

Lower Price High Volume Better Outcome Maximum Efficiency Minimally Invasive: A Developing Model for Health Care Delivery

Minimally invasive arthroscopy is ideally suited to efficient health care delivery. With highly trained teams, it is possible to perform a high volume of surgery while raising the quality of the work.

Henry Ford, the Detroit automobile magnate and founder of the Ford Motor Company, is credited with inventing the assembly line. In addition to efficient production, Ford minimized errors by maximizing uniformity (i.e., any color “as long as it was black”), and mass-produced the reliable (i.e., good outcome) and famous Model T Ford.

We all know that every patient is different, but we also know there are many similarities in patients as well. Caregivers who see high volumes should, theoretically, be better able to distinguish the shades of grey. Surgeons may heed these lessons.

We read in the *Wall Street Journal* in November 2009¹ about an Indian cardiothoracic surgeon named Devi Shetty from Bangalore. He first became known as Mother Teresa’s cardiac surgeon. He offers cutting-edge surgery at a fraction of what it costs elsewhere in the world. His average open-heart surgery costs \$2,000 where most everywhere else the charge is \$20,000 for the same work. His simple premise is economies of scale. He states that “in health care you can’t do one big thing and reduce the price. We have to do 1,000 little things.” Dr. Shetty’s team of “42 cardiac surgeons performed 3,174 cardiac bypass surgeries in 2008, more than double the 1,367 the Cleveland Clinic, a US leader, did the same year.”

“Some in India question whether Dr. Shetty is taking his high-volume model too far, risking quality.” Jack Lewin, chief executive of the American College of Cardiology, who visited Dr. Shetty’s hospital says

“Dr. Shetty has done just the opposite—used high volumes to improve quality. For one thing, some studies show quality rises at hospitals that perform more surgeries for the simple reason that doctors are getting more experience . . . the large number of patients allows individual doctors to focus on one or two specific types of cardiac surgeries.”

Worldwide, it seems that the cost of health care is difficult for many to manage, similar to India. The cost of health care has risen to a point where patients without insurance cannot afford elective surgery and can be financially ruined by emergency surgery.

To address this, the new law requiring all United States citizens to have health insurance is projected to increase health care costs due to a probable increase in volume of utilization. Someone has to pay for this increase in costs, and things will inevitably change.

What we have seen in other nations with universal health care requirements for all citizens, whether socialized or private, is that health care delivery in most of the nations of the world evolves in a direction of the advent of two parallel systems: public and private.² Private health care is generally expensive and, from a business standpoint, the model is the luxury service industry (imagine a very expensive restaurant or hotel) where service (for a price) is uncrowded, unhurried, and available with a short waiting period. Obviously, due to cost, again like expensive restaurants or hotels, access is only for those who can afford it and choose to seek this luxury.

While this concierge model is present in the United States to some extent today, it is very rare. It is most common among primary care physicians and cash-only cosmetic plastic surgeons. For an American orthopaedic surgeon to achieve success using a cash-only model today, three variables must be addressed. The surgeon must be very famous, must live in an affluent area or specialize in affluent patients who are willing to travel (e.g., professional athletes), and the

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number of potential patients must be reasonably large because even affluent patients may choose not to pay cash when less expensive, acceptable quality care is available under universal health care (albeit less luxurious than that described above).

Most predict that when universal health care becomes mandatory in the United States, reimbursement may decrease, surgeon desire for improved reimbursement will increase, service will go into backlog because of increased use (i.e., waiting lists), demand for concierge care will increase, and two-tiered systems of public and private sectors will develop.

But let's not forget the third possibility. This is not common around the world, but it is working for Dr. Shetty in India, and has been the American way since the time of Henry Ford. We think it is perfectly suited to arthroscopic surgeons. Arthroscopic surgeons specialize in performing efficient surgery and efficient rehabilitation, and achieving superb outcomes through standardization. This allows high volume.

We think that this could be the secret to success for many surgeons in the future, and what has worked for American automobile manufacturers and Indian cardiothoracic surgery delivery should work for arthroscopic surgeons around the world.

Surgeon fees are not the primary cost; facilities, staff, and supplies are substantially more significant than surgeon's fees. An important point about the future we are considering is that if surgeons must face lower fees, it is necessary that facility, staff, and supply costs are reduced proportionally. This is only possible if the entire team commits to systems that maintain quality in patient care.

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