# Healthcare cost: Manage the causes, not the effect

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Various healthcare reform proposals call for expanded review and control of health insurance premium rates by either the states or the federal government. On the surface, capping price increases sounds like a reasonable way to confront extraordinarily large premium rate increases. Most other monthly household expenses do not increase by so much year after year. Surely there is something wrong with health insurance premiums that makes the imposition of price controls logical.

Ask an actuary, however, and you'll begin to see that this way of approaching the high cost of healthcare in the United States is actually deceiving and counterproductive. If affordability is the goal, policymakers are looking only at the symptoms and not the causes when they concentrate on premium rates. If the public wants to control the rising cost of healthcare coverage, there is a more logical place to look—at the underlying cost of medical care, a cost that continues to grow and that comprises around 85% of most premiums. This underlying cost is itself highly complex, and does not move in lockstep with any cost of living index or measurement of medical price inflation.[1]

Focusing on the wrong aspects of our healthcare system will not lead to more affordable care. This paper endeavors to refocus attention on the levers in our system that can actually be used to bring about more affordable care.

## WHO'S COVERED AND HOW DO THEIR PREMIUM RATES VARY?

For any health insurance program to be sustainable, premium rates must be set at a level that is adequate to cover the overall cost of the insurance pool. The overall cost for the insurance pool reflects the sum of all of the risks taken as a result of providing insurance to currently enrolled and new members (or families). Some of the central and more dynamic drivers of the costs produced by these insurance risks are directly related to a two-part central issue:

1. Who is covered by insurance in the insurance pool?

2. How does the amount that each insured member or family pays vary from member to member (or family to family)?

### PROFIT AND ADMINISTRATION

Insurer profit and administration are often identified as part of the reason American healthcare is so expensive. However, profit and administration are generally not the primary drivers of cost increases. Analysis for the Institute of Medicine indicates that administrative cost for fully insured health insurance is just over 11% of total premium.[2] Within this average, small-group and individual insurance policies generally have a significantly higher level of administrative cost than large-group.

The total amount spent on administration usually is relatively stable over time—quite different from the highly variable cost of care that is discussed here and in another recent paper.[3] Although from time to time there are situations involving a specific insurer where administrative costs contribute to significant premium rate increases, this is not normally the case.

Under certain conditions this administrative cost ratio could be reduced to 8% of premium or less by implementing advanced technologies and following "best practice" administrative processes. This savings is significant—as much as $14 billion nationwide—but does not explain overall increases in healthcare costs that far outstrip this number. There may be additional potential for savings in the small-group and individual insurance markets, because these markets have higher per-customer acquisition costs, but the amount spent on administration in these markets is still small relative to the cost of care.

If one pool has a relatively large proportion of older, less healthy people, it is going to cost more in total to cover the medical costs involved than it would to cover a second pool full of young and healthy individuals. If it costs more in total, then does everyone in the first pool simply pay more, or do those individuals who are themselves older or less healthy bear some of this added cost directly?

1 Shreve, J. (Feb. 24, 2010). The difficulty of legislating premium rates. Milliman on Healthcare. Retrieved March 18, 2010, from http://www.milliman.com/perspective/healthreform/difficulty-legislating-premium-rate.php.

2 Based on 2008 data for comprehensive healthcare plans (excluding Medicare and Medicaid related plans) analyzed by Milliman. Includes membership and billing, claim processing, customer service, medical and network management, sales and marketing (including external broker commissions), and insurance company overhead. Excludes state premium taxes, federal income tax, and profit. More information at http://www.iom.edu/~/media/Complete%20Background%20Materials%2010.ashx.

3 Shreve, ibid.

Similarly, who should pay if the profile of the insurance pool changes significantly over time because of an influx of new and different members or the departure of certain current members? Dealing with these financial risk-taking and risk-spreading realities requires quantification using the tools of actuarial science.

This is why the idea of a strong and effective mandate for everyone to purchase insurance coverage is recognized by actuaries as a way to help spread risk effectively. If everyone pays into health insurance pools, whether they need care now or not, the continued participation of good risks (i.e., the young and healthy) will help pay for the cost of the poor risks, thereby helping to keep the average cost down. Of course transforming the American system of providing healthcare coverage from a voluntary market to a mandatory one has many complications, including the necessity of dealing with how to fund the costs associated with relatively lower-income individuals and families for whom paying the full cost of their coverage may not be feasible. A strong and effective mandate to buy insurance would seem to be essential to the success of any move toward universal coverage through the private insurance system.[4] The larger undertaking of ensuring universal coverage, however, is accompanied by a high price tag, and therein resides one of the difficulties of the individual mandate as a consumer concept.

Dealing effectively with the issue of who is covered and how their rates vary is important and clearly will affect premium rate levels for health insurance coverage. However, increased review and scrutiny of premium rates does not alter these dynamics and the impact that they have on premium rate increases. Instead, one must look further upstream to find the central causal factors that drive the underlying costs of providing medical care to the individuals who need it.

## THE BASIC COST EQUATION

In our fee-for-service system, each service or unit of care—a doctor visit, a night in a hospital bed, a prescription drug—has a price. These *unit prices* are established in negotiations between physicians, hospitals, and pharmaceutical companies on one side and insurers or other payors on the other. In the case of Medicare, unit prices are dictated by the federal government.

Services are then delivered to insured members, with reimbursement based on the negotiated unit prices. The average number of services provided and the composition or mix of those services can be termed *utilization*. Utilization results from a number of factors: the severity of the patient conditions treated, the extent to which the conditions are acute or chronic, physician practice patterns, and patient choice, to name a few. Actuaries and clinicians know that differences in utilization are a major source of cost variation. We see it when comparing different member groupings, when comparing one geographic area to another, and when comparing hospitals and physician groups.

In the most simplified sense, then, the basic equation for healthcare cost in today's fee-for-service system is:

**UNIT PRICE × UTILIZATION = COST**

So it stands to reason that, if the goal is to control the healthcare costs for a pool of insured members, one should examine the underlying factors in this equation.

## MANAGING THE COST FACTORS

Of the two factors in the cost equation, unit price has proven to be the easier one to manage and the one that is most managed today. There are a variety of complex considerations involved in the negotiations between the various medical providers and the insurers or other payors of the unit prices to be paid. These considerations include compensation and salaries, facility and practice operating costs, cost-of-living differences, and other economic factors. There is a long history of intense focus and management by both sets of parties on unit prices and the considerations affecting them.

The management of utilization, however, has proven over time to be more difficult and elusive. At the heart of this difficulty is the multilateral nature of utilization: It is driven directly by the actions of insured members, providers of services (physicians, in particular), and payors (primarily insurers, through their insurance plans and practices). These actions reflect the incentives present and the motivations of each of the parties—such as financial impact, immunization from economic consequences, federal income tax treatment, and risk of litigation. Aligning the incentives involved and then simultaneously managing the resulting actions by members, providers, and payors is the core challenge to achieving efficiency in utilization while pursuing high-quality care. And in addressing this challenge, reimbursement practices and provider payment structures necessarily become an integral element (i.e., unit price is no longer simply a separate and independent term in the cost equation).

Many of the attempts in the past to manage care tightly have been undertaken one-dimensionally and without adequate support and tools to manage effectively and responsibly. Some of these attempts have focused exclusively on delegating the direction of member care to assigned physicians or provider networks accompanied by a transfer of risk to these providers, while other attempts have focused solely on members to make prudent consumer purchasing decisions by incorporating significant cost-sharing provisions in their health insurance policies. In many cases, these attempts to encourage the management of utilization were not adequately supported with the information and tools needed for the effort to be successful. To be fully successful, a sophisticated, comprehensive, and cohesive approach that involves all three parties (members, providers, and payors) is necessary. Unfortunately, early attempts at managed care sometimes lacked some or all of these features, and hence failed to meet expectations or were met with a backlash from one or more of the key parties. [5, 6]

4 Snook, T. & Harris, R. (Oct. 19, 2009). Adverse selection and the individual mandate. Milliman on Healthcare. Retrieved March 18, 2010, from http://www.milliman.com/perspective/healthreform/adverse-selection-individual-mandate.php.

5 Mirabito A.M., Berry, L.L. Lessons that patient-centered medical homes can learn from the mistakes of HMOs. *Ann Int Med*. 2010; 152: 182-5.

6 Robinson JC. The end of managed care. *JAMA*. 2001; 285: 2622-8.

Fortunately, the evidence is becoming increasingly clear that properly managing utilization can produce both better quality healthcare and lower costs. An illustrative example is the clinical scenario of low back pain. National guidelines based upon the medical evidence suggest conservative care for most cases of acute low back pain (e.g., no CT scans, MRIs, or invasive procedures).[7] Compliance with this guideline would achieve cost savings and reduce possible harm to patients from unnecessary testing and procedures. When low back pain becomes chronic there is disagreement over the best treatment strategies.[8, 9] Despite this lack of consensus on benefit, the utilization of expensive, potentially risky procedures has grown steadily and varies significantly. An analysis has found that spending on back surgery has doubled in recent years and utilization can vary by eight- to 20-fold from region to region.[10] Similarly, utilization rates for epidural steroid injections for back pain can vary by almost 20-fold between regions and providers.[11] Standardizaton of care for back pain could lead to improved outcomes, reduced harm, and cost savings.

Take another example: pneumonia. Studies indicate that the use of evidence-based guidelines in the treatment of patients hospitalized with pneumonia can reduce length of stay and costs and lead to reduced mortality.[12, 13, 14] One study found that collaboration between providers and case managers could further reduce lengths of stay and improve quality.[15]

These are just a few examples of the convergence that can be achieved between quality and efficiency.[16] In many instances, if physicians follow clinically based evidence and adopt corresponding best practices, care is not only better but also more affordable. It has been estimated that as much as $600 billion in waste could be wrung from the U.S. system; achieving convergence in the delivery of our healthcare can help reduce this inefficiency and waste.[17]

Accomplishing cost reductions while maintaining and improving quality is no small task. It will require the cohesive involvement of members, providers of care, and payors. The techniques, information, technology, and tools needed to support each of these parties exist today, but they must be adopted and deployed in practice settings. A focus on utilization as the upstream driver of healthcare costs is more likely to succeed in controlling premium growth than trying to simply limit premium rates with no corresponding reduction in costs.

Aligning financing with efficiency and quality could fundamentally change the equation that drives the costs behind our $2.5 trillion dollar system.[18] If the goal is to control healthcare costs, public policy must treat root causes. The idea of massive rate increases is galling to most people, but one can't treat the symptom and expect a cure. Trying to control costs by attacking premium rate levels rather than the costs that drive them is likely to introduce yet another perverse incentive into a system that is already overburdened with them.

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