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## An Entrepreneurial Approach to Bending the Health Care Cost Curve

by Ken Beckman

*This essay was submitted for the Society of Actuaries' Entrepreneurial Actuaries Section 2010 Papers Competition.*

### Executive Summary

This paper proposes an entrepreneurial solution to address the continued, unsustainable increases in health care costs that threaten to deny access to health care for millions of Americans. Entrepreneurs will develop systems providing clear financial motivation for consumers to make decisions that minimize health care spending and maximize positive health outcomes. In so doing, health care providers must necessarily compete to offer the highest quality services at the lowest cost. By relying on the financial self-interest of consumers and free-market competition among health care providers, effective and sustainable systems to bend the health care cost curve can be achieved.

The Patient Protection and Affordable Care Act was passed with the goal of providing more Americans access to health insurance coverage. However, even the law's supporters agree more must be done to address rising health care costs so that insurance is not only accessible, but affordable. A common suggestion is to improve price transparency with the intent of increasing competition among health care providers. Recent examples include a survey showing that 86 percent of actuaries believe that "making prices for treatments more visible and available" will have an effect on "bending the cost curve downward" and a pending bill in Congress that would require all health care providers to disclose their prices.<sup>1</sup> As rising health care costs have resulted in increased

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premiums, deductibles and coinsurance, the incentive for consumers to make decisions based on price is greater than ever. However, while health care price transparency is necessary, it alone is likely to be an incomplete solution. For example, mutual funds disclose detailed cost data, but many consumers are unable to understand this information and often buy higher cost funds when similar lower cost alternatives are available. Health care costs are even more complex as they are driven not only by raw prices for services, but numerous other variables including provider quality, treatment effectiveness, and insurance plan design. A system is needed that translates these complex variables into simple terms that consumers can understand and use to make cost-effective decisions. The development of such systems will require innovative thought and is accompanied by a great potential for financial rewards as well as the risk of failure. Entrepreneurs have both the ability and motivation to play a lead role in the development of these systems that will create the opportunity for a significant reduction in the growth of health care costs.

Although each entrepreneur will have different design and implementation ideas, these systems must all recognize that consumers take actions consistent with their own financial self-interest. Consumers needing health care services must be able to easily determine the true cost (reflecting provider price and quality and other relevant variables) of each available option when health care decisions are being made in order to choose the option that maximizes their financial self-interest. For example, consider an insured that needs minor surgery and has not yet satisfied a calendar year deductible. In today's environment, the insured could call each available provider to obtain price quotes and then calculate a net cost after the impact of their insurance plan's provisions, but this is a complex and labor intensive task that is not often done in practice. Further, this process does not consider any other variables, such as provider quality, and as a result the insured does not have the necessary information to guarantee the most cost-effective choice is made. For the surgery in this example, one provider charges \$600 and two other providers each charge \$500, so based on price alone the insured would be indifferent between the two \$500 providers. However, one of the \$500 providers has a lower incidence of medical errors and subsequent complications, so the insured's most cost-effective choice is the high quality provider. To encourage this choice, the entrepreneur would provide the insured with an online tool that instantly displays the net cost for the three providers as \$600, \$500 and \$475. The high quality provider would still charge \$500, but the cost to the insured is only \$475, with the entrepreneur contributing the remaining \$25 as an incentive to motivate the cost-effective choice. In this way, entrepreneurs are using the financial self-interest of consumers to promote competition among health care providers to offer both the highest quality and lowest

cost services.

In the situation where most or all cost sharing provisions have already been met, insureds are not very price sensitive and without the use of financial incentives often make choices that are not cost-effective. Consider an insured needing an MRI and the only out of pocket cost is a \$250 deductible that remains to be satisfied. There is an MRI provider very near the insured's home costing \$3,000, but a less convenient facility offers an MRI for only \$2,000. Regardless of the MRI provider selected, the procedure will only cost the insured \$250, but if the insured chooses the more convenient option, the cost to the insurance company is significantly higher, resulting in higher future premiums. To encourage the optimal choice, the entrepreneur uses a \$100 financial incentive in the form of a deductible credit. The online tool would show the insured a \$250 charge for the high-cost provider, while the charge for low-cost provider would appear as \$150, representing the \$250 deductible less the \$100 financial incentive paid by the entrepreneur.

The two previous examples focused on consumers having a clear and imminent need for medical care, but these systems can also use financial incentives to control future costs for those not actively seeking treatment. For example, many insurance plans provide no-cost coverage for preventative health care services, but utilization of these services is not optimal. To address this issue, entrepreneurs could offer incentives such as future premium credits or cash payments to those insureds that would most benefit from preventative services (e.g., those with a certain health history or those at specific ages.) Similarly, financial incentives could be used to motivate behavior changes among insureds having risk factors that likely result in greater future health care spending. For example, entrepreneurs could offer smokers a cash payment for taking a smoking cessation class. The concepts illustrated in these two examples are similar to the proven marketing techniques (free offers, coupons, etc.) used with many other products and services that target specific demographic groups in order to influence consumer behavior and achieve desired outcomes. These incentives increase costs in the short term, but future potential health care costs should be reduced.

While it certainly is possible for each insurance company to develop and maintain its own unique system, there are significant expenses and risks involved. As insurers are already under pressure to reduce administrative expenses and profit margins, many will decide against taking on a new venture such as this.<sup>2</sup> Also, the inherent motivation for insurers to assume added risk and expense in order to control costs is limited by their ability to pass-on cost increases to insureds in the form of higher premiums. While entrepreneurs also have expenses and risks, their capacity to manage these factors offers the optimal approach. Entrepreneurs will license their systems to many different insurers for a

small fixed fee that will cover routine operating and administrative expenses, providing insurers a valuable service with no added risk at a reasonable cost. Further compensation from insurers can be earned, but it will be contingent on and directly correlated with the ability of the entrepreneur's system to control an insurer's claim costs. This compensation structure will motivate many entrepreneurs to not only initially develop, but also continually improve the ability of their systems to reduce the growth in health care costs. Entrepreneurs whose systems are unable to control costs will not receive incentive compensation and will likely be replaced by another competing entrepreneur. While this is an unfortunate result for the unsuccessful entrepreneur, it does not impact the solvency of any insurer and facilitates the widespread use of the most effective systems.

Entrepreneurs will need to rely on actuarial models to analyze the numerous variables influencing health care costs and develop the necessary financial incentives. The models will quantify the effect of these incentives on consumer behavior and project the impact of that behavior on current and future health care cost trends. The success or failure of the entrepreneur is largely dependent upon the ability of these models to determine the appropriate level of financial incentives. If the financial incentives used are too low, the entrepreneur faces the risk that consumers will not be motivated to make cost-effective decisions. If the financial incentives used are too high, health care costs may be effectively controlled, but the entrepreneur faces the risk its income<sup>3</sup> will be insufficient to provide the required return on investment. In the earlier MRI example, if the insured could have been motivated to choose the cost-effective provider with a \$50 incentive rather than the \$100 actually used, the entrepreneur would have increased its income and reduced its risk.

Current health care cost trends are unsustainable. Insurers, health care providers and consumers all have an interest and responsibility for reducing these trends, but currently lack the tools to achieve this goal. Entrepreneurs are ideally suited to address this challenge by developing systems that will motivate consumers to make cost-effective decisions and facilitate price and quality competition among health care providers resulting in a realistic opportunity to achieve sustainable and affordable health care for all Americans.

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<sup>1</sup> Society of Actuaries press release 6/28/2010 "Actuaries Believe More Transparency in the U.S. Healthcare System Would Help Bend the Cost Curve

Downward" H.R. 4700 "Transparency in All Health Care Pricing Act of 2010"  
Introduced February 25, 2010 by Rep. Steve Kagen, M.D.

<sup>2</sup> This paper focuses on using these systems in context of the private insurance market, but the same principles could be applied to Medicare/Medicaid with legislative changes.

<sup>3</sup> Income = (Incentive compensation earned from insurer) - (Financial incentives paid to insureds)



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