the adverse health consequences of high out-of-pocket expenditures. The principle tenets of a VBID program are: 1) medical services differ in the clinical benefit achieved; and, 2) the value of a specific intervention likely varies across patient groups. We believe that more efficient resource allocation can be achieved when the amount of patient cost sharing is a function of the value of the specific health care service to a targeted patient group.

While cost sharing may be ill-advised in certain clinical circumstances, it would be absurd to completely ignore the need for interventions to reign in spending. Increased cost sharing seems inevitable given the lack of demonstrated savings from, or unwillingness to adopt, other approaches. In the VBID paradigm, patients' out-of-pocket costs are determined by the costs and benefit of care; no or low copayment for interventions of highest value (e.g., mammogram for women with a first degree relative with breast cancer) and higher cost sharing for interventions with little or no proven health care benefit (e.g., total body computer tomographic scanning). This more sophisticated benefit design is made possible by advances in health information technology and comparative effectiveness research. While some believe that such benefit packages are too complex for consumers or difficult to create in certain clinical conditions, the inability to construct the perfect program should not lead to abandonment of key VBID principles. The cost of maintaining the status quo, in terms of higher spending and worse health outcomes, is staggering.

Barriers to VBID implementation exist and create challenges.[4] From experience in the field, VBID programs are feasible, acceptable by all vested stakeholders, and have been well received by beneficiaries. Multiple private and public sector employers, health plans and pharmacy benefit managers have implemented VBID programs encouraging the use of high quality services. Pitney Bowes, The City of Asheville, North Carolina, Marriott Corporation, Mohawk Carpets, Wal-Mart, CIGNA, the State of Maine and the University of Michigan are among those who have implemented VBID. Leading health plans and health benefit consultants are working to make these packages accessible nationwide.

VBID can address several important inconsistencies in the current system and work synergistically with other initiatives such as HDHP, DM, patient centered medical home and P4P programs. By allowing different cost sharing provisions for different services, value can be enhanced without removing the role of cost sharing in the system overall.

Types Of VBID Programs

In practice, there are two general approaches to VBID programs. The first simply targets services known to be of high value (e.g., ACE inhibitors). While some users of the services have the target high-value condition(s) (e.g., congestive heart failure, myocardial infarction), others do not (e.g., essential hypertension), and the system does not attempt to differentiate between these patient groups.

The second approach targets patients with select clinical diagnoses (e.g., coronary artery disease) and lowers copays for specific high-value services (e.g., statins, beta-blockers) only for those patient groups. This diagnosis driven strategy—which requires more sophisticated data systems to implement—creates a differential copay based upon patients' health conditions.

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A controlled evaluation of a VBID program that lowered copayments for all users of five high-value pharmaceutical classes, demonstrated significant increases in patient compliance.[5]

COPAY REDUCTIONS INCREASE ADHERENCE OF HIGH-VALUE DRUG CLASSES

When a large services industry emplyer reduces copays for certain classes of crugs, nonadherence rates fell by 7-14%.

	MPR Increase	Baseline MPR	%MPR increase	% reduction in non-adherence
ACE/ARB	2.59 (p<.001)	68.4	3.8%	8.2%
B-blocker	3.02 (p<.001)	68.3	4.4%	9.5%
Diabetes	4.02 (p<.001)	69.5	5.8%	13.2%
Statins	3.39 (p<.001)	53.0	6.3%	7.1%
Steroids	1.86 (p<.134)	31.6	5.9%	2.7%

Copayment rates for generic medications were reduced from $5 to $0; copayments for branded drugs were cut in half for 5 classes of drugs. A similar employer with identical disease management offerings and similar but stable copayments serves as a control group.

MPR = Medication Possession Ratio

Source: Chernew; M. et al. Impact of prescription copayments on medication adherence in the context of a disease management program. Health Affairs. *2009 Ref [5].*

The financial impact of VBID programs on health care spending is under investigation. Economic effects depend on the level and precision of targeting and the extent/direction of the changes in copayments. Since many clinical services provide higher value for a select subset of patients, the better the system is at identifying those patients, the higher likelihood of achieving a high financial return. Employers with more targeted programs incur lower treatment costs, because fewer individuals are eligible for copay reductions and the targeted patients who receive copay relief are most likely to benefit from increased utilization.

Offsetting these direct costs of copay reduction are the savings incurred by reductions in future services avoided due to better clinical outcomes. For example, savings due to fewer emergency room visits for acute asthma exacerbations would offset the direct costs of lower copays for asthma controller medications, at least partially. The net financial benefit improves if the underlying risk of an adverse outcome is high, if the cost of that adverse outcome is high, if consumers are responsive to lower copays, and if the service is effective at preventing the adverse outcome. Additional return on investment accrues if the nonmedical benefits of improved health (e.g., reduced disability and absenteeism, enhanced productivity) are included.

The following financial scenarios are likely to occur, depending on the goals of the VBID program and willingness to raise copayments on low-value services:

1. Targeted copay reductions only. Result: higher value for each market-basket of services due to incentives to use services that produce high levels of health benefit. Uncertain effect on total health care cost trend.
2. Targeted copay reductions, global or targeted copay increases to offset short-term costs of increased utilization of targeted services (actuarial equivalence). Result: higher value for each market-basket of services due to incentives to use services that produce high levels of health benefit. Equal or lower costs, depending on extent savings due to offsets from improved health and lower utilization of low-value services due to higher copays.

Controlling Costs

Efforts to control costs should not produce reductions in quality of care. Payers desiring to optimize health gains per dollar spent should avoid "across the board" cost sharing, and instead implement a value-based design that removes barriers/provides incentives to encourage desired behaviors for patients and providers. Targeted efforts to reduce utilization of low-value services are more likely to contain cost growth while maintaining quality of care. That said, the alignment

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of financial incentives—for patients and providers—would encourage the use of high-value care, while discouraging the use of low-value or unproven services, and ultimately produce more health at any level of health care expenditure.

This paper was derived from a commentary originally written as an Expert Voices Essay, published by The National Institute for Health Care Management Foundation.

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Practical Reform For The U.S. Health Insurance System

by John P. Cookson

Health Coverage—Some Background

Continuing cost increases for health coverage represent a major problem for many if not most of us. However, the long-term continuation of the excess growth rate of the health care economy versus the rest of the economy has the potential makings of a major crisis.

A key problem with affordability is the lack of flexibility in health insurance. Some of this is due to legislated mandates such as mental health and maternity coverage, and court or regulatory rulings requiring coverage of services like bone marrow transplants for breast cancer, for example. In effect, buyers—employers and other premium payers—have little say in what they do and do not want to cover. And, once something becomes a covered service, it is more or less covered for everyone. This process exaggerates the affordability issue because the purchaser cannot choose what services they cannot afford and/or are unwilling to cover. The only alternative to some employers is to drop coverage altogether.

Changing the dynamics of the system could have a significant effect on lowering the future costs of health care. This would primarily require two actions: 1) a significant improvement in the measurement of cost, quality and efficacy of medical treatment and dissemination of this information to consumers; and 2) a change in the insurance structure to reduce or eliminate the third-party payment for high-cost, low quality providers and treatments that are of unproven or dubious efficacy, and allowing buyers to select coverage based upon the perceived cost of services in relation to the outcomes. This would likely require the establishment of a health care research organization that provides unbiased information on the cost, quality and efficacy of providers and treatments.

Non-Scientific Based Medical Care And The Supply Driven Health Care System

The health care system is a supply driven system, and physicians are responsible for control of and ordering most medical care services. Contrary to what many might think, much of the health care delivered is not based on hard scientific studies and sometimes is even based on fallacious interpretations of statistical data.

Some studies indicate that as much as 35 to 45 percent of prescriptions may have no effect on the disease for which they are prescribed and that as little as 10 percent of diseases are significantly influenced by modern treatment. Substantial portions of recoveries or physical improvements during treatment are likely due to the placebo effect or our bodies' natural healing processes.

The diagnosis and treatment of high cholesterol illustrates these problems. A substantial portion of the adult population is considered borderline high risk or above in total cholesterol and could be considered lifetime candidates for statin drugs. However, for otherwise healthy individuals with high or borderline high cholesterol and no other cardiac risk factors (the vast majority of those with high cholesterol): 1) their cardiac mortality risk is really lower than the public is led to believe; 2) the potential reduction in mortality from taking statins is quite minimal in absolute terms; and 3) any mortality reductions are not statistically significant. On the other hand, for those who have had a previous heart attack, reductions of 3 to 3.5 percent in total mortality over a five-six year period have been found.

Another area of questionable use of scientific evidence relates to the high percentage of false positives occurring during preventive screenings. These false positives necessitate additional testing or procedures on the patient, which can lead to significant anxiety and cost for those wrongly diagnosed. The claimed benefits of undergoing these screenings are generally based on assumed reductions in relative mortality risk (for example, 30 or 40 percent reduction, or some other large number, in dying from breast cancer). However, absolute mortality risk reductions—for those of average risk—are fractions of 1 percent over a decade. In effect, the statistics show large percentage reductions in what are otherwise very small numbers.

Finally, the fact that much of medical care is still reimbursed on a fee-for-service basis sets up an inherent vested interest by providers in recommending more frequent and more expensive services, or services that are more convenient for the provider, irrespective of the presence of any evidence of efficacy.

Variation In Health Care Cost And Quality

Significant variability of costs by area has been demonstrated, even when controlling for differences in illness burden. In these studies the variation is often attributed to excess supply of hospital beds and specialists, and higher cost is often associated with lower quality. For years, my own research about variation in efficiency and pricing of hospital services shows significant variation at the provider specific level, even within geographic areas, and the results show that the lower quality hospitals tend to receive higher relative reimbursement and also tend to be less efficient at delivering care. The marketplace is effectively rewarding inefficiency and lower quality.

The Solution

The identification of the problems contributing to excess health care costs also represents the potential framework for the solution. Consumers must be made more responsible for their own care and must be provided the tools and information they need to choose wisely. The providers must then adapt to the new realities by becoming more efficient and focusing on improving quality. Some details of the needed changes are as follows:

1. Development and Dissemination of Information to Consumer and Payers

   This process is important and has two key requirements:

   a. An independent agency (independent of politics, as well as health care providers and insurers), such as a Consumer's Bureau for Healthcare, needs to rigorously review the scientific and statistical bases of both old and new treatments to classify those which are truly efficacious, and those that are less so and/or harmful. Evidence-based medicine and valid statistical techniques should be the primary drivers of such determinations. Such an agency should also be the repository for quality information on providers. This agency is necessary so that payers can obtain the evaluations from an independent agency on which to base their coverage decisions. Such an agency needs to be independent of government influence because of the tendency for governments to mandate coverage for many medical services of unproven value and efficiency.

   b. Provider's performance must be compared to each other on a case-mix, severity-adjusted basis on the variables of cost, quality, efficiency and outcomes.

2. Plan Designs and Coverage

   Changes in plan design need to incorporate the proper incentives for consumers to use care wisely and spend effectively. These changes will force providers to compete in new, more appropriate ways.

   a. Truly efficacious medical care treatments should be covered generously by insurance and third-party payments. These could form the core of insurance coverage. Care that is speculative and/or harmful should not be covered, or covered to a much lesser degree at the option of the premium payer. Controlled clinical studies or other experimental procedures could also constitute an additional monitored class, with its own method of perhaps pooled reimbursement.

      Traditional out-of-pocket insurance limits need to be removed on the non-efficacious services. Otherwise, these services will be overused once the out-of-pocket limits are met.

b. In addition, insurance/third-party payment levels must also recognize cost, quality and efficiency differences by provider. The consumer must be made to bear the economic consequences—through the reimbursement mechanism—of choosing higher cost, less efficient and/or low quality providers.

These actions would more directly involve consumers in their health care decisions, and level the playing field on the knowledge gap between consumers and payers vis-a-vis the providers. Furthermore, this would change consumer behavior and put tremendous pressure on the inefficient, lower quality/higher cost providers to compete. Such action would also reduce the costs of health care while improving quality and should help control the long-run rate of growth, because efficiency, cost effectiveness and quality will become the focus of competition by providers.

Let's assume that half of current medical services will satisfy that high quality, cost effective and efficacious level of care. Also, assume one-fourth would be classified at a low level and one-fourth at the middle level. Let's also assume the first level would be covered at 90 percent, the middle level at only 50 percent and the low level would be covered at only 20 percent. Not only would the payment levels be lower, but utilization on the lower two levels would also decrease, while perhaps increasing on the higher level. Let's further assume the following: mid-level coverage utilization is reduced by 20 percent; low-level utilization is reduced by 80 percent; and the high coverage level increased by 20 percent. This scenario could reduce claims cost levels by 30 percent from what they would be under current typical plan designs. Furthermore, additional savings would accrue from the improved quality and cost transparency. These are only hypothetical assumptions, and demonstrate the potentially significant impact of such changes.

This demonstrates that reasonable changes to the health care system that align incentives with quality and efficacy can produce significant savings to the system.

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Harnessing The Forces Of Markets And Innovation

by Ian Duncan

Note: This essay won second prize in the contest sponsored by the SOA Health Section.

When I was a boy, not all that long ago, the concept of individual self-service was virtually nonexistent. At the grocery store, you handed a list of items to a clerk behind a counter, who disappeared and returned with your order. In the bank, you queued up—sometimes for a considerable time—in order to cash a check or make a deposit with a teller. A third example is the numerous administrative processes that have been replaced by integrated circuit technology where (as Moore's law states) the capacity of transistors doubles and the price halves approximately every two years. Whole industries have been re-engineered in the last 50 years, transferring activities (shopping, bank transactions, etc.) via technology to customers, increasing choice and efficiency and simultaneously lowering costs.

Contrast these examples with the delivery of health care. Although attempts have been made to drive out costs and involve the consumer more in both the consumption and the purchase of health care, these attempts have generally not been successful in the United States or elsewhere. Why is this? Is it possible to achieve the same gains in productivity in health care? Is there an inherent structural inhibition that prevents us from making the same advances with regard to health care?

Health Care Financing

That we have a problem in health care financing in the United States (and other countries) is clear. One symptom of the problem is health care costs which continue to increase faster than the rate of growth of income. Instead of falling costs and increasing quality—as we see in other industries—we experience rising costs, and most commentators have difficulty making conclusive quality statements.

As actuaries, concerned about both costs and the long term, we should be doing more to explain to the public that the benefits that they have awarded themselves (through Medicare and Medicaid) are unsustainable without significant increases in productivity. Consider the following: the value in current dollars of the Medicare benefit that we provide seniors at age 65 exceeds the accumulated contributions of the individual senior and his employer—assuming a lifetime of contributions at the median wage level—and future retiree contributions by about $250,000. This is, essentially, an unfunded liability to the taxpayer, and an asset to the retiree. The median house price in the United States is currently about $170,000, so we provide retiring seniors an asset worth 50 percent more than a median house. A politician who proposed awarding every senior a free house at retirement would be laughed out of Washington. Yet no one questions whether it is reasonable, sustainable or even a wise use of national resources to provide a free health care benefit worth considerably more. Medicare benefits represent such large unfunded liabilities because of high rates of projected cost increase (trend). If we could reduce future trend to even the average rate of price inflation, the unfunded liabilities would fall to a more sustainable range. The challenge is to find ways to harness the same forces in the health sector that have proven successful in reducing transaction costs in consumer goods, electronics and financial services.

Instead of attempting to harness the forces of the market and innovation that have been so beneficial in other industries, policymakers turn, again and again, to the same failed solutions that have resulted in our present crisis. I am reminded of a comment made by Fidel Castro on the 50th anniversary of the Cuban revolution: the reason for the disastrous state of the Cuban economy is not too much central control, but insufficient socialism! Our Washington policymakers, having failed abysmally to control the cost of Medicare and Medicaid, now propose to extend their reach to the other half of the health care economy that they do not directly control. Like second marriages, truly a triumph of hope over experience!

Harnessing The Forces Of Markets And Innovation *by Ian Duncan*

Vision For The Future

This paper, however, is about visions for the future of the U.S. health care system. There is an alternative vision that, applied to the U.S. health care system, could unleash the same forces that have delivered increasing quality and lower prices in other industries. Five things are necessary to realize this future:

1. *Change the U.S. tax code*. Currently, the tax code (through the deductibility of health insurance premiums) favors over-consumption of health care at the expense of other goods and services. In a market in which there are obvious diseconomies of scale in health care—with a few notable exceptions—encouraging more health care spending simply raises costs.

2. *Return responsibility for medical decisions to doctors and patients*. Managed care is an important set of tools for educating patients and providers about best practices and cost-effective solutions, but it has become the central cost-control technique in the system. Coupled with a lack of personal budgetary responsibility, managed care is always a villain, rather than an important technique for helping consumers manage their health care dollars. Consumers see no reason for limiting demand or for using managed care techniques, because the third-party payer system makes some other entity responsible for financing care. Individual consumers responsible for managing their own health care budgets will demand that providers provide not just for clinical treatment but also help consumers make the most of the health care dollar.

3. *Encourage individual responsibility.* The case is often made that medical care is too complicated and requires too much specialized knowledge to allow individual involvement. Yet our experience with the Internet is that consumers demand, and use, large quantities of health care information. The great genius of the current U.S. system—and one that we destroy at our peril—is that it decentralizes decision making to many different actors: patients, physicians, managed care companies, employers, etc. Considerable political pressure exists to blow up the existing decentralized system and place decision-making power in the hands of a few technocrats. Yet, as markets have universally illustrated (and a few counter-examples, such as the Soviet Union and the current Medicare system illustrate all too well), centralized decision making can never ensure as efficient, innovative or cost-effective a solution as a decentralized system.

4. *Educate the public about their responsibility for long-term funding*. Ultimately, the success of the U.S. health care system will require individual responsibility for lifetime needs, with perhaps employer subsidies for working employees and some degree of state subsidy for the indigent. The scale of unfunded Medicare (and Medicaid) liabilities, discussed above, is simply too large for the government to continue to provide on a non-means tested basis for the elderly, let alone those who are actively working. The sooner the United States recognizes this and begins to plan for the replacement of universal government-provided care, the sooner we can implement a replacement system. In the meantime, today's young workers should begin accumulating a tax-free fund to take care of their retirement needs. There is no reason why such an accumulation system should not be successful—the IRA and 401(k) models are examples. Depending on the institution with which the worker accumulates funds, the worker would also have access to important components of an insurance package: network discounts, information about provider quality and efficiency and care protocols.

5. *Encourage the type of innovation and disruptive productivity increases that we have seen in other industries.* One of the biggest inhibitors of productivity increases in medicine is the current "expert model," which the medical profession has encouraged and from which it benefits. In the early days of computers computing was a similar "expert model." To access the computer,

you had to approach the computer's acolytes, who wore white coats and inhabited air-conditioned computer centers. Bill Gates and Microsoft came along and disrupted the entire model, placing enormous computing power in the hands of the end user. If we want to control health care costs in the future, we will have to encourage the equivalent of Bill Gates's disruptive technology that places ultimate responsibility in the hands of the consumer. This can be done, and we see a few tiny signs of the coming revolution, as employers begin to provide financial incentives/disincentives to employees to assume precisely this type of responsibility. But for the most part, the medical industry—which is a huge user of medical technology—has failed to embrace consumer-centric technology. Some early solutions exist (for example, home monitoring and test kits for individuals to monitor their own health). The financial incentives—to both members and providers—are not yet in place to support this model, but will develop rapidly as the funding crisis grows.

This vision is clearly radical. However, the president is proposing an even more radical remaking of the system, with vast expenditures and huge concentration of power and decision making in the hands of a few technocrats who have failed to demonstrate that they can manage the 50 percent of the health care economy that they currently direct. An alternative vision—one in which individuals and their providers make the decisions—is possible. It is not too late to reject centralization of the system in favor of the consumer.

This essay was written in fond memory of Jerry Grossman M.D., Kennedy School of Government at Harvard University. A great entrepreneur and true friend, from whom I learned the power of disruptive innovation.

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U.S. Health Care—Where To Look For Reform

by Sam Gutterman

Introduction

The continued growth of health care costs in the United States has maintained its position as the most expensive health care system in the world. But cost is not the only challenge facing this system. Access—the human face of the system—is one whose effect can in part be assessed by the large and growing number of uninsured and underinsured. Consequences include a lack and low quality of care, personal bankruptcy and impeded labor mobility. Another, often overlooked challenge, is the maintenance and enhancement of quality of health of Americans. All three of these interrelated factors (cost, access and quality) have to be considered in any evaluation of policy changes to the system.

The desirable objective of a health care system is deceivingly easy to summarize—the enhancement of health over both the short- and long-term at an affordable cost. The challenge to make changes is due in part to the massive size of our health care system in relation to our total economy, its resultant entrenched interests, and the significance of the outcomes of the system as they relate to all of our lives. A complicating factor is that the underlying economics of health care is unique, a result of the almost unlimited demand for quality care, due to the high but intangible value that each individual gives to her or his family's health.

Key Elements Of A Desirable Health Care System

The history of the U.S. health care system is littered with attempts at reform on a national or statewide basis, in attempts to meet the interests of one or more of its many stakeholders. These efforts have been initiated by both the private sector and by government. Each effort has focused on one or more of our basic health care factors. For example:

- *Cost*—Limitations on reimbursement for services, managed care and capitation programs, medical savings accounts and high deductibles plans, preventive care and wellness programs, tax-deductibility of health insurance premiums and medical costs, disease management, anti-fraud and waste programs, and medical malpractice reform.
- *Access*—Group health insurance, Medicare (including drugs) for the aged and disabled, Medicaid for the poor, state Comprehensive Health Insurance Plan (CHIP) plans for the uninsurable, and children's insurance coverage mandates.
- *Quality*—Research, diagnostics and treatments, medical education, and physician/nurse specialization.

While successful in some respects, most have at best tempered overall trends. And many well-intended changes have had negative consequential effects in other areas; any proposed solution has to be thought through thoroughly before introduction. Although it is tempting to address all three of the key factors at the same time, a big bang approach may be too much to tackle at once.

Then there was the so-called Hillarycare effort of 1994 that tried to fix all three of these factors. That effort was doomed to fail because 1) it attempted a radical total solution while failing to develop a sufficiently wide constituency for change; and 2) its premiums were labeled as taxes.

Cost

The control of costs is crucial, although attempts at solutions have proven problematic at best. Health care costs have consistently grown faster than our overall economy, now making up about one-sixth of our Gross Domestic Product (GDP). Reform difficulties abound. For example, almost a decade ago, Congress thought it had set up a system to control and reduce the big-ticket item of Medicare reimbursements of physician fees; yet that has proven to be a political hot potato, and lobbying pressure has overridden most of the planned cutbacks in reimbursements. In fact, most efforts at controlling costs have been outflanked by key players able to get around the limitations imposed, for example by increasing the number of procedures or upcoding

diagnostic codes—increasing the average reimbursement amount per procedure—when reimbursement per procedure is limited.

It was once thought that if only the cost of physicians and other medical personnel who are more highly compensated than those in other countries could be reduced—the cost problem would be overcome. The amounts that hospitals have charged patients without insurance are exorbitant and sometimes go unpaid anyway. In summary, hoped for cost savings have often proven to be a mirage—if a participant doesn't get payment in one way, other ways are often found.

In most parts of our economy enhanced technology lowers costs. But the opposite has occurred in the delivery of health care—due to health care's unique underlying economics—where the customer's demand for services is not usually limited by its cost. Who wants substandard care, especially if a third party is paying for part or all of it? Why should providers ignore best practice involving the newest technological tools, especially if it might end up in a lawsuit? In fact, technology has been one of the most significant sources of health care cost increases. But this doesn't have to happen; researchers should aim in addition at cost-saving technologies.

The use of expensive diagnostics primarily for defensive medical purposes that add little value should be discouraged. Defensive medicine has increased costs, but it can be difficult to distinguish between what is defensive and what is necessary. To do so, a gatekeeper is needed, but such a gatekeeper is never popular, whether an insurer, a physician or reimbursement guidelines. In part, defensive costs are due to fears or habits by risk-averse physicians in fear of medical malpractice suits. We as a society have to stop feeling that any negative medical result is someone's fault and should result in a lawsuit, while not losing the sense of responsibility for the many decisions that medical professionals have to make every day. Can money be saved in this area? Of course, but common sense—together with professional practice—may be more important.

Waste, fraud and abuse are often seen as significant contributors to high cost. Although these certainly exist, some of this waste is inevitable under a system as large as health care. Though they should continue to be pursued, they can't be counted on to be a major source of cost reduction and better control of them will not contribute significantly to high health care cost trends.

Personal incentives—for example, high deductibles can introduce a higher personal financial stake in cost control—can reduce health care utilization. Nevertheless, it has to be remembered that such incentives are usually more effective for smaller health care expense items, and not the big ticket items that have really driven increases in health care costs.

Population aging has been cited as a driver for increased cost, as health care usage generally increases with age. Although this certainly has to be lived with, it is not the key driver of increased costs. In fact, offsetting the upward sloping cost curve with age has been a remarkable increase in life expectancy that has delayed the high health care costs of an individual's last six months of life.

Universal care might help in some ways. It may facilitate a more efficient system by means of reduction in per unit administrative costs with increased volume and negotiating power with certain suppliers. But, at the same time, can a monolithic care provider influenced by political agendas and consumer driven health care be as dynamic as a full-of-choice, entrepreneurial driven system?

Cost will remain important both to the individual who has to pay for actual or expected costs—whether as a substitute for wages in an employer-sponsored arrangement, out-of-pocket cash or debt, or premiums for a private or public health program—as well as to society, representing a crowding out of the allocation of resources to other components of our economy.

Access

A great deal of the recent public policy discussions has focused on increasing access—at least in terms of reducing

the number of uninsureds, a measureable metric—rather than controlling cost. This emphasis has surfaced because it is easier to visualize and to address. Nevertheless, it should instead be examined in terms of those unable to access appropriate care, rather than the extent of coverage by private or public health insurance.

During the most recent political campaign, it was suggested that tackling access first will make success on the cost front easier. I am concerned that this assertion is problematic at best. If only access is increased, either costs will increase even further or quality will suffer. In fact, access issues arise only where costs are high in the first place. This is not to say that access issues should be ignored, but that initially, if the already high costs are not to be further exacerbated—the system may only be able to address the access of significant at-risk population segments.

Quality

Quality of care—the factor most closely aligned with the objectives of a desirable health care system—has to be considered along with cost and access. We should be proud of our health care system's achievements, including its research, advanced acute care and diagnostic capabilities. We should be proud that our system, even though not efficient at the edges, can deliver quality care in most cases. However, we are constantly reminded that our life expectancy is not the top of the league internationally; we have to continue to stride for improvements.

Of course, it is easy to improve access or to decrease costs by decreasing the quality of care provided. An example of this alternative is the growing number of physicians who no longer accept Medicare and Medicaid patients because of their low reimbursement for medical services.

Preventive care has proven to be useful in enhancing health over the long term, although up front it can be more expensive. It has to be seen as an investment rather than a cost. In contrast, the typical American demand for aggressive health care treatment at the end of life will inevitably result in continued high cost health care.

More effective use of compatible electronic computer records can—after the initial investment—help achieve a more consistent quality of care by reducing errors, enhancing patient-specific medical information available to the medical professionals treating the patient, improving outcomes research, as well as some improving cost and control. It should be assigned a high priority whatever else is done.

I include individual choice under quality, but it also has cost and access implications. On the one hand, the choice of a medical care provider is important in terms of trust and convenience—but the choice of whether to take drugs prescribed—often a significant concern of physicians—can interfere with effective care no matter who the medical provider is and what system is in place. Other potential choices abound—regarding health insurance plan, treatment regimen, level of cost-sharing, and level of optional benefits—the list goes on. Choice is important where it can enhance quality, access and cost. How it should be made available is an important design criteria for any health care system.

The R Word

Finally, I have to mention the hated R word. It isn't Recession. In this context, it is Rationing of care. Some form of rationing will be inevitable as long as the objective of the health care system is the delivery of services at an affordable cost. It might take the form of one or more approaches, including a controlled number of hospital beds or servicers, limited stays or services for a given condition, limited reimbursement for experimental drugs and treatments until proven effective or cost-justified, and increased cost-sharing or prices for services received. Its use in some form is inevitable.

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Principles For U.S. Health Care Reform

by Richard H. Hauboldt, Mark E. Litow and Allen J. Schmitz

Introduction

The U.S. health care system, roughly one-sixth of the U.S. economy, is suffering from continued annual cost increases significantly exceeding wage growth. This trend, if continued, will create dramatic pressures on our standard of living. This cost pressure and increasing number of uninsured necessitates comprehensive health care reform.

We see many alternatives advanced to fix the problems. But these attempted solutions regularly do not address the entire health care system. Instead, they focus on one or two issues. Further, many reforms violate economic and actuarial principles while constructing unsustainable safety nets. This lack of vision results in a maze of patches, producing an uncontrollable system that lacks transparency in cost and care.

The objectives of health care system reform should be to improve three primary items: cost, access and quality in aggregate. The complexity of the health care system requires balancing these three variables while taking into account individuals' points of view.

To achieve that balance, health care programs should satisfy economic, actuarial and safety net principles and be appropriately managed. Currently, we see violations of these principles including:

- Economic demand and supply out of sync (price controls, over insurance, little or no transparency in costs or delivery of care).
- Lack of appropriate actuarial risk classification (adverse selection resulting from too much pooling in reforms to date).
- Inappropriate safety net structure.

In addressing these issues, we believe that economic, actuarial and safety net principles should be gradually restored versus the distorted conglomeration existing today. The ideas presented in this paper focus on restoring the use of principles over time, rather than trying to create a system that overcomes certain problems but violates these concepts. We believe any system that seriously violates these concepts will be inefficient and likely unsustainable long term.

This paper provides basic health care reform principles and discussion on incremental solutions. This paper's length limitation prevents further elaboration.

Basic Principles

These basic principles below should be followed in any reform.

Economic Principles

Reforms should strive to encourage the basic economic principle of supply and demand. Price controls, reliance on third party payers, excessive mandated benefits, high malpractice costs, and over insurance are impediments to market driven supply and demand.

Government price controls shift costs to the private markets and cause providers in government programs to increase utilization to maintain income levels. Elimination of price controls relieves the cost shift to the private markets. Restructuring government programs as true safety nets (discussed later) would result in a restructuring of these programs.

The third party payment system desensitizes individuals to the cost of health care. Information must be provided to consumers so they know the cost of the services that they use. Benefit design must result in the consumer having "skin in the game," especially for discretionary health care spending.

Provider incentives should be aligned with value (cost and measurable quality). When providers make more money by providing more care, supply creates its own demand.

Actuarial Principles

Lack of reasonable risk classification will ultimately lead to adverse selection, nonparticipation and increased costs.

Many parts of our current system rely too heavily on pooling to solve problems. While a degree of pooling is necessary, our experience has been that pooling concepts are stressed more than appropriate and risk classification much less than appropriate. Many reforms tried by various states have relied too heavily on pooling, which has caused better risks to opt out or move to leaner coverage, resulting in adverse selection. The cost of pooling—to those who are doing the subsidizing—has to be minimized, which is not often the case today.

Long-term costs should be matched to the population's long-term ability to pay to minimize generational cost shifts.

Appropriate Safety Nets/Government Programs

People should be placed into safety nets based on need only. Safety nets may be funded privately or through government. Safety nets should include a low percentage of the population that receives a substantial subsidy. The subsidy should come from those not in the safety net, with the per person subsidy a low percentage load of their total cost.

Incremental Ideas For Improvement

This section lists alternatives to move the system incrementally toward satisfying the principles presented. The success of some of these ideas is interdependent on others. Testing and monitoring should be established to properly manage the system over time.

1. Increase transparency so individuals understand health care service costs and shop accordingly as if they were using their own money. Price transparency needs to be paired with increased consumer cost sharing in order to maximize the effectiveness of each. Price transparency will help to improve quality because services will become more comparable and local variations in care will slowly be replaced by best practices. Providers should be measured on cost and quality, and that information needs to be made available to consumers. Provider incentives should be structured around those measures.
2. Insurance plan design should encourage more cost sharing. While a high deductible HSA plan may not work well for everyone—likely depending on income—this will reduce over insurance and utilization, and help restore economic and actuarial principles. Increased cost sharing with price transparency will help provide proper incentives to insureds and providers. Benefit designs with payments varying by perceived provider quality or price could be implemented. To encourage lower utilization, payments for bundled services could be used.
3. Reduce or eliminate price controls. Safety nets and government programs should either pay provider rates consistent with private markets or the differences should not be substantial. This will reduce cost shifting, improve transparency and ultimately improve quality.
4. Provide tax equity with respect to health care financing. Tax equity may be achieved through individual tax credits that would vary with certain risk classifications, such as age, income and health status to at least some degree. This needs to be properly integrated with redesigned safety nets. Overall, tax equity will help reduce the number of uninsured individuals.
5. Increase risk classification and use appropriate levels of pooling. Risk classification should be increased in private and government programs, increasing participation and encouraging people to appropriately spend money and receive care as needed. Pooling will not work well if individuals can choose whether or not to participate: high cost individuals with subsidized coverage have no incentive to control costs; and low cost individuals funding excessive subsidies will not want to participate. Pooling created by guaranteed issue, mandated coverage and lean benefit plans might work in the short term. Eventually however, political pressure will likely lead to increased mandated benefits and rate restrictions, which in turn increases the level of subsidies creating improper incentives and pressure for those providing the subsidy to leave the pool, perhaps even illegally.

6. Reform safety nets by restructuring applicable programs such as Medicaid and Medicare. Medicaid could use a tax credit or voucher program, but with higher credits/vouchers as appropriate to a risk class. Medicare needs fundamental restructuring to increase private market involvement and reduce the government role to a safety net. Adjustments are needed to reflect various risk factors such as eligibility age, rich benefit requirements, etc. Oversight of safety nets should involve private and public entities and reflect a sound checks and balances approach. Changes of this magnitude would have to be phased in over time.
7. Reduce mandates to lower costs. Benefit plans are frequently required to cover certain mandated benefits. Many mandates are not essential to a good health insurance plan, but add significantly to the cost of coverage.
8. Implement tort reform. A "loser pays" rule would reduce the problems of high medical malpractice costs significantly. The structure today causes providers to perform many tests despite the cost or likely outcomes.

These types of reforms should gradually create the transparency needed and balancing of objectives over time.

Concluding Remarks

We believe implementation of these ideas—consistent with the underlying objectives and principles noted—will produce a much improved balance of cost, access to treatment and quality over time. Because we have allowed problems to grow over years, bringing our system into a reasonable balance will take some time. The sooner a strategy is created the better; without that, we are headed toward a system with increasing public dissatisfaction.

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Two Issues In The U.S. Health Care System

by Brian A. Jones

Two issues dominate most discussions of health care among actuaries, among nonactuaries and in interactions between the two groups. They are: first, U.S. health care costs as a percentage of GDP are far higher then those in other countries; and second, large numbers of people in the United States lack coverage.

Issue One—Health Care Costs

A major factor in the high cost of U.S. health care—and a source of wonder to foreigners—is the high level of earnings amongst doctors, not just leading doctors, but virtually all except a few who choose to serve the poor in low-paid or even volunteer positions. In my opinion, the country has, in effect, put practically all its doctors on a pedestal in a way that other countries do not and has given them a top-echelon lifestyle: McMansion, top-grade automobiles, country club memberships, etc. Doctors' fees reflect that assumption.

A symptom, and one of the causes of this, is the fact that entrance to medical school requires an undergraduate degree. Other countries do not have this requirement, and it is far from obvious that their doctors are inferior. Recent personal experience, in fact, suggests just the opposite to me. It is unquestionably true that medical school professors prefer to teach classes full of graduates in philosophy or science, but it is probably equally true that professors in those and other disciplines would like to teach a class full of graduates too.[1]

Consumers might prefer a less expensive route to qualification if that was reflected in reduced education costs and eventually in reduced doctors' fees. It seems unlikely that much can be done about this, at least in the short run. Nevertheless, we could consider offering an option to aspiring doctors with a high school education which would not involve a period of study as long as the present system of four-year college followed by medical school. One way to start would be with people who are willing to make a commitment such as service in the military for a period, in exchange for tuition-free medical education.

Another significant factor in U.S. medical cost is administration—marketing, underwriting, coordination of benefits, etc.—which is largely eliminated under a universal plan. These areas involve actuaries who will have to face the fact that some of them may not be required if the system is reformed.

Finally, the allegation that universal coverage will be expensive is based on inconsistent analyses: first, that additional medical services will be required which are not being provided now; and, that doctors' and other fees are now padded to reflect unpaid care which is being provided. These fees will not be reduced when that care is covered by the new plan, replaying the Medicare windfall.

Issue Two—Coverage

It is important to note that the people who are most affected by loss of coverage are not the lowest income strata of society. The poorest people usually qualify for Medicaid, and even if for some reason they do not, they will not be refused care in a hospital emergency room: an expensive option for many reasons including the fact that treatment is often postponed unduly. The classic example of this is pregnant women coming in at the last minute after little or no prenatal care. The people who are hardest hit financially are not such poor people. They are those who have assets, but find themselves uninsured for reasons ranging from loss of coverage after loss of employment or expiration of COBRA, to such mundane problems as a missed or mislaid premium notice. The result is serious horror stories which arouse sympathy for those affected and also trigger concern: "Could I be next?"

Built into the system now is an implicit assumption that the sensible way to finance health care is through per capita premiums, paid by individuals or by employers. Clearly the poorest part of the population cannot afford premiums of hundreds of dollars per month; hence the lack of coverage.

Elaborate subsidies and/or rebates must be devised if coverage is to be expanded while maintaining a per capita

approach to funding. Presumably, the resulting cost will be met from general revenue. There is simply no other source, though earmarked taxes such as tobacco or other health-related items may make the subsidy more palatable.

If the per capita approach is really the best way to fund health care, one wonders why it is not carried over into other parallel areas, a prime example being fire protection. Instead of financing fire departments from taxes, should we not use a per capita premium approach here too—perhaps with rebates, subsidies et al? It would not be practical to let the homes of uninsured people burn down—unless they were very isolated—because that would put the neighbors' houses at risk too; but we could pursue uninsured people for the cost of putting out fires in their houses after the fact, piling an additional cost on them just as they are faced with the cost of repairing or rebuilding.

The precedent is in place. That is what we do with the medically uninsured or underinsured. We treat them in the emergency room—much more expensive, especially when treatment is delayed—and then pursue them for the cost of treatment, often driving them to bankruptcy. To add insult to injury, we charge them the full cost, without the discounts that Blue Cross and other plans are able to negotiate. Since the poorest people are virtually without assets, the burden of this approach falls largely on the lower middle class.

Perhaps we should also encourage a profusion of competing fire departments. Competition among health plans touted as one of the advantages of our current approach to health care. Why not in fire protection too?

By contrast, countries with universal coverage rely primarily on a tax-based approach to the entire cost of benefits and provide a uniform level of benefits.

If the United States is to provide universal coverage, the questions which must be addressed are:

1. Can we afford deluxe coverage for all?
2. If not, and deluxe coverage is to be provided outside the universal plan, will those with private coverage have to pay full costs in addition to being taxed to pay for the universal plan?
3. If such double payment is to be avoided, how do we integrate private and universal plans?

It is suggested that the answer to question 1 is that clearly we cannot afford universal deluxe coverage if that implies private rooms, caviar for lunch, and individual bedside telephones and perhaps TV sets. Where the deluxe line comes is obviously a political issue to which actuaries bring no special expertise. Nevertheless, it seems unlikely that public opinion would tolerate the notion that certain cutting-edge technologies would be available only to an elite with private coverage, but it probably would tolerate the difference in waiting periods for non-emergency treatment which often occur in other countries (though probably not as often as the more hysterical opponents of universal care allege).

Question 2 is also basically political. It seems likely that if large numbers of people face double costs—for their own coverage via premiums paid by them, or by their employer but reflected in their pay package, and for everyone else through taxes—support for the health care reform will fall. This could result in inadequate coverage in the universal plan or in outright rejection.

Question 3 is where actuarial expertise will be essential. Integration could come via separate payment for excess benefits not covered by the universal plan or via subsidy payments based on projected (or possibly actual) cost savings to the universal plan when the private plan pays. Either way, establishing a fair approach will be complex, especially so if minimum standards are not set for private plans.

A recent article in the *New Yorker* magazine[2] traced the evolution of various national health care regimens noting that national systems reflect history in the various countries

and casting doubt on the one-size-fits-all proposals of many would-be reformers. Unquestionably, the public is demanding universal coverage. The issue is how that can be provided; and if it is provided, does the United States need a complete upending of the system or can it make a smooth transition?

Actuaries, I suggest, can make a major contribution to such a transition. It should not be beyond our capabilities to devise a procedure which will result in a tax-financed basic plan allowing private deluxe supplementation.

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[1] *Law schools now require an undergraduate degree before entry, capping the maneuver by rebranding their undergraduate degree as a J.D. rather than the more transparent LL.B. used by other common-law countries. (Ironically, the next step up remains the LL.M.) Fortunately for the rest of society, the effect on lawyers' earnings outside the elite, has been less dramatic though by no means negligible. It should be a source of satisfaction to actuaries that the profession has not attempted this maneuver, which may be a tribute to some of the titans of the profession who did not have degrees at all.*

[2] The New Yorker. *January 26, 2009. "Getting There from Here"*

The Health Care Crisis In The United States
My Vision For A Better Future

by William R. Lane

While there are many issues in health care, the single most significant issue is cost, both in terms of the cost today and in terms of the growth in cost over the past several decades. We need to:

- Increase the ability of all citizens to purchase health care services (or health insurance that in turn purchases health care services).
- Decrease the growth in the cost of health care.

The Cost Problem

The cost of health care varies significantly from one person to another with the healthiest people having a very low cost and the least healthy people having enormous health care costs that almost no one could afford out of their normal discretionary spending. Two ways have generally been proposed to cover all people:

- A government run program with all citizens automatically enrolled.
- A legislative mandate that everyone must purchase insurance (individually or through their employer).

One of the most significant issues with a government program is that such programs tend to manage costs by forcing providers to accept the government stipulated price per service. When government budgets are tight, the provider reimbursement can be squeezed. Medicaid is an example of a program that in theory provides excellent coverage, but in practice it is hard to find a quality provider that will accept the very low government set rate.

The problem with a mandate is that—for a lower income individual—the annual cost of a comprehensive health insurance policy is a very significant portion of their annual income. An equivalent problem remains if you require employers to purchase the health insurance for their employees. The mandate adds to the annual cost of each employee and increases the likelihood that employers will eliminate the lower paying jobs entirely.

Risk Adjusted Financing

To me, the best solution requires government involvement in the funding of health insurance, but not in the management of health care providers and their prices. I would implement a system whereby the federal government implements a new tax that is progressive on individuals and progressive on employers' payrolls. The money collected must be kept separate from all other federal funds, and except for a reasonably small reserve for adverse circumstances, the money must be allocated back to all individuals. The allocation to individuals, however, is not paid in cash to the individuals, but is paid to the insurance company, HMO, Blues plan or employer self-funded plan that provides the individual his or her insurance coverage. It is also paid back in a very special manner. The payment for the oldest and sickest people is the highest and the payment for the youngest and healthiest people is the lowest. In actuarial terms, this is called "risk adjustment." In practice, this means that a health plan (or an employer with their own self-funded health plan) is not at a financial disadvantage if the individual they are covering is not healthy. This is important because a serious complaint against health plans is that they tend to seek to insure only healthy people. By removing the extra cost of a chronic medical condition, the health plan no longer has a reason to avoid such people.

With these payments, all health plans would be required to accept all applicants regardless of their health status, and there would be little or no reason for the health plan to reject high-risk applicants.

Risk adjusted payments are based on what medical condition the individual has and how long it has been since the condition required serious intervention. For example, for people with a heart condition, one factor is how long it has been since their last heart attack. For people with cancer, one factor is how long it has been since they have been in remission. In my vision of this system, I would pay a reasonable amount for the cost of care in the year of the

diagnosis of a serious condition, or a serious intervention, but I would pay somewhat higher than needed for the next few years (when costs tend to decline on their own). The reason for this approach is to encourage the health plans to find ways to retain these people in their plans and to keep them healthy. The more a health plan can actively work with their insureds to reduce future heart attacks, the more money the health plan may make.

Simplified Provider Reimbursement

I have a chronic medical condition called Type II Diabetes. I go to my physician three times a year and, based on how I am doing, he has a number of tests performed. I later get bills from my physician, from the laboratory who performed the tests, and sometimes even from another physician who reviewed the laboratory results. Imagine if you were to purchase a new car, and then a month later you received a bill from a tire company for the tires on your new car, and then another bill from a glass company for the windshield. We would never pay such bills for a car, but we routinely pay similar bills for health care.

Some people have suggested that individuals would better manage their own health care costs if they would negotiate with their providers. Under our current system, this is impossible because you don't know in advance who is going to bill you or for what services. In fact, patients rarely even know how much their own physicians are going to charge them for their current visit.

I would change the system by having all health care providers charge a fixed percentage (or multiple) of a fee schedule set by the government. Medicare already has such a fee system for both physicians and hospitals. Providers could charge whatever percentage they wanted, but they must publicly state the percentage they will use, and they must give a three-month advance posting for any changes in the percentage. Similarly, the government could change their schedule, but the government must give a six-month advance posting of what the new schedule will be.

Thus, when I would go to a physician, the doctor might charge me 85 percent of the government schedule or 175 percent of the schedule. But, at least I would know in advance what the percentage would be. And if I wanted to know what the office visit would cost, I could look up the government schedule on the Internet and do the math.

I would also make another very significant change in billing. I would require that all services ordered by a physician (or hospital) in conjunction with that doctor visit or that hospital stay must be:

1. Billed through the physician or hospital as a part of their total cost.
2. Billed together, not a series of separate bills.
3. Billed at a payment rate that is no more than the stated percentage payment rate of the physician or the hospital.

Thus, if you go to an 85 percent payment rate physician, then the lab work ordered by that physician must be billed by that physician and paid at no more than the 85 percent rate. What the physician pays the lab who did the work can be anything. Paying the lab is now the physician's cost, not the patient's.

This one change would force the physicians and the hospitals to be in charge of the work which they have ordered. It would not, however, apply to a prescription drug prescribed by the physician (but not supplied by the physician). In this case, the patient is free to go to any pharmacy. The pharmacy, in turn, will have a posted percentage of some government schedule for prescription drugs. Each patient can then seek a lower cost pharmacy or can pay a higher cost for prescriptions in return for greater convenience.

The physician does not have to order services as they currently do. They could prescribe them as they do with drugs and let patients choose their own laboratory for the services. This would not be feasible for someone staying in

a hospital, however, where such services would have to be billed by and through the hospital.

In such a system, health insurance could pay for all providers at all prices or, for a lower premium, could pay up to a specified percentage of the government schedule. People who were willing and able to go to providers with a lower percentage could reduce their costs because their health insurance premiums would be lower, but they would still get all needed services. People who wanted to be able to use any doctor or any hospital could either pay the extra themselves, or could buy a health insurance policy with a higher percentage rate of benefit. This would begin to put real pressure on providers to keep their prices as low as possible while still providing acceptable health care services.

Fifteen hundred words are not enough to describe all of the changes I would make, but just these changes would go a long way to make our health care system affordable and available.

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Consistently Framing The Design And Analysis Of Health Care Proposals

by Mark Litow and Bob Shapiro

The words "profession," "professional" and "professionalism" frequently appear in the statements, programs and in the organizational chart of the American Academy of Actuaries and related partner actuarial organizations. These are important words and deserve to be constantly on our minds and in our consciences. The concept of a profession carries with it the idea of service to the public. Today a unique opportunity, one could also say a professional obligation, for public service is presented to actuaries. In the United States, the national social insurance systems face serious problems. Any list of domestic issues has Medicare and Social Security in prominent places.

— Jim Hickman, FSA, MAAA, ACAS, 2006

We are members of a group referred to as the Concerned Actuaries Group, and this group has been working for more than three years in the spirit of Jim Hickman's words. We believe strongly that each of us has a personal responsibility to serve the public and to lead such efforts whenever and wherever we can. If we fail to contribute, we fear we will regret our lack of involvement and look back on this time as a low point for our profession—actuaries being absent from the discussions where their unique expertise was required.

Nowhere is our leadership needed more today than in framing the ever intensifying national health care dialogue. Actuaries have a responsibility to assure that the design, costing and management of proposed Medicare and health care programs are developed with actuarial discipline. Actuarial discipline involves much more then setting assumptions and pricing or costing a proposed program. It requires that management processes be established in a way that is consistent with the underlying assumptions, that experience is measured against those assumptions as it unfolds, and that adjustments are made based on the learning that occurs in evaluating differences between what was expected and what actually occurred.

The Actuarial Control Cycle is a general actuarial framework that is an integral part of actuarial training. The Actuarial Control Cycle refers to the recurring cycle of specifying the problem, developing a solution, monitoring experience and refining the problem specification. Let's look a bit deeper at each of the three elements of this continuous cycle.

Specifying The Problem

Our national health care system represents a large and growing proportion of our gross domestic product and Medicare is a substantial part of our national health care system. Largely funded through payroll and federal income taxes, Medicare is also an important part of our U.S. financial system. It is responsible for a large part of the growing deficit that threatens the future viability of our economic system and standard of living.

Reasonably designed, priced and managed health care makes compelling economic and moral sense. Our current Medicare system and many related parts of our health care system are not reasonably designed, reasonably priced, nor reasonably managed. To remedy this situation, tenets such as the following need to be accepted (or overtly rejected):

1. Health care is not an unlimited resource. Health care must be designed to be affordable within the economy.
2. Medicare and other health care systems should follow actuarial and economic principles such as:
    a. Use established risk pooling techniques that create credible and reasonably predictable results. Pooling like risks improves predictability. Pooling unlike risks often creates adverse selection and higher costs.
    b. Minimize adverse selection. Mismatching of risk classification in cost/benefit comparisons and/or distorting demand and supply or other economic balances lead to inefficiency or other consequences. These impacts can result in some blend of reduced affordability of, and access to, quality treatment.

c. Minimize hidden induced demand. Overuse of insurance and third-party payment creates excessive costs. Insurance should protect only against catastrophic events and contingencies that are beyond the budget capacity of the insured.

d. Monitor expected results. Establish clear initial assumptions for future behavior and experience, tie program design and management to those assumptions, manage to the scorecard of related expectations and adjust management practices periodically as actual experience differs from expectations.

3. Health care programs must meet to-be-established standards for access, quality and financial soundness.

4. Program management must preserve demonstrable financial equity between generations of citizens.

Establishing a consistent (and actuarially sound) foundation for assessing the costs and benefits of each and every current and new Medicare or other health care proposal is critical. Current analytical approaches are often opaque, not comparable. This situation is too dangerous to continue, with different constituencies often using different numbers to create demand for answers they want to promote. Each new proposed program should be scientifically sound, with clear standards for management that maintain the integrity of the original projections and related expectations. If this management discipline is not applied, we can continue to expect out of control costs and dissatisfaction. We cannot afford even to consider such a scenario.

Developing A Solution

Solution development begins with agreement on basic tenets, such as those offered earlier in this paper. A baseline (expected) case will underpin program costing and future management. Sensitivity tests—under varying assumptions—provide insights into where variations might be expected to occur and suggest indicators that show such occurrences are evolving. This management discipline is essential to the long-term success of any financial system.

Some basic questions that need to be addressed in any actuarial/economic analysis are set forth below:

1. *Induced Demand:* How does utilization differ under Medicare or other potential health care programs from what might be expected if citizens had insurance for only contingent and catastrophic events?

2. *Anti-Selection (Including Risk Pooling):* How and where is utilization increased because of design and management of the health care program enables individuals to "game" the system.

3. *Alignment:* What incentives are needed to motivate preferred behavior and avoid misuses of risk classification and pooling?

4. *Financial Soundness:* What are reasonable targets for Medicare and other health care systems, including allowance for margins to address fluctuations over time?

5. *Monitoring:* What types of corrective actions should be considered and what will trigger them based on a comparison of actual to expected results?

6. *Key Assumptions:* Critical assumptions driving the necessary actuarial and economic analysis should consider:

   - The program design and related risk characteristics including:
     – Financial security provided
     – Political sustainability
     – Political accountability
     – Affordability over time
     – Administrative efficiency
     – Intergenerational equity
     – Public acceptability (consider values, morals and ethics)
     – Level of individual choice

- Tooling up expenses for the program
- Ongoing administrative costs
- Investment earnings
- Potential variability

Monitoring Experience

Pricing and costing assumptions for a new health care proposal generally start with a review of past experience on similar programs with similar features. Periodic monitoring of an existing program includes a similar exercise—reviewing past experience and trends relative to expectations that were set when the program was last evaluated from a cost perspective.

Projections are never realized exactly. For example, actual claims experience may be substantially different from that expected due a number of factors, including:

- Unanticipated impacts of program design (e.g., imprecise or otherwise flawed definitions of benefits).
- Inadequate program management (e.g., paying for claims that weren't envisioned by the program contract).
- Economic conditions (e.g., a recession generally increase claims costs).
- Over utilization (e.g., often present where the program covers more than contingent and catastrophic events).
- Inadequate incentives to motivate preferred behavior.
- Improper utilization of risk classification and pooling principles.

When the causes of the differences between actual and expected claims—or deviations of actual from expected for any other assumption—are determined, changes in the design or management of the program can be implemented so that actuarial discipline in the control cycle is restored. When such detailed monitoring and management adjustment is not done, as is the case with Medicaid, Medicare and other parts of the health care system, problems tend to compound themselves and eventually transcend effective control of the program managers.

There are other factors, such as the combining of social and insurance principles in our Medicare program, that must be carefully assessed with related assumptions set and periodically modified accordingly.

Managing Future Plans

The integrity and manageability of future health care plans and proposals requires consistent continuing application of the type of discipline and transparent process described in this paper. If this practice was followed, a rational discussion of alternative programs and implications of those alternatives could occur. As things stand today, with every program having its own set of assumed facts and expectations, and with a few programs establishing the needed protocols to manage to underlying assumptions, it is no wonder we are struggling the way we are.

Actuaries are trained to understand, quantify and manage contingencies and risks. Although there will never be a perfect health care system, our current Medicare and health care systems are neither designed nor managed in a way that is effective or sustainable. We believe that any sustainable health care system has to reflect the principles, standards and management philosophies reflected in this paper.

We would like to thank Bart Clennon, FSA, MAAA; Jeremy Gold, FSA, MAAA, FCA, CERA; Fred Kilbourne, FSA, MAAA, FCAS, FCIA, FCA, EA, MSPA; and Jim Toole, FSA, MAAA; for their contributions to this paper.

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Health Reform—A Proposal

by Timothy J. Luedtke

Today, few argue that change is inevitable for the U.S. health care financing and care management systems. I believe progress happens fastest and most effectively when participants have a vested interest in reaching the best answer. Advancements will occur across the entire health care spectrum from consumer education to health care delivery to financing, and ultimately to cost.

The U.S. health care financing system over time has so distanced the health care service provider from the patient user that medical costs have become increasingly opaque and outpaced general inflation over long periods. As these costs are pushed—at an accelerating pace—through the financing system from insurer to employer to employee/patient, we see employers and young or healthy employees/policyholders revolting and dropping coverage, further accelerating the cost pressures for those remaining in the financing system.

I believe we need to realign our health financing, care delivery and incentive systems to return appropriate checks and balances and make patients and providers more accountable. I believe this realignment can be achieved through:

1. Personal Health Care Savings

Every employer and employee would pay a flat 7.65 percent of maximum savings level as a payroll tax into the OASDHI. The maximum savings level is established such that the employer and employee contributions eliminate the actuarial deficit that exists under Social Security. I estimate the limit to be $40,000 to $45,000 using the most recent long-range Social Security actuarial deficit.[1] Each employer and employee may offset this required payment if they contribute an actuarially equivalent amount to an employer-sponsored benefit plan.

Such a program might look something like:

a. Employers establish a retirement savings plan having a health account on behalf of their employees.

b. Any employee contribution (up to the maximum savings level) goes toward paying retiree income benefits and is made on a before-tax basis.

c. The employer's contribution is allocated to employees' health accounts in proportion to an actuarially determined health risk adjuster; such risk adjuster will allocate more dollars to those having the greatest medical need—such risk adjuster to be calculated assuming the employee is fully compliant with preventive screening, chronic condition standards of care or healthy living standards.

d. Employer contributions are not taxable to the employee.

e. Health accounts may only be used to pay medical expenses such as paying insurance deductibles, purchasing individual insurance, or paying the retiree's share of Medicare premiums. Such payments would not be taxable.

f. Funds held in the health account are available to purchase a whole life insurance policy. Such life policy provides a hedge against a worsening health status and can be monetized as accelerated benefits or through the life settlement market if necessary.

g. Any residual amounts remaining in the health fund at death reverts to the plan to offset future employer contributions.

h. Savings plan is to be fully portable.

i. Each employer plan is required to have an actuarial compliance certification annually.

2. Catastrophic Coverage For Every Citizen

This would be true catastrophic coverage with a significant deductible and would not provide first dollar services as most plans offer today. The plan could be offered by private payers using guarantee issue and the government

providing a risk adjustment based upon the risk characteristics of the accepted individuals. The coverage's deductible will be set at the greater of the asset value of the above health care account or an amount for every citizen that is either a flat amount (e.g., $100,000) or a percentage of the individual's health care taxable wage base (say 100 percent of the wage base). Additionally, rather than resetting to zero every year, the deductible is condition specific, such that should insurance benefits become payable due to a specified condition e.g., breast cancer, leukemia, etc., such conditions will be covered immediately should a recurrence occur.

The insurance protects the individual when they need high cost health care services. These services are often associated with hospitalizations, a generally high-stress setting where consumers have little influence on the services provided and the charges incurred. I believe that offering such catastrophic coverage represents an evolutionary, rather than a revolutionary change, as nearly two-thirds of employers already offer such catastrophic coverage as a part of their benefit programs.

3. Preventative Screening Coverage Provided For Every Citizen (Including Coverage For Chronic Condition Standards Of Care)

Every citizen receives insurance coverage which provides approved preventative screening treatments and chronic condition standards of care free of charge. Such standards of care shall have been shown to be comparatively effective through rigorous research evidence and approved by a standards board of professional clinicians, researchers and statisticians. Such standards could initially include those set by the American Diabetes Association, Merck Manual or the U.S. Preventative Task Force. Where appropriate, such standards will recognize the individual's unique physiology, when being determined as comparatively effective. Being free, all citizens are encouraged to pursue those treatments that will improve their quality of life consistent with value-based insurance design standards both improving an individual's healthy life expectancy and likely productivity. Some employers offer elements of such preventative coverage today as they implement value-based insurance design concepts, yet have been reluctant to expand these programs as the returns on investment, though real, are too long term during these difficult economic times.

Funding for catastrophic and preventative plans is provided through a to be determined tax/premium, yet employers providing equivalent coverage, and employees purchasing such coverage, would receive a tax credit based upon the risk-adjusted premiums for the employer's covered population or for the employee, as applicable, that would have been payable otherwise by the government. Individuals may receive an additional tax credit for those having a bona fide living will.

4. Create A Federal Charter For Individual Health Insurers

Federally chartered health insurers would be exempt from state specific health insurance requirements and able to offer the same contracts nationwide. Such insurers will offer both catastrophic coverage and preventative coverage. Additionally, federally chartered insurers are able to sell supplemental insurance policies on whatever terms deemed appropriate including full medical underwriting, adjustments for living wills, etc.

5. Electronic Medical Records

Encourage every individual to have an electronic medical record. The personal medical record should include not only medical information, but also exercise, biometric and health assessment information. Employees wishing to receive any additional risk-adjustment contribution to their savings plan will wish to provide an electronic medical

record, so that their personalized health conditions are recognized.

6. Provider Reimbursements

Every provider—who accepts government reimbursements—will have to offer a freely self-determined cash price for their services. This price will be available to: cash paying individuals, including patients who use a debit card tied to any Personal Health Care Savings Account at the time of service; third parties paying in advance or electronically in real time; or Medicare/Medicaid for timely made payments. Such price and service schedules will be auditable by CMS or the third party. CMS will provide audit support for services provided to cash paying individuals.

7. Comparative Effectiveness

The United States should continue to expand research into what medical procedures and technology are best in class. Like government efforts to enhance national defense technology, pharmaceutical companies, academic institutions and contract research organizations may apply for grants to perform health care quality comparative effectiveness research.

8. ERISA-like Liability Protections For Medical Providers

Medical providers who do not violate comparative effectiveness guidelines and deliver services without gross negligence shall be protected from punitive damages.

9. End Of Life Care

Services covered by government-sponsored catastrophic coverage are reviewed and approved by a medical care steering committee when the patient has an actuarial healthy life expectancy of less than X months assuming that all available medical treatments are performed. Such a medical care steering committee shall determine whether the services should be provided based upon the prospect for improving the patient's remaining quality of life. Any nonapproved services may still be provided, yet must be covered by personal assets, private insurance or accelerated benefits under a life insurance policy.

I believe this approach will lead to greater alignment of health care resources to empower patients where they have control, protect patients where they don't have control, incent medical research and development that offers improved quality and comparative effectiveness, provide broad coverage, and promote fairness, healthy habits and improved productivity.

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[1] *Summary of the 2008 Annual Reports, Social Security and Medicare Boards of Trustees.* http://www.ssa.gov/OACT/TRSUM/trsummary.html

Prepaid Medical Care And Medical Insurance

by John I. Mange

Note: This essay won first prize in the contest sponsored by the SOA Health Section.

Ask yourself this: Other than medical (or dental) insurance, is there any insurance product on which you expect to make a claim every year? Undoubtedly, the answer will be, "Of course not."

Through decades of practice, policymakers and the public have become accustomed to thinking of insurance as how one accesses medical care. The reason one expects to make a claim every year on medical insurance is that much of what is sold as medical insurance today is not insurance. It is prepaid medical care. Covering prepaid medical care drives up the cost of insurance and contributes to the extraordinarily high rate of trend in medical costs from year-to-year.

An Inefficient System

The medical insurance system is, nevertheless, the means by which most people access the medical care system in the United States. It is remarkably inefficient for that purpose. Why?

Medical insurance today inserts a third party—an administrator—and its attendant costs into virtually every single doctor/patient interaction. The presence of the administrator, whether public or private, weakens the doctor/patient relationship. There is someone else in the room, figuratively speaking, exerting influence over decisions that the doctor and patient should make together.

Moreover, the administrator's costs are high, much more so than, say, credit card transaction costs, because the administrator has many difficult questions to answer before it can process the transaction:

- Is the patient eligible?
- Are the services covered?
- Were the services medically necessary?
- Were the costs reasonable?

Because these questions are often not answered in advance, the patient may not know his/her net costs (after insurance) until long after services are delivered. How are doctors and patients supposed to make informed decisions in such an uncertain environment?

Misaligned Incentives

In addition, today's medical insurance system distorts incentives in several ways. First: because much of today's insurance is prepaid medical care, those covered by insurance are incentivized to extract value from their insurance instead of, as with other insurance, hoping that they never make a claim. This contributes to overutilization and causes demand for medical services to be comparatively inelastic contributing to high unit costs.

Second, because reimbursements are often based on the services delivered and not on the outcomes produced, providers are incentivized to deliver as many services as possible. This, too, contributes to overutilization.

Third, reimbursements are often limited to amounts that are usual and customary, so providers are incentivized to determine the maximum reimbursement available, not the economically appropriate price. This contributes to high unit price inflation.

Finally, because prices for medical insurance today rarely reflect lifestyle choices, medical insurance fails to incentivize covered lives to adopt healthier lifestyles. Wellness is, of course, covered by many medical insurance policies today, but there is often no financial incentive to take advantage of such benefits when they are covered.

The issues cited here—interference in the doctor/patient relationship, the costs of administering prepaid medical care, and the design of medical insurance—are but a few of the many issues facing the U.S. medical care system, but they are often overlooked and frequently misunderstood. Failure to correct these issues will perpetuate their effects on the system, and the resulting system will fail to deliver on higher quality, more affordable medical care sought by advocates of reform.

Addressing The Issues

How can we address these issues? First, educate policymakers and the public that medical insurance should be like other insurance, a financial service that is frequently bought (perhaps even mandated), rarely used, but critical to the physical and financial well-being of the insureds.

Second, effect legal and regulatory changes that differentiate between prepaid medical care and medical insurance. For example:

- Define medical insurance as coverage for medical care that exceeds an agreed amount per person per year, perhaps expressed as a percentage of income and indexed to inflation.
- Require that prepaid medical care and medical insurance be unbundled from one another.
- Continue the tax deductibility of medical insurance.
- Eliminate the tax deductibility of prepaid medical care.

Third, encourage the pricing of medical insurance based, in part, on known actions of the insureds that demonstrably lower the cost of medical care, including:

- Cholesterol screenings.
- Mammograms and pap smears.
- Immunizations.
- Smoking habits.
- Demonstrated weight management behaviors.

Fourth, require that costs—both of services and of insurance reimbursements—be transparent. That is, providers must post prices for the services they provide so that their patients know what they will be asked to pay, and insurers must schedule benefits so that patients will know how much they will be reimbursed.

Fifth, require that insurance reimbursements be based on episodes of care, adjusted as appropriate for complications. Such a requirement would likely cause providers to adjust their posted prices to an episode-based approach, which would, in turn, focus attention on how to achieve favorable outcomes efficiently instead of on the services that were delivered.

Sixth and finally, encourage, but do not mandate, the purchase of prepaid medical care, and allow prepaid medical care to be offered by providers directly to the public. Concurrently, allow prepaid medical care plans to be designed so that transaction costs can be reduced to the level of a credit or debit card. The costs covered are predictable, and many people would not perceive the need to pre-fund these services. They do not need to be part of an insured medical package.

The perceived but needless connection between insurance and access has clouded our thinking about what medical insurance is and how best to address the issues of access and affordability. If, in our effort to reform the medical care system, we fail to:

- Address these issues,
- Help policymakers and the public make the distinction between medical insurance and prepaid medical care,
- Squeeze administrative expenses from the cost of prepaid medical care,
- Restructure the pricing of medical insurance to encourage healthy behaviors, and
- Restructure medical insurance to correct its distorted incentives, we will likely fail to slow the inexorable rise in the cost of medical care. We can ill afford to fail at this task.

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A Facilitated Free Market Approach

by Tim Maroz

In order to sell a health care system vision to the public and to a great variety of stakeholders, it has to be simple, logical and have a high perceived return on investment. My suggested approach would likely meet these criteria. Here is the essence of my vision:

Provide consumers of medical care with transparent and comparable price and quality information to enable them to make economically optimal decisions.

Many economic theories are based on the assumption of perfect information. Having perfect or near-perfect information would enable the "invisible hand" to align the forces of supply and demand in the equilibrium price/quantity combinations for medical services and prescription drugs. It would also increase competition between providers of medical services and prescription drugs, which should favorably affect the consumer.

Current Situation

Under the current state of affairs, patients are usually unaware of the cost of their upcoming medical service or prescription drug until after they buy it. The cost of the service would depend on the amount charged by the provider and on the discount, if any, negotiated by the insurance company. The lack of upfront pricing and comparable quality information hinders optimal decision making.

We can take any competitive free market industry as juxtaposition: for example, the car industry. Availability of fairly good price and quality information leads highest relative quality/lowest relative price automakers to succeed. Wouldn't it be logical for the higher quality/lower cost hospitals and physicians to attract more patients? The less effective and less efficient providers of medical care would need to take steps to either improve the quality or reduce the price of their services. Same goes for prescription drugs: a lower cost drug with comparable or better outcomes should logically gain market share. (The patients would need to make trade-offs between incremental differentials in price versus quality, but this should naturally happen.)

Redesign Of Medical Coverage Cost Sharing

We need to make health care consumers more cost conscious. Making people pay more at the point of sale would result in more efficient and effective utilization, which will paradoxically lead to more affordable health care for everyone. To draw a parallel, a person with modest means would try to eat as much as he or she can at a low-fixed-price buffet, but may limit himself or herself to a glass of water and a main course at a nicer restaurant. Wine, appetizer and dessert are available, but would cost extra out-of-pocket. There is no reason medical service utilization cannot work in a similar economic fashion.

Whether it is partially mandated by the government or driven by the marketplace based on guidelines from the government, medical plans need to be redesigned to include significant employee coinsurance (e.g., greater than 20 percent, up to 50 percent). Current fixed-fee plan design parameters (copays, deductibles, etc.) have a limited impact on utilization and provide little incentive for the consumers of the medical services and prescription drugs to learn about the comparative price and quality of medical care providers and, therefore, no incentive to price shop.

Preventive services should be covered at 100 percent subject to a stipulation that if preventive services—such as an annual physical—are not performed, the coinsurance for the remaining services would go up (e.g., by 10 percent). Not following treatment plans, such as specific prescription drugs, should also carry a significant penalty.

This should apply to Medicare and Medicaid participants as well. Both of these categories are at least partially subsidized by current taxpayers. Therefore, it may be perceived as acceptable to require Medicare and Medicaid beneficiaries to: utilize preventive services, adhere to

treatment plans, and use discretion in utilizing medical services and prescription drugs. (For example, we could implement steep financial penalties for Medicaid recipients for using emergency room facilities for non-emergency services).

Funding Of Higher Cost Sharing

If mainstream health insurance plans adopt higher coinsurance designs, individuals should be provided with a vehicle that would enable them to set aside money to use for medical expenses. A tax-favored Health Savings Account or a similar structure would be an ideal vehicle to meet this need. This account should have a high maximum allowed contribution and should be extended beyond the group plans to the individuals who are currently uninsured. The account money could be used to pay premiums and pay medical/Rx/dental/vision coinsurance, with balances that can be saved for future use, including postretirement medical expenses.

Linking Pricing Of Medical Services To Quality And Care Delivery

In order for the pricing transparency to be successful, it has to be relatively simple for the consumer to figure out and it has to be coupled with the quality ratings.

To simplify the pricing, it could be linked to clusters of care as opposed to individual services. For example, there could be a price for annual ongoing care of a diabetic at a given stage of her condition. Hospital pricing could be primarily based on a diagnosis—as is currently the case for Medicare—rather than on the number of services performed.

The medical community should play an active role in designing the pricing structure and in developing acceptable quality metrics that could be consistently used to evaluate the performance of physicians and hospitals. I believe there has been some progress made in developing "Zagat" ratings for physicians that evaluate a number of parameters, including such service metrics as waiting times.

Quality ratings should also reflect the adherence of hospitals and physicians to evidence-based treatment guidelines. Quality ratings and pricing information could be delivered via the Internet.

Impact On Health Care Reform Objectives

Enforcing pricing transparency and developing appropriate pricing units, developing relevant evidence-based treatment plans and corresponding quality guidelines, and implementing universal tax-favored medical savings vehicles would all require upfront investments. However, these investments would likely be very modest, with a substantial ROI.

Making prices transparent will likely reduce the sticker prices for most medical services by almost half. In and of itself, this will make health care more affordable.

Moreover, there should be substantial savings from the economically optimal utilization of medical services and prescription drugs due to the increased price and quality information transparency. These savings to the health care system should enable the marketplace to provide ffordable preventive and catastrophic coverage to the currently uninsured.

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The Future Of Health Care In The United States

by Thomas Persichetti

The vision for a U.S. health care system that is financially sound, broadly accessible and operationally efficient begins by asking the following questions:

- Is health insurance real insurance, and if so, what is the appropriate role of insurance companies within the health care system?
- Is there a more efficient and economical way to care for chronic illnesses?
- Is there a maximum price society is willing to pay to support the ongoing life of any one individual?

Is Health Insurance Real Insurance?

The conditions that make a risk insurable are:

1. The insured is subject to losses that are definite and random in nature.
2. The group of insureds must be homogeneous and subject to the same loss events.
3. The cost of insuring the loss must be economically feasible.
4. Losses must be unlikely to affect all insured simultaneously.
5. Losses must have a potential to be financially serious.[1]

Most acute illnesses—sudden onset of illness, broken bones, myocardial infarction, etc.—certainly meet all of the above conditions of insurability. However, an argument could be made that individuals with chronic diseases such as diabetes, cystic fibrosis and morbid obesity fail the first condition of insurability. Losses associated with these individuals are definite; however, they are random only in the magnitude of the expected losses, not in the chance that loss occurs.

The question should be asked: is it possible to restrict the role of health insurance to only those individuals that meet the definition of an insurable risk?

Is There A More Efficient And Economical Way To Care For Chronic Illness?

If you attend any seminar regarding the cost of health care in the United States, you are likely to see a slide in the presentation that claims that individuals with chronic illness account for around 75 percent of all health care spending. Current health care expenditures are approximately $2.6 trillion, which, in case you have never seen it before, looks like this: $2,600,000,000,000. This implies that spending for chronic conditions is approximately $1.95 trillion. The management of these conditions represents the greatest opportunity for improved efficiency, cost and outcomes in the system.

The current U.S. population is approximately 305 million. It is estimated that 45 percent (about 137 million) of all Americans have one or more chronic conditions. Therefore, the cost per person is about $14,200 for those with chronic conditions, $3,900 for those without chronic conditions, and about $8,500 for the group as a whole. Please note that these figures are understated on the per capita basis because not all Americans are covered under one of the various forms of insurance.

As noted earlier, individuals with chronic conditions generally fail the first condition of insurability listed above. Currently, insurers implement disease management and care management programs to manage the costs of the chronically ill. There is some evidence that these programs reduce cost and improve outcomes. However, I have not seen a study that definitively supports their effectiveness in making a meaningful impact to cost or quality of care. A new solution is needed to improve the efficiency of caring for the chronically ill.

One possible solution is to establish a national high risk pool and enroll everyone with one or more chronic conditions in it. By pooling the chronically ill, the health care system would:

- Lower the average cost for the general insurance pool by removing the substandard risk.
- Enable the design of a benefits plan that is tailored to the needs of this population.
- Provide a centralized data source for:
  - establishing best practices in coordinating care for the chronically ill.
  - health economists, epidemiologists, and actuaries to perform meaningful studies on this population.
- Gain considerable leverage in implementing reimbursement arrangements with the medical providers and pharmaceutical companies that reward efficiency and quality of care.

The risk pool would be made up of the high risk individuals from all segments of the current health care spectrum. Individuals currently enrolled in Medicare, Medicaid, the individual and group markets and the uninsured would all be represented in this new pool. A tentative outline of the financing of the high risk pool would be:

- Medicare enrollees would pay no more than the current cost of Medicare Parts B and D, with a possible adjustment on a means basis.
- Medicaid enrollees would pay nothing.
- Individual market members would pay 150 percent of the prevailing market rate, adjusted on a means basis.
- Group plan sponsors would contribute 150 percent of their average premium rates, but would still be able to collect employee contributions.
- The remainder of the plans' funds will be supported by the general revenues of the federal government and state revenues.

So How Does This Save Money?

The goal of the program would be to ultimately reduce the costs of care for the chronically ill by one-third. To achieve this, the high risk pool administrators will need to determine the most efficient practice guidelines for treating the chronically ill. This will require a reduction in unnecessary services and an adjustment to provider reimbursement rates. This plan will likely elicit a negative response from patient advocate groups, the medical provider community and the pharmaceutical industry. Proponents of the free market system will find the financing and structure of this proposal in contrast to their views.

Who Is The High Risk Pool Administrator?

The obvious choice would be the administrator for Medicare, CMS, who currently administers benefits to a significant portion of the chronically ill. A case could also be made for the selection of a private administrator with the possibility to reap financial rewards if program objectives are met.

The question should be asked, will a high risk pool provide a more effective and economical way to care for chronic illness?

Is There A Maximum Price Society Is Willing To Pay To Support The Ongoing Life Of Any One Individual?

There seems to be a considerable reluctance to deal with this question in American society. It is a difficult question, one that requires us to apply rational principles to an issue that is laden with humanitarian concerns. It surely will elicit a passionate debate. However, if we carefully study the economics of health care and its impact on the American economy as a whole, we would come up with a dollar figure for which it is no longer economically feasible to support health care for any one individual, particularly if the funds required to do so are public funds.

American society's willingness to consume unlimited resources under the purview of, "if it saves at least one life it is worth it," is a fiscally irresponsible mantra. Society needs to consider the amount of medical resources it is willing to provide on behalf of individuals in relation to the overall economic output of the average individual. At this unsustainable rate of spending, we will get to a point at which the present value of future benefits will exceed the present value of economic output for the average American.

Most of the technological advances in the medical and pharmaceutical sciences are geared towards treating chronic and terminally ill patients. While modern advancements in technology are typically more successful than the treatments they are replacing, the additional cost associated with these procedures may outweigh their benefit. Because the elderly are much more likely to consume these technological advancements, society as a whole is increasing funding for a population that is no longer adding to the economic growth of the nation. The wage base to support this increased funding could eventually grow to a point where American products and services—due to increased cost of production—would be uncompetitive in the global economy.

I am the first to admit I do not have a solution to this issue, but I am offering insight into a serious problem that, if dealt with sooner than later, will help navigate the health care system towards a more sustainable pattern.

Conclusion

The current housing/subprime lending/credit crisis had warning signs that should have been identified early. The failure of those in the financial and risk communities—including some in the actuarial community—to aggressively pursue changes in lending practices and derivative pricing contributed to the current economic recession.

If spending on health care continues unchecked, it will lead to a similar crisis. This time losses will impact not only financial assets, but human lives as well. I believe that the proposed high risk pool is a sensible solution to lower the aggregate cost of care for all, while improving the quality of care for the chronically ill. The high risk pool is not intended to replace the insurance markets as they exist today; a primary market for insurance could still operate in a competitive environment that would spur innovation and real insurance for the nonchronically ill.

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[1] *Based on definitions from various sources, especially Introduction to Ratemaking and Loss Reserving for Property and Casualty Insurance, by R.L. Brown and L.R. Gotlieb.*

Change The Expectations In Health Care

by Jonathan Shreve

Note: This essay won third prize in the contest sponsored by the SOA Health Section.

It is my premise that the primary reform that is needed within the health care system is a change in our expectations. Making it clear what we expect is the first step, and the second step is adjusting policies to be consistent with the expectations.

Note that clarifying expectations is not an easy task—there are many voices representing both broad and narrow interests, which can quickly turn the task of setting expectations into a long wish list of changes. I believe that there are two primary expectations which should be made clear:

- It is everyone's responsibility to have health insurance coverage.
- It is the health care provider's responsibility to achieve the most efficient and highest quality outcome by following the principles of evidence-based medicine.

With these expectations set, it is then critical to follow them up with the appropriate financial incentives, so that our actions and our words are consistent.

Accessibility: The Uninsured Problem

The working assumption for many years has been that we have a large number of uninsureds because of barriers in the system, such as high price or medical underwriting restrictions. Remove the barriers—we have assumed—and we can fix the problem. With that as a hypothesis, a number of states have proceeded to remove the barriers, with little effect. States from Maine to Washington have introduced low cost options for people with relatively lower incomes—some as high as four times the federal poverty level—only to get a very low percentage (in the 10 percent range) of the uninsured to take the option.[1] Even free expansions of Medicaid often experienced take-up rates of only 30 percent.[2] Other states have put in restrictive rules on medical underwriting and/or community rating to find a similar result—little change in the uninsured rates.[3] If you build it, they still won't come.

Along comes Massachusetts, and it breaks down the same barriers that the other states have broken down, but it also includes a tax penalty for individuals without health insurance. The take-up rates skyrocketed from the experience of all the other states. The tax penalty was well below the actual cost of insurance. I would argue that it was not the economic incentive to get health insurance by itself that caused the change, but more importantly the expectation that you should have coverage that drove the much higher take-up rates. As a society, we have expressed this view for auto insurance and even quitting cigarette smoking to great effect. As the expectations are set, we often start to back them up with laws, but I believe the greatest impact comes from setting the expectation. In Massachusetts, the take-up rates were nearly 54 percent,[4] and the number of individuals without health care insurance has decreased by 324,000 in the first year of the legislation (2006).[5]

Affordability And Efficiency

We currently rely on subsidies in order to remove the barriers to getting coverage. Governments subsidize the lower income individuals, employers subsidize employees, and the younger healthier individuals subsidize the older less-healthy individuals. To some degree this will always be true. Sometimes those subsidizing others cannot afford the subsidy. Even if they can afford it, there is always an alternative economic use that the money could be put toward (from other investments to lowering prices or taxes). We all understand that health care is very expensive in the United States, and it is expensive in other parts of the world. Medical costs in the United States have steadily outpaced inflation and now comprise over 16 percent of the Gross Domestic Product (GDP). This figure is projected to increase to 20 percent in the next 10 years.[6] It is critical that we find a way to reduce the cost of health care, and in turn reduce the burden of this cost on the subsidizers and on the direct purchasers.

In health care, less can be more. When back surgery and bed rest have equivalent clinical outcomes for certain

types of back pain, why would you attempt surgery? Other than optimal care is delivered in many situations and for many reasons. The reasons include out-of-date information, the wrong financial incentives, bad habits and inefficient structures. The result is bad care and bad outcomes for patients and inefficient use of resources. The inefficient use of resources also means that other patients may get no care at all. In the United States, the more treatments that are given, the more the providers are paid, independent of the value of the intervention.

This leads to the second expectation I think we need to set: it is health care providers' responsibility to achieve the most efficient and highest quality outcome by following the medical evidence. Further, because this is our expectation, our payments to providers need to reflect that. Recently, CMS has stopped paying for "never" events, like surgery on the wrong body part. This is a good start, but its expectations are significantly below the level I suggest. Recent movements toward pay for performance or medical home are also moves in this direction, but all are within the context of more is better. In a fee-for-service system, each additional service generates an additional fee.

Private sector evidence-based medical guidelines are well established, and the vast majority of third-party payers rely upon them to determine the medical effectiveness. (This is best left to the private sector, as public efforts get bogged down in politics, are less likely to be deployable, and rarely get updated in a timely fashion.) This same level of evidence-based guidelines needs to come to the bedside, and we need to expect physicians to follow these guidelines in each decision they make.

During the 1990s, more physicians were paid based upon treating a number of patients, rather than upon the volume of services generated. Some of the early forms of capitation were not as refined as you might like, and they led to "managed care backlash." However, during the 1990s, medical cost trends were at a lower level than they have been before or since. This was a partial and imperfect beginning to paying our providers consistent with our expectations. One payment solution that has been suggested is offering risk-adjusted payments for episodes of care.[7] Under this reimbursement arrangement, insurers and other payers pay all hospitals or medical professionals fixed amounts per episode of care depending on the condition being treated. Restructuring the payment system has the ability to produce a powerful motivation for health care providers to perform only those procedures consistent with the medical evidence. A system that is driven by results rather than services will allow physicians to be more efficient as they focus on necessity rather than the quantity of services.[8]

Policies Versus Expectations

Most government actions start with one set of rules, and pile more sets of rules on top of those. It is good business for lawyers and other professional advisors, but they usually don't add much stimulus to the economy. Of course, some element of this is necessary, but how far should it go?

In your own workplace, would you rather be subject to a long, detailed list of policies (as most of us are) regarding all form of behavior in your office, or would you rather be given a core expectation—we expect you to treat others with respect, act professionally, and don't do anything stupid. I believe most of us would prefer the latter, and the result is better outcomes.

Of course, changing expectations is actually cultural change, with culture reflecting our country's shared attitudes, values, goals and practices. Individuals learn much of our culture through everyday habits—we all assume that service providers should get paid for each service they perform. For major cultural shift to happen, it usually takes multiple leaders demanding the change, and focusing their behavior on making that change. These leaders come from many sectors—much of the health

care change in the past has been demanded by employers and then reflected by the health care community. In the future, we will need leaders from employers, health plans, health providers and government to accomplish the level of changes we wish to make.

When President Obama starts health care reform, I would much rather that he state these two expectations than to send his policy wonks into action. Although the latter would likely be better for my business.

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Visions Of The Future Of Health Care: Scenes From A Trip To Costco

by Steven Siegel

Maybe it was the woozy feeling from too many free samples of two-bite brownies or the giddy delight of seeing the food court's quarter-pound hot dog with a 20-ounce soft drink (plus free refills!) for a measly $1.50, but a recent trip to Costco gave me visions of the future of health care in the United States.

After hearing from numerous friends and family members about the bargains to be had, I finally signed up when a Costco representative visited my office building and enticed me with a membership offer I could not refuse. With the paperwork making it official, I could barely contain the rush of excitement I felt for my inaugural visit into the world of mass wholesale shopping. Yet, I had not suspected that the visit would provide a revelation for the future of what has been described by President Obama as "the most inefficient health care system imaginable."

Here then are scenes from a trip to Costco:

Scene 1—The Parking Lot

Driving into the parking lot, I encountered a seemingly endless array of vehicles. Gas guzzlers, hybrids, luxury imports, beaters on their last legs, massive SUVs, compacts and subcompacts all filled the parking spaces. Even a few bikes and a skateboard or two hugged the curb.

It's clear everyone likes bargains. And at Costco, anyone can join for an annual fee.

FUTURE HEALTH CARE SYSTEM VISION NUMBER 1:

Universal coverage with no barriers to access.

Scene 2—The Official Membership Card and Photo

Once inside the store, the first order of business was to have my picture taken for my laminated membership card. Through their efficient data system, all I needed to obtain the card was my driver's license for identification verification. My card would allow me entry into any Costco worldwide. One piece of information conspicuously absent from my membership application was the name of my employer. Although the Costco representative offering memberships was set up in my office building, my employer had nothing else to do with the application.

FUTURE HEALTH CARE SYSTEM VISION NUMBER 2:

To preserve competitiveness in the global market, the role played and cost borne by the employer for providing health care is lessened. The employer represents a conduit for health care coverage, rather than a primary stakeholder. Health care coverage is portable nationwide and a uniform data system is employed to ensure maximum efficiency.

Scene 3—Flat Screen TV Land

With my membership card in hand, I anxiously made my way to the formal entrance. Once there, my eyes were mesmerized by the dazzling images of row after row of flat screen TVs. High-end brands juxtaposed next to off-brand names I never heard of. For the most part, I could not discern any difference in picture quality, and I must admit I didn't really care if there was a difference. To me, TV is TV. But, the difference in price between a 42-inch brand name versus an off-brand was astounding. Knowing the price differential, I can safely say I'm definitely an off-brand kind of consumer when it comes to TVs.

Right now, when I see a doctor, I have no idea what kind of consumer I am. When I make an office visit, I don't know if I'm getting brand name or off-brand treatment. I imagine for some services I'd want the off-brand and others I'd want the brand name. But, I simply don't know because I don't have the information, nor can I get it easily.

Why should I be better informed about my TV purchases than my health purchases?

FUTURE HEALTH CARE SYSTEM VISION NUMBER 3:

Extensive cost and quality information is made readily accessible to consumers to make them smarter users of health care, resulting in overall cost savings.

Visions Of The Future Of Health Care: Scenes From A Trip To Costco *by Steven Siegel*

Scene 4—Free Samples

Leaving TV land, I made my way to the food section. When they say you can buy in bulk, they really mean it. With the endless choices, deciding on exactly what to buy is the real dilemma. But, there is a fun way to help make up your mind—free samples! I never thought I'd like carrot juice, but after seeing a blender demonstration and several tastings, I was hooked. As the saying goes, "tastes good and good for you."

FUTURE HEALTH CARE SYSTEM VISION NUMBER 4:
Free or low cost prevention services as an incentive to better health and wellness, effectively reducing overall health care utilization.

Final Scene—The Check Out

Many have argued that Americans are not ready for the visions I have described. It is posited that the United States is a special case in the industrialized world with a completely different culture. For those inclined to that mindset, I'd like to suggest that an efficient, universal health care system is as American as baseball, apple pie and a $1.50 hot dog plus free refills—Costco-style!

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Free Market Fix

by Joseph Slater

Health care in the United States is expensive and getting more expensive at a rapid rate. Currently, spending on health care in the United States accounts for approximately 17 percent of the Gross Domestic Product (GDP). In 2008, total health care expenditures were expected to increase by about 7 percent, or approximately twice the rate of inflation. Furthermore, the high cost of health care has made it unaffordable for 46 million Americans who are uninsured. High costs do not necessarily correlate to high quality care. Recent studies show that only 55 percent of adult patients receive recommended care.

How Do We Fix The System?

Fixing the U.S. health care system requires reducing the level of government intervention in the health care system, not increasing it. Effective reform will also necessitate making each individual insured aware of the costs she is incurring prior to consumption and to giving her incentive to make economic choices regarding offered services and to "police" the payments claimed by providers.

Four simple reforms could dramatically alter the U.S. health care system so that it would provide affordable, effective and universally available health care.

Fix The Tax Code

The tax code must be reformed to eliminate the incentive for employers to offer low cost-sharing, "rich" plan designs to their employees as tax-free benefits. The net result of these types of plans is that consumers care too little about the cost of health care at the point of service. Most proposals to remedy this problem are politically infeasible or economically insufficient to control health care spending. Fortunately, the Cato Institute put forth a reform that is politically and economically effective: so-called "Large" HSAs. Current HSAs would be transformed into Large HSAs by making the following three improvements:

1. Increase tax-free contribution limits dramatically so that the limits would meet or exceed the value of the vast majority of employees' tax free employer-sponsored health care coverage.
2. Eliminate the attendant high-deductible health plan (HDHP) requirement.
3. Allow HSA holders to spend their HSA funds on health care coverage of any type (i.e., varying coverage limits, varying product types, out-of-pocket, etc.) from any source (i.e., employer, individual plan, etc.) tax free.

Large HSAs would have to be implemented in concert with the elimination of all current health care tax breaks, including the current favorable treatment of employer-sponsor health care coverage. This is necessary so that the current cost of the employer-sponsored health coverage is returned immediately to employees' wages thus minimizing employee anxiety over the uncertainty of the new system.

Returning the value of employer-sponsored health coverage to individual employees' wages will make the large HSA concept work by giving individuals control over their health care spending while maintaining the value of their employer-sponsored coverage on a tax basis. Imagine a hypothetical individual who currently receives his health coverage through his employer. The total premium for this coverage is $6,000, of which he contributes $1,500. With a Large HSA, the employee would see the $4,500 his employer contributes in his wages. The employee could deposit the $6,000 into his HSA. Now the employee has complete control over and transparency regarding his health care spending choices. He may decide to stay with a version of his employer-sponsored plan. He may decide instead to purchase (tax-free, of course) a less-rich individual plan and keep the rest of his funds in his HSA to spend out-of-pocket as needed. Either way, the employee will now have "skin in the game" regarding the cost of his care. He

will learn to shop for the insurance coverage which best meets his needs and risk tolerance. He will also learn to seek value from his health care providers, as he no longer feels that his health care coverage is free or almost so.

Reform Health Insurance Regulations

The health insurance market needs to be liberated from the expensive and distorting effects of government regulations and mandates. This can be done by allowing individuals and groups to purchase out-of-state insurance plans, thus creating competition between states and putting pressure on regulators and lawmakers to remove assumedly well-intentioned, but excessively costly guaranteed issues, community rating laws and state mandates. The variance among state regulatory environments can make the premiums on a health insurance policy several times more expensive in one state than it would be in another. Economists have estimated that allowing individuals and groups to purchase insurance across state lines would eliminate 17 million people from the roles of the uninsured. When this approach is combined with the tax changes suggested above, as many as 24 million of the uninsured would become insured.

Open The Health Care Industry To Increased Competition

To provide the health care industry with the incentive to provide less expensive and more effective care, we need to reform laws that protect health care providers and facilities from competition. First, it is essential to eliminate state health care licensing laws to increase the number of physicians, nurse practitioners, and physician assistants providing care, while also allowing for increased competition among provider types. In spite of claims to the contrary, there are a large number of services, currently restricted to highly-trained and costly providers, which could be performed by lower cost provider types. For example, many studies have shown that midlevel clinicians, e.g. nurse practitioners, are just as effective at providing routine treatments as physicians. Removing the state licensing requirements would not make health care providers unaccountable for the quality of the care they provide. Instead, providers would work to prove their competence by demonstrating their effectiveness to consumers.

Second, state laws that require government approval of new medical facilities—so-called Certificate of Need laws (CON)—should be eliminated. Evidence suggests that even though CON laws are supposed to slow the increase of health care costs, their effect has been the opposite. In reality, CON laws increase the barriers to entry for new and more effective medical facilities, thus protecting existing facilities and systems from competition and reform. The ineffectiveness of CON laws led the federal government and several states to lift their CON mandate. Unfortunately, many states maintain their CON laws and some have even expanded them.

Malpractice Litigation Must Be Reformed

Medical malpractice lawsuits provide an important protection for health care consumers since the threat of being sued for medical malpractice provides an extra incentive for providers to limit negligence and fraud. Unfortunately, the medical liability system also interferes with the ability of providers to offer the best and most cost-effective care. Rather than increasing consumers' risk to medical malpractice —by limiting the actions of plaintiffs' counsel—providers and consumers, or insurers acting on the consumers' behalf, should be allowed to bargain for their own mutually beneficial medical malpractice liability levels in their health care services contract. Since the cost of medical malpractice liability insurance is directly reflected in the cost of health care services, allowing the marketplace to determine cost effective and sufficient liability levels would benefit providers and consumers alike. Currently, contracts that allow providers and consumers to agree on malpractice liability levels are illegal. Instead, liability levels are set uniformly by the court system at great cost to providers, insurers and consumers. Legislatures will need to act to make these contracts legal.

Free Market Fix *by Joseph Slater*

A Health Care Market Instead Of A Health Care System

These basic reforms will transform the U.S. health care system into a thriving health care market. Health care consumers will now have the incentive to shop for the best insurance and bring pressure on providers to provide cost-effective and quality care. Insurance companies will be able to offer fair, adequate and affordable policies to consumers across the country. Providers of all types will be free from anti-competitive licensing requirements to offer their services in a less costly, yet consumer-satisfying manner. And finally, both providers and consumers will be free to decide cost-effective and mutually beneficial medical malpractice liability levels instead of having them imposed by the courts at their expense. Free of the damaging restraints of government intervention, the health care market will evolve to bring about less costly, more efficient and universally available health care.

What About Medicaid, Medicare, The Poor And The Chronically Ill?

The reforms outlined here will go a long way to making health care more amenable for the poor and chronically ill simply by making health care less costly and more effective. Additionally, a vibrant health care market will help reduce the cost and inefficiencies that currently plague Medicaid and Medicare. Improvements in health care delivery and health insurance operations will greatly advance the prospects of Medicare and Medicaid privatization since the providers and insurers will be able to apply new, effective tools to these programs. However, assistance to the poor and chronically ill not covered by any other program or private group insurance policy will still be necessary. Therefore, a voucher system that would allow people from these groups to purchase health care coverage from private insurers would be effective in ensuring that the no one goes without sufficient health care.

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Health Insurance Continuity

by Steele R. Stewart

Competing American ideals for the U.S. health care system include free markets which foster competition, cost effectiveness and advances in health care versus public and private assistance, which provides health care independent of a person's financial means.

Today, these ideals are partly met by Americans under age 65 financing health care through employer, individual, Medicaid/SCHIP, other public health insurance and charitable contributions. Each type of financing is designed with different benefits, eligibility rules and contribution levels to sustain long-term fiscal viability. However, uncertain long-term medical inflation makes fiscal viability problematic. In response, the market or the plan administrator adjusts the design as necessary. This results in a fractured health care system with gaps and disconnects between the different types of insurance. How these gaps will change over time can be impossible to predict.

Americans find themselves transitioning between different types of health insurance and becoming uninsured. This essay will address ways to protect individuals—who have insurance today—from losing coverage. We will look at the obstacles that hinder insurance continuity and propose government actions to improve continuity while allowing a free market to determine insurance benefits and premiums.

Continuity Obstacles

What are the obstacles impacting individuals from maintaining insurance as they move between the three primary types of insurance (Employer, Individual and Medicaid/SCHIP), and becoming uninsured?

Enrollment Delays include:

- *Natural Delays* in enrollment take place as people shift between insurance types. Individuals must research and apply for the coverage that seems best to them. An employer's human resource department, and insurance brokers and agents are support structures to help and encourage individuals to enroll. The lighter the support structure and the more complex an insurance product, the longer the natural delays.
- *Life Events* often take place at the time when applying for insurance is needed. Lost employment, moving out of state, a severe medical condition, or starting a new job are natural stressors which can create emotional barriers and practical distractions when one tries to research and apply for insurance.
- *Coverage Delays and Limitations* are allowed by policymakers to help protect insurance pools from abuses by those who go without insurance for extended periods of time. Employers often have waiting periods or pre-existing conditions limitations for up to a year. Individual insurance products may exclude or delay when pre-existing conditions are covered.

Limited Desire for Health Insurance

One of the fundamentals of assuring continuity of coverage is having the necessary motivation to be covered independent of circumstances. As an individual's employment, eligibility for government programs, income, assets, and health status change, their desire to pay for insurance may change. Following are some examples:

- *Income, Assets and Health Status:* A person is motivated to purchase insurance based on their income, assets, perceived insurance need and willingness to risk being without insurance if their health status should change. Since approximately 20 percent of those with insurance incur 80 percent of the claims, most people will not realize the value of the insurance premium they pay over the next several years. However, as a person's health status becomes questionable, he or she will tend to have a greater desire to buy insurance.

- *Other People's Money:* A strength of employer-sponsored insurance and Medicaid/SCHIP is also one of the major weaknesses in maintaining continuity of coverage. With both, individuals are offered insurance that is entirely or significantly paid for by someone else. Unintended consequences include people not realizing the following: the cost of health insurance, their responsibility to pay for insurance, and the need to save for when a third-party will no longer be covering their premiums.

  While employed, group insurance will often have rich benefits with low employee premiums that are desirable to the employee. Once unemployed, the same COBRA group benefits—but without the employer's premium contributions—are most often perceived as a financial burden. Therefore, most people will drop the COBRA coverage in favor of becoming uninsured, or if financially reasonable, decide to purchase individual insurance with significantly lower benefits.

- *Medical Inflation:* This includes the increase in the cost of known and advances in medical care. Americans expect that effective new treatments will be covered independent of the cost. Improved benefits and escalating cost of care is passed on to the consumer in higher insurance premiums. These changes impact the perceived value of insurance.

Discontinuous Insurance Laws and Regulations

To protect consumers and encourage insurance, policy-makers have passed laws and regulations that help define specific types of health insurance. For example, ERISA and COBRA apply to employer coverage; state individual insurance laws apply to individual coverage; and government program regulations to Medicaid/SCHIP. Individuals who shift between insurance types are faced with rules and funding mechanisms that encourage coverage within a type, but discourage continuity of coverage from one type to the next. The following illustrates how insurance laws and regulations contribute to discontinuity.

- *Individual to Employer Insurance:* Individual state laws may require individual insurance to pay claims even when a person has group coverage. Instead of requiring employer insurance to be primary and reducing individual premiums by the actuarial value of the group benefits, the individual insurance company must provide benefits as if no group coverage exists. Most people drop individual coverage if the group coverage offered has richer benefits or is less expensive, but lose the long-term protection that individual coverage guarantees.

- *Employer to Individual Insurance:* As discussed earlier, due to the high cost of employer-sponsored benefits, most people will forgo COBRA coverage when moving to the individual market. Since the individual market is significantly different than the group market, people will need to cross many of the obstacles previously listed.

- *Medicaid/SCHIP:* This requires income and non-income eligibility criteria. However, once these criteria are no longer satisfied, a person will lose coverage benefits, but may not be able to afford individual insurance. Therefore, the prospect of employment or higher income may not always be beneficial, unless group coverage is provided.

  For those who lose group or can no longer afford individual insurance, eligibility in government programs is not guaranteed, and becoming uninsured may be the outcome.

Additional Money Required

The underlying rationale for many of the above obstacles is preserving the financial soundness of each insurance type. Thus, mitigating these obstacles will include providing or motivating others to provide or set aside money for continuity benefits.

Options To Increase Continuity

The following proposals intend to improve continuity of coverage by creating a legal framework where private insurance and government programs can operate efficiently, and minimize changes to the current insurance markets.

- Require educational material to be provided by an individual's current insurer. The material would include long-term limitations of their current insurance, descriptions of other insurance options and contact information.
- Create more fluid insurance laws and regulations. For example, allow employers to replace COBRA coverage with other insurance mechanisms which in turn allow the employer and employees to choose and prefund individual insurance products that would be activated upon employment termination. Or, create a class of Secondary Payer Individual Insurance Products (SPIIP) that are tax deductible and have premiums that reduce to the actuarial value of a secondary product when a person has group insurance.
- Create a Continuity Insurance (CI) Market through tax incentives to encourage insurers to sell, employers to support, and individuals to purchase continuity coverage. CI provides SPIIP when a person terminates group or government insurance. The individual insurance provided would have benefits and premiums agreed to when the CI policy is purchased.

  CI could be sold when an employee first enrolls in an employer's insurance or upon the employer's annual open enrollment period. CI is not a group product, but an individual product and thus would be priced based on an individual's insurance needs and risk characteristics. But insurance laws and tax regulations would need to be modified to be advantages to employers to help promote the CI in the workplace. The monthly cost of CI could be about 5 percent of the agreed upon individual health insurance premium.
- Allow Health Savings Accounts (HSA) for those with CI or SPIIP and allow the funds to be used for medical expenses and health insurance when unemployed.

In conclusion, the advantages of above proposals would help bring together many of the fractured aspects of our health insurance system. Specifically 1) Enrollment delays are avoided since the research, learning and application for insurance takes place long prior to employment termination. 2) CI's low monthly cost, the significant risk insured (being uninsurable), the timing of sale (outside of unemployment circumstances), employer promotional efforts, and government tax incentives combine to provide significant motivators for individuals to purchase CI. This in turn brings the needed money to cover these needed benefits. 3) Integrating the use of HSAs, SPIIP and CI will also bring needed money that will help reduce the number of uninsured long term. 4) Government agencies could also purchase or provide CI for Medicaid/SCHIP enrollees to assist with this population's need for continuity of coverage.

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Health System Reform—Old Challenges, New Solutions

by Robert E. Stone

Citizens from across the demographic spectrum are calling for immediate and effective health care reform—a widespread appeal that has gone largely unanswered. The United States' health care system ranks as No. 37 in the world and our present economic downturn has only intensified the ongoing call for reform. According to Peter Orszag, director of the Office of Management and Budget, "The principal cause of the nation's long-term budget problems is rising health costs." Despite our ranking and current economic situation, real progress will not occur unless and until there is a common objective with respect to what we want a reformed system to accomplish, and one upon which all stakeholders agree. Further, in reaching that agreement, all stakeholders must abandon the implicit, yet impossible, demand that reform must not diminish anyone's portion of the economic pie.

Progress toward reform is also being inhibited—as it has been countless times before—by the often nebulous nature of the vocabulary used and misused in the dialogue. The words we use—affordable, equitable, accessible, transparent and quality—have different meanings for each and every stakeholder in the debate. Health and health care are used interchangeably, despite their distinct definitions. We regularly speak of the payment system and the delivery system as if they were one, although we clearly know they are not. We talk of the under-insured and uninsured as if no one is actually paying for the cost of their care. In short, we are unable to articulate, with a single voice, precisely what we really want the system to accomplish. As a result, we have a 70-year history of not getting it. Perhaps these are the very reasons that caused Senator Edward Kennedy to state, "Reform is urgently needed."

Old Challenges

This debate is not unique to our times. It began more than 70 years ago when President Franklin D. Roosevelt engineered a broad social agenda that ultimately led to the passage of the Social Security Act. While a national health plan was originally included in the Act, President Roosevelt killed the plan in the final hours to ensure passage by Congress. Commenting on that decision, Roosevelt said, "I am confident that we can devise a system which will enhance and not hinder the remarkable progress which has been and is being made in the practice of the professions of medicine and surgery in the United States."

Clearly, the intervening 70 years have not hindered the progress President Roosevelt anticipated. Unfortunately, in many cases, the value of that progress has been overwhelmed by ineffective health care policies that have driven apparently inexorably higher costs without meaningful increases in quality or health outcomes. Arguably, our country's overall health has suffered as a result.

The U.S. health care system, as it exists today, is a result of the stakeholders' collective inability to define one paramount objective for what they want the system to achieve. As a result, the debate consists of varied and often conflicting opinions from all sides, including providers, patients, insurance companies, academic experts and government. At the same time, however, demand for acute and chronic care is growing so quickly that it will soon completely overwhelm the ability of the delivery system to respond. Yet, we have focused almost all of our considerable efforts and resources on the supply side of the health care equation and in providing capabilities to interact with people after they get sick. Until we expand our focus on preventing or reducing the demand for services, meaningful progress is unlikely to occur.

Barriers To Reform

We cannot continue to simply tinker around the edges of the U.S. health care system. We have adjusted payment, coverage, manpower and facilities policies, but have yet to see the desired results in terms of either cost or quality. Despite our best intentions, our decisions in past reform debates have been predominantly based upon the prevailing political winds or in-vogue ideologies of the time. We have,

as a result, limited ourselves to treating the symptoms of our ailing system, and we now seem to be going down the same road again.

All of these issues center on the fact that, as an industry, as concerned citizens, as a country, we have become our own greatest barrier to reform. If we cannot agree upon what we want, what our nation needs, and what type of approach will most likely succeed, we will certainly fail to define—let alone execute—satisfactory reform. We can no longer afford to make incremental changes at the edges of the system or expect results from titrating system features like access and affordability. That approach has not worked for over seven decades, and I submit that it is unlikely to work now.

The Path To Successful Reform

President Dwight D. Eisenhower recognized this fact when he wrote, "We succeed only as we identify in life, or in war, or *in anything else*, a single, *overriding* objective, and make all other considerations bend to that one objective." Our objective, I suggest, should be that our ranking will improve from today's No. 37 to No. 1 within the next 10 years. It's clear; it's simple; and it's easy to measure. To achieve that objective we must focus our reform efforts on assuring that the new system does three things.

- First, it must help keep healthy people healthy.
- Second, it must help people mitigate or eliminate the health risks associated with unhealthy lifestyle behavior choices.
- Third, it must ensure the provision of evidence-based care to those who are ill.

With these endpoints in mind, we can begin to think about how we will reorganize the payment and delivery systems to support reaching them, a very different approach than those we have tried in the past, or seem poised to try again today.

In order to support this focus on becoming No. 1, we must also create a single measurement that allows us to assess the total well-being of both large and discrete populations over time. This single measurement will help us to effectively guide and focus our efforts and investments.

Once we have the system designed and migration underway, we must create and introduce targeted interventions, at scale, that will improve the health and well-being of the nation and each of its citizens, lower direct health care costs, and improve productivity and business results.

With the inauguration of the new administration, we have entered an era in which change is anticipated and progress encouraged. The United States can no longer afford to provide the same solutions and expect different results. This paper suggests a different approach, but successful implementation is in all of our hands. Ultimately, to achieve the No. 1 system in the world, we must agree to that objective—and why would we settle for less—and then rigorously bend all other considerations to that objective.

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U.S. Health Care System: Righting An Inversion

by Jim Toole

Remember those office toys filled with colored sands, the ones that formed intriguing patterns when you turned them over? In nature, the process of reaching equilibrium is seldom so controlled. Tornados, avalanches and epidemics are all examples of the rapid and violent equilibration of inversions and criticalities.

Not all inversions are destructive; the unique characteristics of water preserve life from year to year. As water cools, it becomes denser and drops to the bottom of a lake, pushing warmer water to the surface. But at 4 degrees Celsius, something special occurs. Water begins to expand, floating back to the surface to form ice, leaving space hospitable for marine life. Such a small thing, such a big effect. Intriguingly, the theories that explain inversions and their return to stasis can also help with understanding the behavior of markets and social networks.

Man As Market Maker

Like humans and the social networks they serve, markets are creative, hungry and constantly evolving. Markets respond to their environment and the incentives in them, explicit and implicit. Many noneconomists think that there are only two kinds of markets: the "free" one ordained by god (or, as the case may be, Adam Smith), and the wreckage of all other civilizations throughout history that failed to follow free market principles (usually pursuing some "ism", led by some "ist"). The "free" market is a mathematically convenient way of arriving at prices between willing buyers and sellers when goods are reasonably homogenous, information asymmetry is minimal, and the cost of externalities (environmental degradation, social injustice) can be comfortably ignored. As we all know, theory is different than reality.

Modern markets do not spontaneously generate, nor are they formed by some invisible hand. While early markets formed organically—as capital became more concentrated—owners demanded more structure and transparency. Most, if not all, 20th century capital markets were conceived, designed and created with great intentionality and continue to evolve. The Chicago Mercantile Exchange, NASDAQ, Treasury markets, emissions trading and spectrum auctions, were all created by businesses, investors and quasi-governmental authorities for the express purpose of serving as crucibles for equalizing supply and demand.

One of the confounding characteristics of markets is that they behave irrationally: they have booms and busts. Speculation creates imbalances of economic pressure, similar to inversions and criticalities. Commodities, real estate, financial instruments—even tulip bulbs—all experience cycles and bubbles dating back to, well, the invention of markets. Tended skillfully, pressure can be released with a minimum of pain and dislocation. Left to fester, a bubble may burst with catastrophic effect, engulfing not only local markets but collateral markets with contagion-like effects.

Modern markets are structured, rule-based and withstand the pressure of capitalism best when framed by explicit policy, reinforced by responsive governance structures and protected by effective oversight mechanisms.

Perverse Incentives, Predictable Outcomes

Our nation's health policy has been to have no policy. The employer-based health care system is an accident, and not a happy one. Far from intentional, it is the result of WWII era tax policy allowing businesses to deduct health insurance premiums to attract talent and circumvent wartime wage/price controls. One-sixth of the output of the entire U.S economy—an unimaginable 2.2 trillion dollars—is funneled into health care with only the slightest regard for outcomes. When production is not constrained by quality or efficiency, outcomes suffer; we have only to look at the auto industry to see the result of focusing on lobbying rather than product.

The incentives for health care delivery in the United States are inverted: we reward intervention and skimp on maintenance; reimburse service volume while ignor-

ing outcomes; and penalize efficient providers even as we reward the profligate. As a result, the system costs twice as much as it should, underperforms in terms of outcomes, yet still leaves over 45 million people—17 percent of the non-Medicare population—uninsured. Our health system is ranked 37th in the world by the World Health Organization (WHO). We are afflicted with an infant mortality rate more than twice that of Japan and Sweden, yet despite numerous studies showing high returns in terms of avoided health care costs, we invest merest pennies from the health care dollar in public health.[1]

Medical errors have become institutionalized. Studies estimate 3 percent of all hospital visits result in medical errors, the same rate as in 1984. The Institute of Medicine reported as many as 98,000 people die each year as a result of preventable medical errors, more than auto accidents, guns and AIDS combined, even more than the entire Vietnam War. Excess mortality amenable to healthcare is 44 percent higher than Canada, contributing to an additional 100,000 deaths per year.[2] Discretionary deaths which would be viewed as shocking in any other industry—imagine two fiery plane crashes every day of the year—are accepted as a normal business cost.

Our system suffers from a legacy of oppression, segregation and racial injustice. The United States is the only industrialized nation with an employer-based health care system other than South Africa. Far from incidental, at the time the enabling tax legislation was passed, segregation was the law of the land and brutally enforced. Today, workers without health benefits are still disproportionately persons of color. The infant mortality rate for blacks is a shocking 240 percent of the rate for whites. While blacks represent 12.3 percent of the population, just 2.2 percent of physicians and medical students are black. *This is less than the proportion in 1910.*[3]

By not agreeing to intentional health policies we receive the worst of all possible worlds, a perfect storm of high costs, poor access and shameful outcomes which disproportionately impact the poor and people of color.

What Is To Be Done?

While the U.S. health care system is dangerous to our physical health, the market is broken and hurtling towards a fiscal crisis of unimaginable consequence. Michael Levitt, then secretary for health and human services for George W. Bush, said health care spending "could potentially drag our nation into a financial crisis that makes our subprime mortgage crisis look like a warm summer rain."[4] Part of the problem is, short of an overhaul of the system, the tools available to policymakers are relatively blunt. There is no health care federal reserve that can bend health care trends like the Fed manipulates money supply and interest rates to influence financial markets.

Actually, there is. Special interests have just refused to permit it to operate as anything more than a sightless payer. Medicare, along with Medicaid and other state and local health programs, account for over 45 percent of the spending in the United States. That's right. The U.S. "private" health care system is funded almost half by tax dollars. When these programs were initially established—as a compromise to powerful health lobbies—sustainable policies guided by actuarial principles were excluded. Thus, what was a golden opportunity to incorporate information other than price into the system became instead the start of the mad gold rush that is the U.S. health care system.

Medicare can and must serve this role.[5] Where Medicare leads, the industry will, in most cases, gladly follow. Medicare studies show widespread regional variation in spending, with no statistical difference in outcomes. Because there is no mechanism to examine and communicate the benefits, risks and costs of new treatments—a critical component of any market—researchers estimate 30 percent of care in the United States does nothing to improve health outcomes. Based on experi-

ence with similar institutions in Britain and Germany, the Commonwealth Fund estimates direct savings of $368 billion would be achieved over 10 years by establishing a Center for Medical Effectiveness, using Medicare to accelerate the diffusion of best practices. [6]

Change is coming, and this time actuaries can't afford not to be involved. Will the transition be intentional and managed, or chaotic, like a bubble bursting? Can we bend the trend through sheer force of will, or will we stand by and watch as the train hurtles the track? While the cost of action is great, surely, the cost of inaction is greater. Americans need to invent, implement and evaluate sustainable health care policies, divert cash-flow streams away from projects which feed the beast, and focus on projects and policies which enhance value:

- Reward outcomes, not services.
- Incentivize the practice of evidence-based medicine.
- Do the comparative effectiveness research (substitute facts for impressions).
- Develop electronic medical records.
- Establish regional systems of medical homes and off-hours care facilities.
- Invest in the nation's public health infrastructure.

There is no single "magic bullet." It will require a combination of thoughtful, coordinated policies and a change in our cultural expectations of infinite resources and unlimited choice. Who better than actuaries, experts in the analysis of socioeconomic consequences of risk, to help design a robust framework for a sustainable health care market, balancing risks and incentives and bringing back into the equation externalities of quality, access and efficiency? In taking this leadership role, actuaries will earn the right to participate as opportunities arise in these new institutions, and play a continuing role going forward, applying the actuarial control cycle to inform evidence-based policymaking.

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[1] *Public health focuses on the health of populations through education, prevention and monitoring; healthcare delivers services to individuals when they become sick.*

[2] *Schoenbaum, S. "Reducing Preventable Deaths through Improved Health System Performance." The Commonwealth Fund. October 9, 2008.*

[3] *Baker, R. et al. "African American Physicians and Organized Medicine, 1846 – 1968: Origins or a Racial Divide."* JAMA. *2008;300(3):303-313.*

[4] *Levitt, M. "A World Without Innovation." Speech given on September 10, 2008 in Paris, France.*

[5] *For those who perish the thought of government involvement in "bending the healthcare trend," I would point out that the Federal Reserve Board was established in 1913 to fulfill this very role: encourage financial stability and put the government, not Wall Street, in charge of the country's money supply. While this was quite controversial at the time, few today envision a financial system without a strong role for the Federal Reserve.*

[6] *Davis, K. "Slowing the Growth of Health Care Costs: Learning from International Experience,"* NEJM, *359;17, October 23, 2008.*

About Efficiencies Long Overdue, aka Not More Of The Same

by Mavis Tuten

At a hospital employee forum I attended the other day, a nursing supervisor disdainfully declared that President Obama wants to decide what doctor a person can see and what that doctor can choose to do. She indicated she knew this because she listened to the president's recent address to Congress.

Not having remembered the president saying this, I looked up his speech. It turns out that Obama's call for health care reform never touched on this specific. Rather, he said that quality, affordable health care for every American would be paid for in part by efficiencies long overdue in our system. He acknowledged there would be many different opinions and ideas about how to achieve health care reform, but he did not specify any particular method.

So, was it the "health care for every American" or the "efficiencies long overdue" or both that led my coworker to believe that a person's right to choose a doctor and a doctor's license to make medical decisions were being threatened? Why? Why would one assume that a system that provided health care to everyone by being more efficient would limit choices or care for some? And why, especially, would someone working in the current health care system suppose this? And why, if this is to be the case, would it be something to fear or deride?

Examining Assumptions

Perhaps it's best to begin with the disingenuous assumption that our current health care system allows at least some people to choose their own doctors and gives those chosen doctors free rein to decide what is to be done. Even if a person's health care insurance has no preferred provider list of practitioners from whom that person can choose and puts no restrictions on what care that practitioner can prescribe, the reality on the ground limits choice.

One reality is that the practices of many primary care providers are closed. In other words, there is no room to squeeze another patient or another family into that physician's schedule—even with the tightest control over the time the physician is allowed to spend with any given patient. With influence or physician-finder services, those who have an urgent need or a good health insurance plan will probably get a physician. But this is not the same as getting a physician of choice. And this bit of reality applies only to those privileged with health insurance that the physician accepts. Those without health insurance or with an insurance plan not well liked by physicians have no choice but to go to the emergency room to seek needed medical care.

Another reality on the ground is that policies of insurance companies hold sway over the medical care that is allowable, and standards of medicine drive the care that a physician is able to bring about. The hope is that most of the dictates are derived from experience regarding what is medically efficacious and necessary. The acceptance is that some injunctions are based on factors such as cost, popular demand, successful lobbying, and profit and liability concerns, to name a few. The truth is that there are limits now on the care a physician can and does prescribe.

A Failure Of Imagination

Perhaps the supposition that Obama's petition for health care reform calls for an abridgement of one's right to choose a physician and privilege of getting care based only on the physician's unconstrained medical judgment is based not on ignorance of the current health care system but rather on intimate familiarity with it. Perhaps it's a failure of imagination. Those who know best the status quo of our current health care system—such as my coworker—assume health care for every American means simply an extension of the current system to more people. Thus, if the current health care system restricts physician choice and controls medical care, logic suggests that incorporating more people into this system will compound those restrictions. The apprehension of a changed health care system may be based on an imagined health care system that has not changed enough.

Health care reform should not be about financing and making universally accessible the health care system we

currently have. Rather, it should be about revising the health care system to be efficient so that necessary medical care is available to all. President Obama was right in saying that efficiencies in our system that are long overdue will partially pay for quality, affordable health care for every American. He didn't go far enough, however. Efficiencies will not just fund quality affordable health care for all; efficiencies can make health care both quality and affordable.

Efficiency should serve as both the beginning and end of a new health care system—the blueprint for its construction and the test of its working out. How would one construct a health care system that uses medical practitioners, practices and resources to get the most output from input? And then, does that health care system actually get the most output from input?

It is neither within my wisdom nor the scope of this essay to present a draft of a new health care system here. What I can do, however, is outline some steps that need to be taken and some considerations that ought to be incorporated in the plan of a new system.

Define The Output

The design needs to start with defining the output wanted from the health care system. I believe we start at a disadvantage due to the use of the term "health care" to refer to "medical care"—more specifically, to refer to a system of Western, scientifically-based treatments of biological diseases and disorders. A true health care system would focus on more than the scientific treatment of biological disease and disorder; it would also address many of the causes of those diseases and disorders to include personal, cultural, environmental and political forces that are not amendable to biomedicine alone. The fact that health care and medical care are widely used as if they had a common meaning, however, gives more impetus to the necessity to clearly define the output we intend to pursue from a re-envisioned health care system. Without this, we will have multiple strategies, each of which may achieve some good in the end, but none of which will bring about a shared agreement of a common good to be accomplished.

Regardless of the overuse of the term health care, we should begin to define output, for the purposes of a societal-sponsored health care system, in terms of the biomedical care to be available to all persons. This means that our health care system is not primarily going to be about eradicating poverty and homelessness, providing clean air and water, and promoting egalitarian social conditions. Rather, it's going to define the medical care we make available to members of our society.

Perhaps surprising to many, we currently have universal access to medical care in America. The problem is that the care offered to all seems to have been selected for its inefficiency in managing chronic diseases. Anyone who happens to have a seizure can get the emergency and critical hospital care needed to treat that seizure; only those with money or means can get the anti-seizure medications that might have prevented that seizure. Likewise, anyone who is struggling to breathe due to an asthma attack can get the emergency medical care needed to save his or her life at that time, but the asthma-control medications that might have prevented the attack may be out of financial reach. We need to give priority to making broadly available the care that efficiently manages diseases, rather than the efficiency with which we deliver limited instances of critical care to treat acute exacerbations of disease.

Using The Efficiency Model Effectively

The efficiency model needs to be used to determine not just the medical care we make available to all, but also the means by which that care is rendered. We overutilize physicians and underutilize medical professionals such as nurses, pharmacists, dieticians, social workers and therapists (physical, occupational, mental health, et al). We ask patients to come to a 15-minute visit at a private physician's office to monitor their disease rather than sending nurses to those patients' homes. We expect

physicians to prescribe, teach, counsel and answer questions and we assume patients can monitor and manage the prescribed care. For inexplicable reasons, we fail to see that such work is outside the time and inclination of physicians and beyond the capabilities of many patients and families. We could look to hospice as an example of how efficiency can actually bring about more and better care.

As we move forward with a goal of health care for all Americans, we need to remember that "efficiencies long overdue" is the key to re-envisioning a health care system that can provide more health care but not more of the same health care. The derisive idea that health care reform means less choice and care is based on a failure to imagine that things can and ought to be done differently.

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Beautiful Minds, Healthy Bodies

by Matt Varitek

A game-theory concept well illustrated by Russell Crowe's portrayal of John Forbes Nash in "A Beautiful Mind" stipulates that the best cumulative payoff for all players may not entail any of the players seeking to maximize his own payoff. It is in this spirit that I suggest reforms to the U.S. health care system to promote financial soundness, broader access and efficient operations. These reforms require that each participant in the system—individuals, employers, providers, insurers and government—give a little.

Objectives Of Health Care Reform

Public demand for health care reform follows from growing numbers of uninsured and underinsured; unsustainable cost increases that price a growing number of small businesses out of the group insurance market and represent a heavy burden on large businesses; and a disconnect between the cost of services and their effectiveness, to name just a few complaints. Objectives of reform thus include providing coverage for everyone, balancing funding in a way that benefits other sectors of our economy, and improving health outcomes at a lower cost than we currently observe.

Insurers possess a range of value-added skills beyond premium and claims administration and risk protection. Therefore, insurers can play a more effective role in support of employers and individual members to contain costs and improve health. That supporting role could take the form of more aggressive incentives for healthy behaviors—consistent with the growing emphasis on preventive care as a cost-saving measure—and more aggressive disincentives for unhealthy behaviors. These data-driven incentives and disincentives would seek to customize individual risk profiling and quantify effective treatment patterns for medical conditions that lead to increased health service costs.

For example, some insurance products offer a partial reimbursement for membership fees at a fitness center. However the insurer doesn't track the member's use of the center. The same reimbursement applies whether or not the member visits the center regularly or ever goes to the center to work out. Similarly, the reimbursement is not dependent on subsequent improvement in the member's health. Suppose an insurer was to seek quantifiable improvements in a member's BMI, cholesterol or glucose readings, or other health indicators as measured by the member's regular physician. The insurer could then offer full reimbursement for the fitness center membership fees, or credits toward cost sharing for medical services. These incentives are justifiable when the health improvements represent lower expected costs for future treatment services. Such a program could even be used in conjunction with new-group underwriting to paint a better picture of a prospective policyholder's future costs. Should all diagnosed diabetics be treated the same by insurers? Or, should insurers favor and accommodate those diabetics who visit the doctor regularly, exercise and control their weight, and otherwise actively maintain their condition in a properly prescribed manner? This illustrates a distinction between paying for "health care" and paying for "care of health."

Stronger disincentives for unhealthy behaviors—such as failure to obtain routine checkups or poor lifestyle choices that ultimately harm health and increase costs—could result in pre-emptive rate increases or penalties applied to member cost sharing. Insurers tend to rate retrospectively; if a member or group hasn't incurred excessive claim costs in the past year or two, it is unlikely that the member or group in question would receive an increase in excess of the figure determined for their block or line of business. However, if a physician's diagnosis codes or other reported data point toward a new or worsening condition that would prove expensive in the near future, the insurer could offer a carrot through provider and member incentives for a thorough treatment plan, and a stick through cost penalties.

Controlling Unit Cost Trends

Providers would need to work more closely with insurers to help control unit cost trends. Clearly medical trends that consistently outpace inflation are unsustainable. Insurers could continue to streamline reimbursements, assist hospitals with booking receivables and help produce financial projections, which would diminish the need for margins in negotiations. Additionally, the renewed focus on cost effectiveness of treatment would slow the need for expensive high-tech equipment of questionable added value.

Insurers could assemble quantitative studies of the financial benefits of workplace health initiatives and increase employer awareness of their value. Many employers, large and small, make little or no effort to promote good health among their employees—even while they refer to their employees as "their most valuable assets." Empty admonitions to exercise and eat right mean little when directed towards cubicle warriors logging 50 or more hours a week sitting at their desks or in meetings, commuting another five, 10 or more hours a week, grabbing the most convenient breakfast or lunch available and squeezing it into a tight timeframe, and scrambling to meet responsibilities at home. It would be far more helpful to provide exercise time or to facilitate healthier meal choices that are likely cheaper than fattening fast foods. Individual health maintenance takes time, commitment and accountability, and employers have a part to play; they will observe gains in employees' productivity and satisfaction by assisting their employees in making the needed efforts.

The Role Of Government

Public demand grows for increased government intervention in the health care system. At the same time, a significant opposition still exists to a government-run, single-payer system. Yet the benefits of universal coverage in its most literal definition—everyone is covered—can be observed throughout various sectors of the economy. Certainly public health would improve, and lifestyle-based chronic conditions would become less frequent and less severe, thus less costly. Emergency rooms would suffer less overcrowding if everyone could see a regular physician as needed, and hospitals would not have to write off as much bad patient debt (or pass along the costs to the insured population as it exists today).

But the impacts of medical costs can be felt in ways that don't directly relate to personal health. Small businesses are less likely to offer group coverage than large businesses, which affects their ability to compete for workers. This impact to the job market is especially harmful to the broader economy in tougher times such as these recent years. Medical expenses are the leading cause of personal bankruptcy, which has an impact on the housing market through increased foreclosures and distress sales, and the credit market through reduced ability to borrow. One could even note that financial issues are the leading cause of divorce, and postulate that some marriages might have been saved—and families kept intact—if the stress of crippling debt from unanticipated hospital stays had not damaged them.

These and other ripple effects that stem from lack of coverage advance the argument for the government to play a role in ensuring everyone's care. It is not necessary for the government to take over the health care industry any more than it is necessary for them to take over the defense industry. They contract with numerous private-sector firms to build the tools used by our military; why not contract with private insurers to offer a basic level of coverage to everyone?

Such contracting would reduce the obligations of employers to provide health insurance. Those premium dollars that they spend today might be more efficiently directed towards wage increases and employee health initiatives, and could lead to our manufactured products being more competitively priced in the global marketplace. Likewise, the insurance premiums currently paid by the

employees through payroll deduction—or fully purchased by the self-employed—could be directed toward greater purchasing power for wage earners, leading to job creation and added protection for the housing and financial markets. These stimulant effects could be expected to result in increased tax revenues that would offset at least some of the costs. Rather than advocating a one-size-fits-all approach to health insurance, employers would have the choice to "buy up" to more comprehensive supplemental coverage as dictated by HR goals, union negotiations or company mission statements.

Our government already offers tax deductibility of employer-paid health insurance premiums, and has expanded tax credits and other subsidies for the purchase of private insurance. However, these policies have asked nothing of insurers in return for the added business. It is fair to enforce reasonable restrictions on executive compensation, greater transparency and accountability for the use of public funds, and perhaps even a direction of a portion of the insurer's proceeds from the taxpayer-purchased policies toward support of medical research and fundraising efforts that include healthy activities, like the Komen Race for the Cure. Research investments will eventually lead to cures for diseases that at present are expensive to treat or manage.

Thus if insurers, providers, employers and individuals all make a conscious effort to lessen the strain on the system—with assistance from government where beneficial—we can move away from the buying and selling of "health care" and embrace the concept of "caring for health" with all the benefits that result from a healthier population, a more productive workforce and a strengthened private sector. A comprehensive, widely accepted solution begins with the imagination of all of our beautiful minds.

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The Future Of U.S. Health Care: A Two-Tiered System

by Bradley H. Vernon

The current presidential administration and Congress, as well as those who will fill these positions in the future, have a daunting task. The United States public, due to the ever-increasing cost of health care and promises made during political campaigns, now expects revolutionary change to the health care system. This change will be slow and tedious and much of it will likely be met with opposition from various stakeholders. The change will likely come in baby steps, so that decades from now the U.S. health care system will look very different from the way it does today. The goals we strive to reach by introducing these changes are to make health care affordable and accessible to all, while improving quality of care and preserving as much of the autonomy and innovation we currently enjoy as possible. A view that many have for meeting these goals is one of a two-tiered system. The first tier in this system is a universal one controlled by the federal government, while the second tier is a private sector supplementing the first tier. The remainder of this paper will examine this two-tiered system and how various stakeholders in today's system will be affected.

Tier One—Federally Operated

The first tier in this two-tiered system will be a federally run, universal system in which basic health care is provided to everyone living in our country; costs are controlled to an affordable level; and quality of care continues to improve. The first step might be a national health database which is already being discussed by the Obama Administration. Allowing currently uncovered persons to enroll into the system the first time they receive service, by the provider, will help prevent people from falling through the cracks. It will also eliminate the need for the large distribution market currently used by private insurance.

This first tier of health care will enjoy a substantial one-time cost cut due to the removal of numerous costs. The costs to be eliminated or greatly reduced include commissions, underwriting, marketing, profits and much of the duplicated expenses, including management, associated with a competitive insurance market. In order to keep the first tier affordable on an ongoing basis, the plan will also involve rationing, restrictions and limits that we are not currently accustomed to in the United States. This means long wait times for many services, while other procedures that many believe to be helpful may be denied or strictly limited. The key to making and keeping this universal system affordable will be the government focusing on costs and benefits and not being clouded by emotion or politics. Focusing on the cost associated with extending a person's life by one year or alleviating pain for a day is not something we are accustomed to, but this will need to become the way of thinking in order to reach our conflicting goals. The third goal for our government will be to continue to improve the quality of care provided within this first tier of health care. This means using quality measures to evaluate and take action with health care providers, but it also means finding a way to continue the funding of research and development. One of the biggest fears around a universal system is that it will stifle the innovation and advancement we have seen in medicine. Government funding, as well as a clear understanding of how new procedures and prescription drugs can become a part of the government run plan, will be required to support continued medical advancement. One advantage we have in formulating this first tier of health care is that we have other countries to look to, and even states within our own country, for feedback regarding what does and does not work.

Second Tier—Preservation Of Autonomy

The second tier in our future health care system is one that allows a person to buy his or her way out of the waiting times, restrictions and limitations of the first tier. This second tier is where autonomy is preserved and individuals and groups can purchase insurance that looks much like what some of us enjoy today. It is supplemental to the first tier with the focus being more on flexibility and individual

choice. Those who do not want to succumb to rationing or the government, deciding that a year of their life is not worth the cost associated with a certain procedure, can purchase private insurance to cover these services. The second tier will be privately run but will continue to require government regulation similar to what we have today. This second tier will make up a much smaller portion of the health care pie than private insurance does today, but cost containment, accessibility and quality of care will remain the goals for this sector.

Effects Of The Two-Tiered System

This two-tiered system is a drastic change from our health care system today and will affect the various stakeholders in different ways. Some Americans will receive health coverage for the first time; some will be paying more toward the health care of others; and many will be forced to find new careers as a result of this change. The most drastic effects of this change will be felt by the insurance industry. The government-run first tier would likely contract out to a few heath insurance carriers to administer its plan. Certainly there will also be opportunity within the second tier, but the market for insurance carriers will surely shrink. That means fewer insurance companies and it also means many working in the insurance industry today will have to find new careers. Even more strongly impacted will be those involved in the distribution of health care products. Since the government will not need brokers, marketers or a sales force to distribute its plan, and since the private insurance sector will be much smaller, the jobs available in these areas will greatly decrease. In fact, this is where much of the savings associated with the first tier will come from. Other careers including insurance executives, underwriters and actuaries will also see a squeeze of the job market within this new system.

One other area greatly affected by this change will be providers themselves. Physicians and hospitals will have less control over charges for services that fall under the universal plan. Physicians and hospitals will also have to make decisions regarding how much of their time they will contract with the government to provide first-tier services and how much they will leave for privately insured patients receiving second-tier benefits. The government will either have to place minimums on resources dedicated by each to the first-tier plan, or make it lucrative enough that physicians and hospitals will want to reserve most of their time for the government plan. Regardless, how physicians and hospitals work will be greatly changed.

Those paying for health care will also be affected by this change. Notably, employers will no longer be such a large part of health care funding. Since a large portion of this funding will now come from tax dollars used to pay for the first tier of the new system, much less of the burden will be placed on employers. Employees will expect something else from employers to replace these benefits. Employers will likely be very much involved in the second tier of the new health care system and will also now have capacity to increase other benefits such as retiree benefits, ancillary insurance benefits and monetary compensation. A major reason for this reform is to provide health care to those who cannot otherwise afford it. Individuals who do not receive health care benefits from their employers, and those who are unemployed, will be adequately covered, by most measures, with just the first tier of coverage.

Change Is Imminent

The United States is likely going to see drastic changes to its health care system in the decades to come. The reformation will be made in increments and may be a struggle to implement, but change is going to happen. A view that many have for the end result is a two-tiered system with the government funding the first tier; a universal program; and the second tier being privately funded and made up of plans that are supplemental to the universal plan. The goals we strive to reach by making these changes are affordability, accessibility and quality of care within the health care

system. Preserving as much of the autonomy and advancement we currently enjoy is also important in reforming our health care system. To meet these goals, the current and future government will need to engage those with expertise in various fields in debate about each and every detail of the changes to be made. Systems such as those in Canada and the United Kingdom will lend much information to us in this building process. There is a lot of difficult work to be done to reach these goals, but clearly the time to start is upon us.

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The Opportunities During Transformation: Moving To Health Care 2.0

by Greger Vigen

The health care industry is racing towards the long-awaited, but somewhat feared, industry transformation. Given the gigantic health care industry, the transformation will create significant change across the entire economy. This will change the support and services personally delivered to you. There will also be profound changes across all organizations.

Underlying this transformation is a wealth of new and powerful resources. The best minds in the country have been working to create powerful new solutions and prepare for this transformation. Early adopters are moving very rapidly toward Health Care 2.0—a new, powerful and productive health care system. Other players are settling for smaller, incremental improvement over their historic approaches, but increasingly they find themselves falling behind.

This paper will briefly outline the driving forces, and then primarily focus on the future of health care.

Forces Driving Transformation

This transformation is driven by the same powerful forces that create any transformation.

- Financial pressures overcome inertia to drive implementation of innovations.
- Major innovations in technology and new competitors create high potential for improved personal service and/or economies of scale.

Financial Pressures

Dire financial pressures are forcing the fast pace of this transformation. The latest forecast from CMS is that health care will rise to 17.6 percent of Gross Domestic Product (GDP) in 2009. This 1.0 percent increase over 2008 would be the largest single-year increase in history.

The employer-based health system—which historically provides a foundation for health care funding in the country—is being overwhelmed. Rising costs create higher member contributions. Enrollment drops. More people are uninsured. Providers raise prices to offset uncompensated care. This creates another round of rising costs and a rapidly accelerating downward spiral.

The current financial situation creates enormous energy. And, unlike previous years, there is unprecedented realism among the key players (government, hospitals, physicians, insurers and employers). These key players are working as we speak to define the positions and negotiate terms on the variety of major health care reform options, such as single vendor or mandatory individual insurance.

Solutions for financing and taxing health care are highly complex and require intense negotiations. The deteriorating financial situation creates a major impetus for change, but these options are not the focus of this paper.

Major Innovations

Industry expertise, systems resources and clinical support have never been stronger. New, powerful tools are available, such as electronic medical records, or modern techniques for member engagement and decision support. Leaders are using a much broader paradigm: from claims and disconnected services to a powerful concept focused on health and accountability.

At the same time, the financial situation has created a renewed energy to investigate long-standing fundamental questions about reimbursement systems and industry collaboration.

How will the future health care system work? What is different?

The Opportunities During Transformation: Moving To Health Care 2.0 *by Greger Vigen*

LEADING EDGE PRACTICES

Evolving Concept	Historic	Future
Evidence-based management of hospital and acute care	**Slow** Results from clinical trials and innovations from disconnected pockets of excellence disseminated slowly. Occasional rapid distribution by collaborative medical societies, proprietary vendors, Veteran's Administration or accountable organizations. Major improvement in quality metrics from market leaders.	**Rapid and consistent** The wealth of innovation and leading-edge practices delivered rapidly to medical professionals. National and local disease registries. Comparative effectiveness analysis and professional guidance that indicates both underuse and overuse. Widespread use of major innovations, such as: – Major leaps in case management and chronic care – Hospitalists and intensivists – Predictive modeling – Leverage non-clinical staff
Payment reform (structure of reimbursement)	**Pay for basic production** Primarily fee-for-service reimbursement that rewards volume and discourages accountability and collaboration. Discourages powerful role and accountability for primary care physicians. Alternative reimbursement structures and pay-for-performance in parts of the industry (including various Medicare demonstration projects, Medicare Advantage, HMOs and a variety of Pay-for-Performance programs).	**Pay for value and results** Reimbursement aligns incentives and encourages results and appropriate care. Higher collaboration and accountability for cost, quality and resource use. New approach to primary care physicians—may include both reimbursement changes as well as systems support, training and/or implementation. Multiple reimbursement structures are targeted to each particular clinical need—including episode payments, bundled case rates across physicians and hospitals, capitation and limited reimbursement for preventable clinical complications.
Program management	**Uneven** Accountable provider organizations in 15 percent of the country manage their programs very differently from the rest of the country.	**Leading-edge practices and continuous improvement** Leading practices are reviewed, evaluated and customized, such as: – Leading-edge practice acute care management – Outpatient and pharmacy management – Lowest net cost rather than highest discount – Hospital/physicians/insurer collaboration – Appropriate mix of primary care and specialist – Selection of physician and clinical staff – Feedback, implementation and training – Discipline unproductive staff
Health Information Technology Single data record for personal and clinical use	**Disconnected** Multiple, disconnected sources for individual health information. A few key organizations have several years of experience with comprehensive electronic health records.	**Connected with customized feedback** Broad adoption of an integrated, comprehensive and secure data record for individuals, physicians and clinical staff through electronic health records. Reports customized to the audience: – Deep clinical results for physicians (lab, disease registries and evidence-based reminders). – The same information simplified for patients in a personal style. Done with appropriate security.

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The Opportunities During Transformation: Moving To Health Care 2.0 *by Greger Vigen*

LEADING EDGE PRACTICES *Continued from page 78*

Evolving Concept	Historic	Future
Measurement systems	Claims plus selected quality measures Measurement an expensive afterthought Historic techniques focus on selected quality measures or financial measurement of type-of-service. DRG measurement used for inpatient care. Growing use of episode measurement. Extensive measurement and provider feedback in certain locations.	Integrated database from claims, clinical results and disabilities to HRA responses Measurement creates improvement New integrated data bases provide foundation for complete measurement and improvement system. From tracking trends in illnesses to monitor cost drivers, predict illness, monitor results and provide feedback to improve quality and resource use. Broad use of powerful tools including episodes of care, gaps in evidence-based-medicine compliance, risk adjustment, severity and effectiveness of health engagement. Results are measured and communicated to end providers and individuals.
Industry Collaboration	Major turf battles Unclear roles and responsibilities across different industry sectors. Duplication of effort and ever-increasing complexity to gain financial advantage.	Clear roles and responsibilities Defined roles and responsibilities for each different sector. Authority and payments directly connected to responsibility. Stronger, collaborative working arrangements mimicking accountable care organizations. Administrative savings through reduced duplication and less unnecessary complexity.
Personal engagement (compliance, lifestyle changes and preference-sensitive conditions)	Uneven support Population health drops. Personal support for disease management and some lifestyle primarily through two options (boilerplate material or expensive direct contact). – Often only to people who can be easily reached. – Monitoring of results is uneven. – Compliance flat except for leaders. Obesity rising.	Personalized and systematic support Population health improves. Personalized support that is clear and powerful. These programs include member decision support, customized reminders and skill building. – Delivered immediately at the right moment in their life. – Builds upon health risk assessments, readiness-to-change and adult learning. – Multi-media communications pre-tested for effectiveness and customized to personal characteristics. Material "mass customized" to create economies of scale. – Results are monitored with personal feedback to member or provider if needed. – Higher compliance, lower obesity and smoking.
Personal responsibility	Limited Many individuals uninformed and isolated from personal responsibility. High expectations about power of medical care.	Targeted responsibility (as appropriate) Clear personal responsibility where individual behavior makes a difference. Transparency in areas where personal responsibility is needed. Higher engagement and compliance. More realistic expectations.

The leading-edge practices described above are not mythical vaporware. Many were developed and refined during the last three years and tested by a handful of early adopters. So, the early work has been done and the outlook is promising.

Implications

But, lots of work remains. On a personal basis, the first steps are simple. Get up to speed on what is happening and determine how you might get involved.

For successful organizations, given the large magnitude of this transformation, a more formal and focused plan is needed. Key steps include:

1. Monitor the external environment (essential during industry transformation).
2. Inventory, validate and prioritize leading-edge practices.
3. Approach potential allies.
4. Measure the current situation and inventory current capabilities.
5. Build analytic capabilities.
6. Integrate old and new programs into a comprehensive approach.
7. Evaluate obstacles and develop responses.
8. Develop a change management process.
    a. Vision and leadership
    b. Operations
    c. Transition management plan
9. Develop timeline.
10. Implement.
11. Ongoing feedback to providers, individuals and management.

Summary—The Future Is Near

Given the major forces in the environment, change is certain and the pace is accelerating. The challenges are daunting. However, for those willing to invest the time and energy, this presents an enormous opportunity that only comes once in a lifetime.

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U.S. Health Care System Proposal: Private And Public Choice

by Kevin Wolf

By offering consumers two additional choices of private and public health insurance plans and a few changes to the current health care system, the United States can create a system that is more accessible, more affordable, and—by covering the now uninsured—more equitable. To achieve this, stakeholders (including individuals, employers, government, health care providers and insurance companies) will share in the solutions and sacrifices that come with the changes.

The current main public insurance alternatives are Medicare and Medicaid for well-defined populations (generally seniors or low income) and are not available to other health care consumers. For private coverage, the U.S. has employer-provided coverage (including government employers) and individuals buying their own insurance.

In addition to the insured, there are over 45 million people in the United States currently uninsured, including those who are financially unable to pay for employer-offered benefits.

The new system will have three components:

- The current U.S. health insurance system with minor changes (called the Current Option).
- A private insurance option that allows consumers to sign up for the Federal Employees Health Benefit Plan (FEHBP). This will include subsidies based on income to make it affordable for everyone. This is called the Private Option.
- A public option which is administered like Medicare but with more benefits, and emphasis on preventive care. This is called the Public Option. [1]

A concern of private insurance companies, and the reason they underwrite (reject persons or exclude benefits), is that consumers may seek insurance only when they anticipate being sick. To prevent this adverse selection the new system will allow consumers to change their Current, Private or Public Options infrequently (e.g., every two years).

These new choices will improve the health of consumers, reduce bankruptcies,[2] provide affordable coverage to consumers, help businesses become more globally competitive, support quality health care, and increase life expectancy.

Changes To The Current Option

Under the Current Option, employer-provided benefits remain the same with the following caveats:

- Waiting periods, exclusions based on pre-existing conditions and other barriers to coverage are prohibited.
- If employers have no coverage, drop coverage or their employees don't take their coverage, then they must pay a payroll tax (based on a sliding scale, depending on their size) for non-covered employees to subsidize the Public and Private Options.

Private Option

Households or individuals can choose any of the FEHBP benefits[3] in their location (like Basic, Standard, HMO, etc.). They will pay the full premium for this benefit. As in the current option, waiting periods, exclusions based on pre-existing conditions and other barriers to coverage are prohibited. The pooling of people selecting the Private Option with federal employees provides administrative efficiencies over persons buying individual insurance in the Current Option. There is a subsidy for low-income households. Households taking the Private Option pay a small progressive tax on income exceeding some minimum to defray the cost of the subsidy to low-income households. This will cover many of the low-income uninsured and those who can afford a significant portion of group premiums.

Public Option

Those not taking the Current or Private Options are put in the Public Option.

Two new independent entities[4] support the Public Option: 1) Health Care Benefits and Financing Administra-

tion (HCBFA) who develop benefits for and the method to pay for the Public Option, using guidelines given below; and 2) Quality of care standards are developed and enforced by the Health Care Quality Commission (HCQC).

The Public Option is funded through a progressive tax[5] on all household income.[6] All households pay the tax whether or not they are insured via the Public Option (just as homeowners pay property taxes to, in part, support public schools even when they don't have children who attend them). The Public Option tax is estimated by a survey to establish who will choose the Public Option. The tax rate rises or falls as more or less households/individuals join the Public Option. But when the tax rate rises, the total cost of Current and Private Options naturally falls (because less people select those Options).

Key Features Of The Public Option Are:

- *Benefits* are comprehensive and set by the HCBFA. Co-pays—through a low progressive tax on household income—apply to non-preventive services. As an incentive no co-pays apply to preventive services, determined by HCBFA, which can include smoking cessation,[7] obesity weight reduction,[8] preventing diabetes and its complications[9] and alcohol and substance abuse cessation.
- *Payments* to health care providers are at the same level as Medicare recipients.[10] The reimbursement levels and methodology for Medicare are well established, which are generally lower than private insurance reimbursement, and are ready to use when the Public Option begins.
- *Provider Incentives:* 1) Public Option-only providers have limits on medical malpractice liability including removing the medical expense portion to significantly decrease malpractice premiums; and 2) Waive federal and state education loans for providers who practice in underserved areas of the United States for a specific period; especially if they become primary care doctors, nurses and other high need professionals.
- *Quality Control:* The HCQC are practicing health care providers, patient advocates, Public Option participants and Health and Human Service career support staff (lobbyists should be discouraged). The HCQC can set minimum standards for:
  - Provider qualifications—with due consideration for state licensing. Evaluating provider practices and quality—consider outcome modeling (i.e., looking at the entire duration of care for each medical type of occurrence by provider).[11]
  - Creating a national quality and qualification database that rates all hospital, clinic, physician, nurse, etc. providers (consider license, malpractice court decisions, multi-patient and multi-peer *confirmed* complaints or compliments) and is available to the public; must meet minimum qualifications to remain licensed. Consider state input.
  - Medical record administration, Health Information Technology and uniform electronic claim/service reporting with the goal to significantly reduce Public and Private Option and health provider administration costs and increase efficiency.
  - Fraud prevention and auditing.

Conclusion

Though the United States Health Care System is very complex, a few changes can go a long way toward fixing it. The changes proposed here address the major issues of reform, such as funding, coverage of the uninsured, and the need to equitably distribute benefits and sacrifices among the various stakeholders. By implementing this plan, Americans will enjoy a longer and better quality of life.

U.S. Health Care System Proposal: Private And Public Choice *by Kevin Wolf*

PROS AND CONS BY STAKEHOLDER

Stakeholder	Pros	Cons
Consumer/Households	Will get more choices (every two years) Lower health care costs Cover the uninsured Increase longevity and higher quality of life with preventive care promotion in Public Option	Pay higher taxes Put in Public Option if not selecting Current or Private Options
Health Care Providers	No uncompensated care Support quality providers Reduce malpractice rates & college loan relief for Public Option providers	Subject to greater oversight and competition Quality and qualification database available to public Lower reimbursement for Public Option enrollees
Employers	More competitive in global economy because it's easier to budget costs Control own health plan, like today, or drop it and pay payroll tax	Some employees will select Private and Public Options Pay tax if not covering employees
Insurance Companies	Responsible for Current and Private Options Reduce adverse selection by infrequent allowed changes	Remove underwriting controls Will lose members to Public Option
Government	Public Option has lower administration costs than private insurance Enhance society stability by improving health of consumers and reducing bankrupcy rates	May become bureaucratic Public Option subject to political decision-making (Desire independent HCBFA and HCQC to reduce this)

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[1] *Potential name for the Public Option is MedAmeriCare. The word mixes Medicare and America.*

[2] Health Affairs *February 2005 study by Himmelstein, D. U., E. Warren, D. Thorne, and S. Woolhandler found about half of bankruptcies are from medical causes, which will decrease when the Public or Private Options are selected; study:* http://content.healthaffairs.org/cgi/search?andorexactfulltext=and&resourcetype=1&disp_type=&author1=himmelstein&fulltext=&pubdate_year=&volume=&firstpage

[3] *See* http://www.opm.gov/insure/health/planinfo/2009/brochures/71-005.pdf *pages 131-132 for basic benefits summary.*

[4] *In one possible approach, Congress would select HCBFA and HCQC members or delegates member selection to nongovernmental independent organizations; members would periodically rotate, off-election-cycle.*

[5] *For example, this tax could vary by readily available income quintiles (20 percentiles) and upper 5 percentile from* http://www.census.gov/prod/2008pubs/p60-235.pdf *(Income, Poverty, and Health Insurance Coverage in the United States: 2007; table 6)*

[6] *Under this proposal household income would include wages, bonuses, capital gains net of losses, commissions, etc.*

[7] *Tobacco use causes 440,000 annual premature deaths. Direct annual medical costs for smoking related problems are $75 billion annually and $92 billion indirectly. The California Tobacco Control Program led to 33,000 fewer deaths for 1989-1997. The Massachusetts Tobacco Control Program led to significantly reduced smoking during pregnancy (from 25 percent to 13 percent between 1990 and 1996). The Task Force on Community Preventive Services highly recommends cessation programs, decreasing out-of-pocket treatment costs, and smoking bans; from* www.cdc.goc/nccdphp/publications/factsheets/Prevention/tobacco.htm *2/21/2006.*

[8] *Over 60 million adults (age ≥ 20) are obese and 9 million ages 6-19 are overweight. In 2000 total U.S. cost was $117 billion. A 10 percent weight loss that's kept off reduces an adult's lifetime costs by $2,200-$5,300; from* www.cdc.gov/nccdphp/publications/factsheets/Prevention/obesity.htm *2/21/2006.*

[9] *Average annual costs per person are $13,243. Preventing complications includes regular eye exam (treatment could prevent about 90 percent of resulting blindness), foot care exam (treatment could prevent about 85 percent of resulting amputations), and controlling blood pressure could reduce related strokes, heart disease and kidney failure; from* www.cdc.gov/nccdphp/publications/factsheets/Prevention/diabetes.htm *2/21/2006.*

[10] *Under this proposal one exception to Medicare reimbursement: HCBFA can set prescription drug reimbursement levels.*

[11] *For an in depth discussion of outcome modeling, see M. E. Porter and E. Teisberg,* Redefining Health Care, Creating Value-Based Competition on Results, *(Boston: Harvard Business School, 2006).*

Potential Joint Government And Private Sector Initiatives

by Dale H. Yamamoto

Two of the major objectives of the current presidential administration's health reform outline are to reduce health care costs and to improve the quality of health care delivery. This paper provides an outline of three potential initiatives that may be undertaken by the government and the private sector. The first initiative aims at reducing the cost of health care at the provider level. The second initiative provides a means to improve the quality of health care. The third initiative creates a constructive basis for identifying medical best practices to enhance quality. All three initiatives require cooperation amongst many parties to make it successful, but are achievable in the relatively short term (say five years).

These initiatives assume that something similar to a National Health Board described in Tom Daschle's book, *Critical: What We Can Do About the Health-Care Crisis*, is created and would have some input into the organization of the work to be done.

Common Provider Fees

All of the major health plans spend a lot of time contracting with physicians, laboratories and hospitals for their network programs. Ten years ago, there were marked differences in these contracts between the major plans. Today, these differences have narrowed significantly so that many experts consider them a tie in many cases. What has emerged is that the most significant differences exist between the major national carriers and the regional health plans that tend to use rental networks with significantly higher contract rates (lower discounts) with providers.

The first initiative is to create one common contract between all health plans and providers. To accomplish this, a national group will need to provide the ground rules for the new regional contracting groups. The national group will be comprised of a few government personnel, but will be made up mostly of knowledgeable provider contractors from the health plans. The regional contracting groups will be entirely made up of current health plan contractors; they will do the local contracting following guidelines set by the national group.

This initiative will, in the long run, save administrative costs for both health plans and providers. There will be a net reduction in the number of persons responsible for provider contracting within health plans. In fact, health plans will likely only need a handful of people in this area to act as liaisons with the new contracting entity. Many of the current health plan contractors will be employed by the new national or regional groups. Today, physician offices spend an inordinate amount of time on administrative negotiations with health plans on fee payment levels. Under this initiative, providers will deal with one contractor and their fees will be the same for all health plans.

With a universally accepted fee schedule, health plans can also use these fees to pay out-of-network providers. Providers will be able to bill their patients the difference between their customary fee and the network fee. Perhaps a limit could be placed on the amount of this "balance billing."

Next steps for this type of arrangement include pay-for-performance and other quality improvement initiatives that will be easier to implement on a national basis with a common contracting mechanism.

National Data Warehouse

The Holy Grail of health care is defining quality. And, a key to better understanding quality health care delivery is through data. Independently, all health plans are attempting to develop quality metrics, but in many communities of the country they do not have the needed volume of data to calculate statistically significant results. Pooling all data together will allow more robust analysis and hasten the establishment of quality criteria for providers. This type of quality analysis needs to be valuable to both payers and consumers. For payers, quality analysis helps them potentially understand payment mechanisms, quality providers, regional differences and medical management techniques. For consumers, there is a better understanding of practice

and potentially cost differences of providers. So, the primary purpose for creating a national data warehouse will be to develop key quality measures that all parties can agree on; this, in turn, could be communicated to the general population.

Anyone who has attempted to take health care claims data from two or more health plans in order to combine them into one dataset can tell you that it is virtually impossible, especially if the goal is to create a perfect combination of all of the sources. Each health plan has established data parameters that meet its specific needs and has specific coding that it concluded was important to its business. Even for common data fields, the codes are different. The establishment of a national data warehouse will help prescribe uniform data fields and coding.

For confidentiality reasons, this may need to be a governmental operation. Alternatively, it could be a nonprofit group jointly funded by all health plans. The National Health Board will need to be very specific as to the types of studies that this group will be allowed to conduct. Claims data is a critical asset of each health plan and its use will need to be strictly monitored.

Agreements of data sharing will need to be negotiated among the health plans, and limitations of the data need to be recognized. Staffing of the analysis needs to come from the health plans and the medical community—not academia. Researchers will need a strong practical background in order to understand the key drivers of health care costs and quality.

Physician Council

A byproduct of the data warehouse will be reporting of medical procedures. Analysis of data will assist a panel of physicians in identifying "low hanging fruit" of commonly done procedures that have a large variation in cost by community. After identifying a number of these procedures, a better understanding of the reason for the variations will be conducted. For procedures where there are clear best practices that could reduce the variation, targeted communication will be made to the profession.

As medical practice evolves, these best practices need to change to match new technologies so these new guidelines will be constantly reviewed. In addition, new best practices will continuously be added to the guidelines.

In addition, these guidelines should be flexible enough to continue to allow professional judgment of physicians in the treatment of their patients. This flexibility will need to be integrated in the newly developing health information technology systems.

The physician council itself will be made up of practicing physicians and participants will not hold permanent positions. They should serve four- to six-year rotations with a requirement that they were practicing within a recent time period prior to appointment. In order to account for regional differences in practices and to promote physician cooperation, regional councils should also be established. These regional councils would require part-time physician commitments, but again, on a rotation basis. The regional councils will allow a process for local physicians to get counsel and to gain input into the national council.

The creation of the guidelines will better assure good quality health care delivery throughout the country and provide a means to spread new technologies developed in one community to others in a more efficient manner.

Interaction Of Initiatives

The three initiatives described—common provider fees, national data warehouse and physician council—can be carried out independently, but they will work the best if the development is coordinated.

Today, the comparison of health plans is very subjective and difficult to discern even by the best experts in the field. The combination of the three initiatives will help to normalize some of the factors affecting analysis. Many consultants and brokers are placing too heavy an emphasis on the level of discount differences for measuring financial efficiency. Establishing a universal fee schedule eliminates the price discussion in these comparisons. Creating a

national data warehouse will facilitate the ability for actuaries and other analysts to have access to more consistent data from all health plans; this will help them better understand their ability to manage health care utilization. And, the physician council guidelines will help to reduce the volatility in medical practice that is prevalent today so that collected statistics will have greater significance.

Implementing all three initiatives will improve the quality of health care as physicians become more efficient through quicker dispersion of best practices. Health plans will better understand what medical management techniques work best because prices will be more uniform and high frequency procedures are more stable; and beneficiaries will have access to better information about the quality of providers, making them better consumers.

Overall health care costs should stabilize with the contracted pricing process because provider negotiations will be more efficient. Better communicated physician best practices will create more efficient treatments of care and the national data warehouse will assist in creating important metrics to measure costs.

Summary

These three initiatives will create a foundation for true health care reform. The timeframe for fully evolving these measurements will take some time, but five years is a very reasonable expectation to create meaningful metrics. Finally, the creation of the provider council will provide a more efficient means for physicians to communicate best practices for more procedures.

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Glossary

Glossary Of Terms Used In This E-Book

Many of the essays presented are technical in nature, and presume a level of experience and understanding of certain terminology frequently used by actuaries practicing in the health care industry.

Following is a list of some terms and their definitions, which the reader may find helpful. Many of these definitions are based on the material in the following textbooks:

Group Insurance, fifth edition, edited by William F. Bluhm.

The Managed Health Care Handbook, fourth edition, edited by Peter R. Kongstvedt.

The Handbook of Employee Benefits, sixth edition, edited by Jerry S. Rosenbloom.

Adverse Selection, Antiselection

When an individual has a choice about an insurance plan, he or she may select the option that best meets his or her estimated future needs. When this selection is unfavorable to the insurer (i.e., to the entity insuring the individual), the selection is referred to as adverse selection or antiselection.

CHIP, SCHIP

The Children's Health Insurance Program (CHIP, formerly the State Children's Health Insurance Program (SCHIP)) was created by the Balanced Budget Act of 1997, enacted Title XXI of the Social Security Act, and allocates funds to help states insure low-income children who are ineligible for Medicaid but cannot afford private insurance. In February 2009, the Children's Health Insurance Program Reauthorization Act of 2009 was approved by Congress and signed by President Obama.

COBRA

The Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA) dictates that medical expense coverage must be made available by employers for terminated employees and certain dependents of terminated and active employees, for specified periods.

Community Rating

A premium rating structure wherein risks are aggregated in a large community, and all risks are charged the same premium rate. This is contrasted with Pooling, where risks are combined into smaller groupings (pools) to produce premium rates that are reflective of the risks in a particular pool, so lower risks pay a lower premium and higher risks pay a higher premium.

Cost Sharing

Any form of coverage in which the insured individual pays some portion of the cost of providing services. Usual forms of cost sharing include deductibles, coinsurance, copayments and payroll deductions toward employer-sponsored coverage.

Evidence-Based Medicine

As defined by a frequently referenced 1996 *BMJ* editorial, Evidence-based medicine is the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients. It integrates individual clinical expertise with the best available external clinical evidence from systematic research.

Gatekeeper

A model for management of health care, in which a primary care provider must pre-authorize care from other providers in order for it to be covered by the health insurance plan.

Health Savings Account (HSA)

Enacted as part of the Medicare Modernization Act of 2003, health savings accounts are accounts that allow for tax-deductible contributions and tax-favored accumulation, within limits. An HSA must be paired with a qualified high-deductible health plan in order for an individual to realize the account's tax advantages.

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Pooling, or Risk Pooling

A premium rating structure wherein like risks are combined to produce premium rates that are reflective of the risks in a particular pool, so lower risks pay a lower premium and higher risks pay a higher premium. This is contrasted with community rating, where risks are aggregated in a large community, and all risks in the community are charged the same premium rate.

Portability

The ability of an individual to change jobs (and therefore group insurance sponsors) and obtain and/or maintain group health insurance coverage without exclusion of pre-existing health conditions. The Health Insurance Portability and Accountability Act (HIPAA) limits restrictions that a group health plan can place on benefits for pre-existing conditions.

Predictive Modeling

The process of using statistical and other models to predict, as accurately as possible, the future health risk and illness burden of an individual or group. Predictive modeling techniques typically make use of past available health care data such as claims, utilization and diagnoses, and may also make use of other data sources.

Preventive Services

Health care services that are aimed at preventing complications of existing diseases, or preventing the occurrence of a disease. Recommended services may vary by age and gender. Examples of preventive services include physical exams, immunizations and certain cancer screenings.

Risk Adjustment

The process of adjusting payments to health plans or health care providers in order to reflect the health status, or illness burden, of the members. The first step in health risk adjustment is Risk Assessment, and the second step is payment adjustment.

Risk Assessment

The method used to assess the relative risk, in terms of historical or predicted claim dollars, of each individual person in a group.

SCHIP

See CHIP

Stop Loss Insurance

A form of reinsurance that provides protection for annual medical expenses above a certain limit. It can take the form of specific stop loss, where the insurance coverage reimburses all claims above a certain deductible (such as $100,000 per individual); or aggregate stop loss, where the the coverage reimburses a percentage of claims if a group's claims exceed a certain percentage of the expected level (such as 120 percent).

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