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Medical Tourism: Alternatives to the United States Healthcare System

Abstract
This research explores the relationship between rising medical care and insurance costs in the U.S. and Americans' consumption of medical care in foreign countries. Economic theory suggests that increases in medical care prices in the U.S. would decrease the quantity of medical goods and services demanded within the country. In recognition of additional factors which uniquely impact the demand for medical care, this research focuses on estimating the frequency of substitution of global medical care for U.S. medical care and understanding whether this practice will become more or less common in the future.

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Medical costs in the United States are high and continuing to rise. This increase in cost has led to an increase in the demand for an alternative, foreign medical care. In this paper, I consider some of the alternatives that exist for healthcare in the world. With globalization occurring rapidly, the provision of products and services abroad is increasingly common. In the U.S., we observe rising trends in healthcare and insurance prices, while around the world prices are significantly cheaper. With rising prices of a product domestically and the existence of a relatively cheaper substitute internationally, we could see a decrease in the quantity of the good demanded domestically and an increase in demand for healthcare internationally. Rising healthcare and insurance costs in the United States are causing people to travel abroad for medical care. This paper explores the reasons for rising healthcare and insurance costs in the United States, and medical care options in foreign countries. I also explore the decisions and choices we can make as a consumer amid rising healthcare prices in the United States.

Medical Care Market Trends

Currently, we face rising medical costs in the United States. According to the U.S. Census Bureau, the Consumer Price Index for medical care in December 2009 was 380.72 compared to December 1999 when the CPI for medical care was 254.90 (Databases, Tables, & Calculators by Subject). Over the span of ten years, medical care prices in the U.S. increased 49.36%. In the same time period, the CPI for all consumer goods in the US increased by 28.99% (Databases, Tables, & Calculators by Subject). At this rate, medical care prices increased about seventy percent faster than all other goods and services in the United States.

In a study by Harvard University, it was found that half of bankruptcies in 2001 resulted from medical bills (Medical Bills Leading Cause of Bankruptcy, Harvard Study Finds, 2005). Among people who filed for bankruptcy, most had some sort of health insurance before becoming ill. According to the article on consumeraffairs.com, "More than three-quarters were insured at the start of the bankrupting illness. However, 38 percent had lost coverage at least temporarily by the time they filed for bankruptcy" (Medical Bills Leading Cause of Bankruptcy, Harvard Study Finds, 2005). Rising costs make it hard for people, even with insurance, to pay for their medical bills. These people are dropped from their medical insurance when they are not able to pay their bills. Also, people will become sick and will not be able to work, causing them to lose their job that provided health insurance. Without medical insurance, it is nearly impossible for many people to afford medical care. We also see that of those in bankruptcy "…30 percent had a utility cut off and 61 percent went without needed medical care" (Medical Bills Leading Cause of Bankruptcy, Harvard Study Finds, 2005). Individuals could be forced to discontinue medical care, and could also have to

cut back on living expenses (rent, utilities, food, etc.). In this manner, rising medical costs contributed to a decreased quality of life.

The mentioned market trends are apparent in an example of medical tourism. "Eileen Clemenzi of Vero Bach, Florida, had no health insurance. In an interview, she explained that for 3 years she was in extreme pain. Her hip bone had deteriorated to the point that she was experiencing bone-on-bone friction" (York, 2008). The procedure to fix her hip would cost $48,000 in the United States. She decided to research medical tourism and found a hospital in Malaysia that would do the surgery. "She flew there on a Sunday with a friend and by Tuesday had a new hip." The author goes on to say, "Three days post surgery she was up and receiving physical therapy. She spent 1 week in the hospital and 2 more weeks in a hotel with ongoing physical therapy…Her total cost including travel was $11,000" (York, 2008).

Literature Review

We can attribute most of the cost differential between the United States and foreign nations to labor, malpractice, and pharmaceutical costs (Smith & Forgione, 2007, p. 25). In the case of malpractice lawsuits, hospitals have to pay large amounts of money to provide malpractice insurance for their physicians. A majority of the cost hospitals pay for this insurance is then transferred to the patients. Without the worry of malpractice insurance, consumers would be paying less for their procedures. In comparison, if malpractice laws and regulations are in place, medical tourists have a greater risk of not being covered. U.S. laws protect us from a physician performing a procedure that does not meet the designated standards or harms the patient. (Smith, 24) Without these laws, there are no repercussions to doctors for harming a patient with a procedure or surgery. Smith also mentions that "…proving doctor negligence in India is quite difficult since many hospitals do not have established mechanisms to manage complaints from patients. In Singapore and Malaysia, the courts defer to the doctors to determine whether the standards of care have been breeched" (Smith, 24). Without defined protection for the patient, it can be uncertain what will happen if something does not go as planned.

Without regulations in place that limit procedures, foreign hospitals are able to perform surgeries that cannot be done in the United States. In the United States, there are stricter codes limiting the procedures and research that can be done. "In the U.S., healthcare is regulated at both federal and state levels, it is extremely costly and highly inflationary. Western countries like the U.S. and the U.K. have highly evolved healthcare delivery mechanisms that are subject to timely inspections, regulations and follows licensing procedural code." (Aruru, 46) With an advanced healthcare system like the U.S., many regulations and policies exist that must be followed and can hinder our ability to try new

procedures. "For example, Stephanie Sedlmayr, a resident of Florida, needed hip replacement surgery. Rather than pay the exorbitant cost of having the procedure performed in the United States, she opted for a medical tourism package at the Apollo Hospital in Chennai. Not only did she enjoy the reduced cost of surgery and the vacation time of her recovery, but Ms. Sedlmayr was able to have a procedure that, at that time, had not yet been approved by the United States Food and Drug Administration" (Burkett, 2007, pp. 233-234). While many developing and evolving countries have emerging healthcare systems, they do not have as many regulations in place prohibiting the procedures they can do. (Aruru, 46) The lack of regulation provides an environment where procedures can be performed that are regulated in other countries.

Furthermore, the rising medical costs are affecting insurance companies. As medical care becomes more expensive, medical insurance premiums also rise. With insurance premiums growing in size, larger amounts of consumer's paycheck are required (Medical Bills Leading Cause of Bankruptcy, Harvard Study Finds, 2005). It is increasingly common for many consumers to opt out of any type of medical insurance to try to save some money. If you do need medical care or services, having medical insurance provides the least expensive option. Taking this into consideration, some consumers are going without insurance to avoid the growing costs and hoping they do not have any serious medical concerns. The Center on Budget and Policy Priorities (CBPP) reports "…the number of uninsured Americans stood at a record 46.6 million in 2005, with 15.9 percent of Americans lacking health coverage" (The Number of Uninsured Americans is at an All-time High, 2006). It is predicted that this number will continue to rise as medical costs increase. In the past, a majority of employers offered some sort of health insurance coverage to their employees. Recently, fewer employers are offering their employees health coverage, as it is increasingly expensive for the company to provide. "The percentage of Americans who are uninsured rose largely because the percentage of people with employer-sponsored coverage continued to decline as it has in the past several years" (The Number of Uninsured Americans is at an All-time High, 2006).

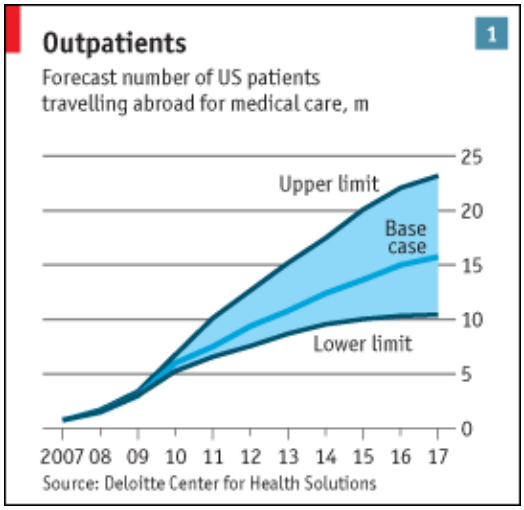
If the U.S. continues to see high medical costs, which we most likely will, it is likely that many companies will stop offering health insurance coverage. With tight budgets and rising production costs, companies could be forced to pay the outstanding premiums for health insurance for their employees. As the number of uninsured rises, other problems may emerge. "…Rising private insurance premiums have led to higher Medicaid enrollment for adults, as low-income workers are squeezed out of private coverage and into Medicaid" (The Number of Uninsured Americans is at an All-time High, 2006). With a higher Medicaid enrollment, taxpayers will spend more money to fund this program.

This would mean more money taken out of individual paychecks to fund a larger population of Medicaid recipients.

Steps are being taken by insurance providers to cover patients who do consume medical care abroad. "Two medical concierge companies, Med Retreat and Planet Hospital, are working with insurance providers and expect soon to have a liability product designed to protect employers who sent patients overseas for care and to protect the patients themselves." (York, 101) This possibility gives patients and consumers a wider range of options, with insurance companies willing to fund procedures and treatments overseas. It is possible that more restrictions and regulations for foreign medical services will emerge as their healthcare systems become more established.

An alternative to inflating healthcare costs in the United Sates exists in foreign countries. Countries in the Middle East and Southeast Asia are emerging as global medical care delivery locations. They offer quality service at a fraction of the cost. Those individuals that cannot afford operations in the United States often look at alternatives in other countries. "A heart-valve replacement that would cost $200,000 or more in the U.S. for example, goes for $10,000 in India -- and that includes round-trip airfare and a brief vacation package." (Hutchinson) The cost difference between procedures in the United States and foreign countries is astounding.

Figure 1



Source: Economist.com (Globalization and Health Care: Operating Profit, 2008)

Many countries around the world are investing in the healthcare market by building large infrastructures for medical care and research. The Hutchinson article also points out that India, "…performs nearly 15,000 heart operations every year, and the death rate among patients during surgery is only 0.8 percent -- less than half of most major hospitals in the United States." (Hutchinson) With more competitive options available, there are an increasing number of people going overseas for procedures. "…more than 55,000 Americans visited Bumrungrad Hospital in Thailand for various elective procedures during 2005 alone." (Smith, 20) The Deloitte Center for Health Solutions expects this number to rise. "A report published last month by Deloitte, a consultancy, predicts that the number of Americans travelling abroad for treatment will soar from 750,000 last year to 6m by 2010 and reach 10m by 2012." (Globalization and Health Care: Operating Profit, 2008) Over a four year period, the number of medical tourists is projected to multiply by ten. Figure 1 displays the general trend expected through 2017.

With a quality of health care rivaling many American hospitals, the U.S. looks at the reasons why these foreign hospitals have emerged. Many of the physicians in foreign countries, like India and Indonesia, went to medical schools and became certified in the United States. After becoming certified, they returned to their native countries to practice medicine. "…25% of medical students in the United States are from foreign countries and there are approximately 37,000 Indian doctors now practicing in the United States." (York, 100) With an ever growing population of foreign doctors, the quality of care cannot be discriminated by nationality. Therefore, it is plausible that health care in other countries is comparable to the United States as they have the same education and training. "Bangkok's Bumrundgrad hospital has more than 200 surgeons who are board-certified in the United States, and one of Singapore's major hospitals is a branch of the prestigious John Hopkins University in Baltimore." (Hutchinson) A high quality medical education is becoming more convenient for many foreigners as medical schools are starting to have branches in other countries. Foreign students no longer have to travel to the United States to get an education, whereas before it would cost them more money and possibly time with a slight language barrier. Another major advantage is that the foreign physicians who do study in the United States learn to speak English well. It is possible that being able to speak English would give a physician the ability to communicate with a larger population of patients.

With the prevalence of medical tourism around the world, consumers have more options from which to choose. Medical tourism is increasing competition for medical care on the global market. "Globalization increases competition by allowing greater specialization and division of labor, which as Adam Smith first observed in *The Wealth of Nations*, increases growth and improves the standard of

living for everyone" (Colander, 2006, p. 75). As Colander explains, globalization provides for a better quality of life. Globalization in the healthcare market occurs in the form of medical tourism. Medical goods and services are now being offered globally. Global competition helps to hold down prices and puts pressure on high-cost companies (Colander, 2006, p. 77). Using Colander's definition and model of globalization, as medical tourism increases, the cost of healthcare will decrease in high-cost countries, such as the United States.

Conceptual Framework

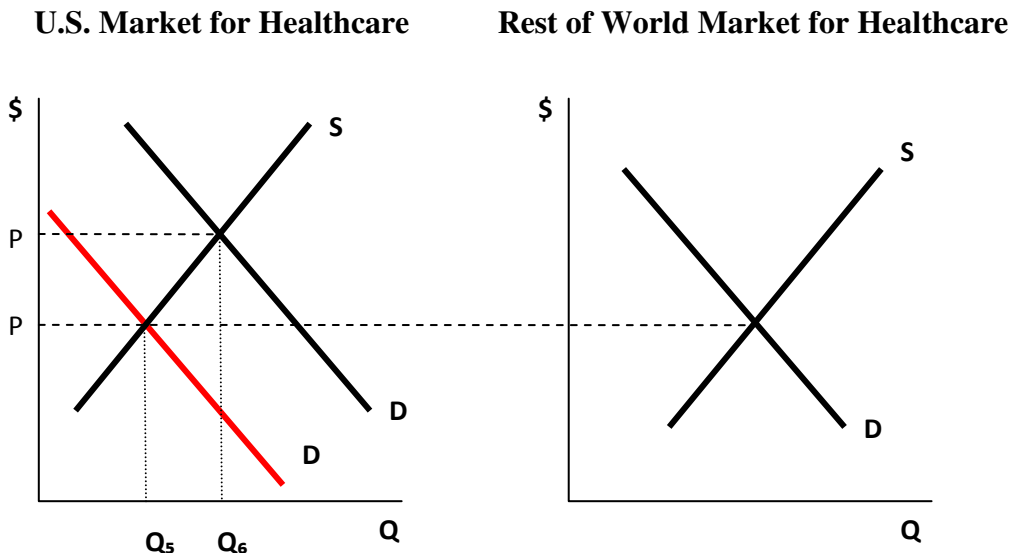
With globalization, the United States could see reduced health care costs in response to international competition. Figure 2 depicts the global healthcare market in the presence of medical tourism. In this context, health care goods and service in the Rest of the World could be a substitute for U.S. healthcare goods and services. In the U.S. market for healthcare, the equilibrium price for healthcare is higher than in the Rest of the World (ROW) Market for healthcare. If the equilibrium price of the U.S. Market is higher, P_3, we will see the demand curve for healthcare goods and services shift from D to D_0, in instances when the U.S. Market for healthcare and the ROW Market for healthcare are substitutes. Under these conditions, the demand curve will decrease until it comes to equilibrium with the ROW Market at P_4. The new demand curve and supply curve in the U.S. market will intersect at the ROW equilibrium price. With the shift in this demand curve, there will also be a decrease in the quantity of healthcare demanded and supplied. The quantity of healthcare supplied and demanded will decrease from Q_6 to Q_5 after the shift in demand. So with the low price in the ROW Market supply and demand model, we would have a decrease in the price and quantity of healthcare supplied and demanded in the U.S. market.

While medical tourism is emerging in the world, the effects of globalization will not occur overnight. The price for the consumer will continue to remain high in the United States relative to some foreign countries. Consumers are faced with two options for medical care. The first option would be to receive medical care in the United States; the second option would be to travel abroad for medical care.

A majority of consumers will most likely choose option one for their medical care. In 2003 alone, almost 20 million patients went to the emergency room in the United States (Health Statistics, 2010). Emergency room visits will always exist in the United States and one would think it would not be plausible to receive medical care aboard for emergency care. Families would most likely stay in the United States for regular checkups too. Assuming that individuals would have to take time off work for checkups, it would most likely be inconvenient for families to travel abroad for regular checkups. My model has been analyzing the cost in terms of money, but there would also be the opportunity cost of going

abroad. For smaller checkups and healthcare services, the opportunity cost of going abroad would be larger than the opportunity cost of staying in the United States.

Figure 2



$ indicates the price of healthcare
S indicates the Supply of Healthcare
D indicates the Demand for Healthcare
Q indicates the quantity of healthcare

P3. Equilibrium price of the U.S. Market before the shift in the demand curve
P4. Equilibirium price of the ROW Market and the equilibrium price of the U.S. Market after the shift in demand
Q5. Quantity of Healthcare after the shift in Demand
Q6. Quantity of Healthcare before the shift in Demand

The second option would be to go abroad for medical care. This option would appeal most to those choosing to have elective surgeries. An elective surgery includes any surgery that is not an emergency and is planned (Elective Surgery, 2009). "According to the National Center for Health Statistics of the U.S. Centers for Disease Control (CDC), in 2000 over 40 million inpatient surgical procedures were performed in the United States" (Elective Surgery, 2009). Using this information, 40 million patients could go possibly consume medical care abroad.

Figure 2 is a good prediction of the change in the markets if the market for healthcare goods and services were perfectly elastic. Assuming that the markets are perfectly elastic would be an incorrect assumption. We have to assume that there is some elasticity between the markets, but not perfect elasticity. So if the elasticity is not perfect, we would see the equilibrium price fall between P_3 and P_4. This would mean that the demand curve for healthcare in the United States would not fully adjust to the ROW equilibrium price. The price in the United States would not be perfectly elastic and we would see the quantity of healthcare demanded and supplied in the United States decrease, but not as much as if the price were at P_4.

Conclusions

In conclusion, the rising healthcare costs in the United States and lower costs in the rest of the world could cause a shift in the world healthcare market. With the globalization of healthcare, we could see the prices and quantity of healthcare in the United States decrease. The prices in the United States will decrease until it comes to the price for the rest of the world. The globalization of healthcare will occur overtime, meaning the prices will be slow to adjust. One cost that would be difficult to measure on the aggregate would be the opportunity cost of going overseas for healthcare. This cost is dependent on the type of care, time required from work, and any other inconvenience that would be of any value. The globalization of healthcare will still occur, but is not numerically forecasted within my research.

Further Research

Some areas that could be expanded are related to data collection. Finding data on the number of patients traveling abroad would be very helpful. All articles and research prior to this have used estimation models to approximate the number that travel abroad for medical care. Finding data or developing a more accurate estimation model would help to construct a regression model. A regression model would be useful in determining the relationship between medical tourism and healthcare prices in the United States.

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