



On the Same Page *by David Guzick, M.D., Ph.D.*



Markets for Health Care: Part 1 – The Market for Health Care Services

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In the ongoing national debate concerning health care, there is often a statement that goes something like this: "Increased free-market competition will reduce cost, improve consumer choice and enhance quality."

Markets for goods and services are at the core of our capitalist economy. Thus, on the face of it, such a statement has significant appeal. But does this statement translate well to the health care industry? Do the predictions of the standard economic theory of supply and demand hold up?

For starters, let's first define which markets we're talking about. In some cases, statements about the impact of competition on prices, quality and choice refer to the market for *physician, hospital or ancillary health care services*. In the current national conversation, however, "competition" most often refers to the market for health insurance products. **These two types of markets are not the same.**

Both the Affordable Care Act, or ACA, and the American Health Care Act, or AHCA, attempt to address the health care needs of Americans who are not covered by employer-based health insurance or other commercial insurance plans, or by governmental plans (mainly Medicare and Medicaid). In my conversations with individuals both inside and outside the UF Health community, the most commonly misunderstood aspect of the current national debate about the health care marketplace is this: the market under intense scrutiny — whether governed by the ACA or the AHCA — is the market for health insurance products, *not* the market for physician or hospital services. Specifically, the main differences between the ACA and the AHCA pertain to health insurance questions, not health care service questions: e.g., whether all health insurance plans must cover a

set of “essential health benefits;” whether pre-existing medical conditions can cause eligibility exclusion for coverage; and whether all individuals (including those who are young and healthy) must purchase health insurance coverage or be subject to a penalty on their taxes. Under both the ACA and the AHCA, regardless of the differences in the market for health insurance, the markets for physician and hospital services are essentially the same. This is because, for the most part, physicians and hospitals continue to charge fees for services.

In this two-part edition of *On the Same Page*, I will outline the differences between the market for health care services and the market for health insurance. To provide context, I will first briefly review some basic economic theory, and then consider whether predictions of the theory of competitive markets apply to the specific markets for health care services and health insurance.

Economic Theory: Perfect Markets with Perfect Competition

Under the “general equilibrium theory” of economics, a perfect market is defined by several conditions, collectively called perfect competition. While the following is not a complete list of conditions, here are the characteristics of a perfect market that are most pertinent to the analysis of health care markets:

- There are large numbers of buyers and sellers of a homogeneous product.
- All consumers and producers have complete knowledge of price, quality and other aspects of a good or service (e.g., in health care, aspects such as need and efficacy).
- Buyers are rational in that they only purchase goods or services that increase their “economic utility” (or “satisfaction”).
- There are no barriers to entry (e.g., in health care, no educational or licensing barriers for physicians, and no Certificate of Need, or CON, requirements for hospitals).
- In large part because there are large number of buyers of a homogeneous product who are rational consumers with complete knowledge, providers do not have the power to set prices or influence demand.

When these and other conditions of a perfect market hold, it can be shown (graphically and mathematically) that a market will reach an equilibrium in which the quantity supplied for every product or service equals the quantity demanded at the current price. This equilibrium is called a “Pareto optimum,” meaning that nobody can be made better off by exchange without making someone else worse off. Through further theoretical analysis, it can be further shown that if the assumptions of perfect competition hold, the overall welfare of a society is optimized.

Economic Reality in Health Care: Imperfect Markets

It is intuitively clear that many of the above assumptions of perfect competition do not hold in the field of health care; thus, some of the theoretical implications of the model are not likely to hold. A key implication of the model, for example, is that under the assumptions of perfect competition the price paid by consumers is determined by the intersection of independent supply and demand curves. In health care, however, the price paid by the consumers is *not* the full price; rather, when patients check out after a doctor visit or hospital stay, the price they typically pay is the “co-pay” as defined by their insurance plan. And since this co-pay (i.e., the actual price paid by patients) is much less than the full price paid to the provider by the insurance plan, it follows that the utilization of health services by patients will be much greater than if they were facing the full price.

Another problem with applying the market competition model to health care is that demand is not necessarily independent of supply. The assumption of perfect information, combined with rational decision-making and a large number of buyers and sellers, leads to independent supply and demand curves. Put differently, when consumers know all there is to know about a service, those who supply that service cannot influence demand. But patients do *not* know all there is to know about a particular medical condition, diagnostic test, imaging study or treatment. Therefore, the providers of health care, who make recommendations regarding visits, diagnostic tests, imaging studies and medical or surgical treatments, can indeed influence a patient’s decision to purchase such services. Thus, a significant market imperfection in health care services is that providers of health care *can* influence demand due to imperfect consumer information. And because of widespread insurance coverage — whether government or commercial — that significantly reduces the price faced by consumers, the constraint on utilization that would normally be achieved by price does not apply. As a consequence of this two-fold phenomena, the number of imaging studies performed per capita across communities is correlated with the number of imaging centers, the number of surgical procedures per capita is correlated with the number of surgeons, etc.

Similar phenomena can apply to some hospital services. One prominent local example is trauma care. Up until 2011, the UF Health Jacksonville Level 1 trauma service (“TraumaOne”) was the only trauma service in the northeast corner of the state. During the preceding years, the total number of trauma cases in the region — all of which came to TraumaOne — actually showed a slight year-to-year decline. In 2011, there were approximately 2,400 cases. At that time, however, the state’s Department of Health gave provisional approval to another hospital to start a Level 2 trauma center. During the subsequent year, this new trauma center (about 10 miles away from TraumaOne) saw about 1,050 trauma patients. And yet, TraumaOne’s trauma case volume declined by only 250. This implied that there had been an 800-patient increase in trauma cases for the region, despite the earlier declining trend. At the end of that year, the DOH identified citations against the Level 2 center, shutting it down. Interestingly, during the subsequent year, when TraumaOne was again the region’s only trauma center, the apparent increment of 800 trauma cases disappeared and the total number of trauma cases in the region reverted back to about 2,400.

This example of provider-induced demand has evidently been replicated throughout Florida. A recent study based on statewide data of this matter was presented at the 2016 Annual Meeting of the American Association for the Surgery of Trauma: This study found that during the period 2010 and 2014, during which time six Level 2 trauma centers opened in Florida, charges for trauma services increased by \$1.7 billion. This dramatic increase in health care expenditures is paid by all those in Florida with health insurance, in the form of increased premiums.

Generalizing to the United States as a whole, expenditures on health care, whether measured on a per-capita basis or as a percentage of Gross Domestic Product, is about twice as high as most nations with developed economies, while health status (as reflected by metrics such as life expectancy, infant mortality and rates of preventable chronic diseases) measures poorly against such countries.

In summary, because providers of health care services in the United States remain predominantly in fee-for-service environments that drive increased utilization, and because consumers generally pay only a fraction of the cost of these services, about which they have imperfect information, competition for health care services does not reduce cost and increase quality. Rather, increasing health care services in a community when there is no objective evidence of need, as in the case of trauma care, will tend to increase its expenditures on health care without impacting quality or outcomes.

Part 2 of this newsletter, which addresses the *markets for health insurance*, will be posted next week. The health insurance market is the focus of the ACA, ACHA and whatever other proposals come out of Congress. The take-away message from the above discussion of the *markets for health care services* is that imperfections in such markets are fundamental and minimally influenced by the insurance structures of the types being discussed. While the ACA, AHCA and various other health financing proposals will have different implications for the number of people covered by health insurance and the benefit provisions of such coverage, the forces underlying markets for health care services will essentially remain the same.

The Power of Together,

David S. Guzick, M.D., Ph.D.

*Senior Vice President for Health Affairs, UF
President, UF Health*