Article #6 – Medical Devices

Markets in Medical Devices Should Open Up

The wealthy countries of the world are spending a large amount of money on medical devices. This trend is only going to continue, as populations in these countries continue aging. The problem is most severe in the United States of America, where medical spending on a per-capita basis has tripled since 1990, without any measurable improvement in health metric scores.

One helpful sign, though, has emerged in the form of innovative Chinese and Indian medical device companies. These companies have been developing new medical devices, which were originally intended for use in the developing world where medical care markets are growing. These markets are vast, but are made up of consumers for whom every yuan or rupee counts. The companies thus focus on low-cost devices, with fewer complex or cutting-edge components; for example, the portable electrocardiographs they made cost an average of $500, instead of the $5000 charged by American companies.

Western medical-device firms are aware of these companies, and have started investing in them. They set up research centers, hire local workers and develop their own versions of the frugal inventions, all the while taking advantage of generous government subsidies designed to promote indigenous manufacturing. One thing they have not done is market the low-cost devices themselves in wealthy countries. There are at least two reasons for this.

Health care is not an efficient market, since health care bills are rarely experienced by the consumer as simple purchases; they are mediated either by governments, as in Europe, or by private health-care firms, as in the United States. Thus patients do not demand low-cost devices, since they have very little information about the cost of their health care – and they have no incentive to insist upon low-cost technology.

Bureaucracy also makes it more difficult to market low-cost devices in the United States. The American Food and Drug Administration (FDA) is risk-averse; it often takes much longer to approve a new technological device in the United States than it does in Europe. The delays caused by the FDA process are expensive, since they require high-cost lobbyists and lawyers to get involved. America's bizarre hybrid health care system makes things even more complex, since profitable devices require not just FDA approval, but acceptance by the bureaucracies that run government programs like Medicare and Medicaid.

Still, Asian firms are not quite ready to take over the market for medical technology. Their strength is in making relatively simple devices and non-invasive technologies such as imaging, but they have not yet penetrated into the market for riskier and more sophisticated devices. Just as cheaper Japanese cars disrupted the Western car markets, though, cheaper medical technology can – and should – disrupt the market in medical technology. The United States should reduce rules that make these devices less profitable, and encourage health care bureaucrats to approve these devices for widespread use. In the end, all will benefit from the presence of this technology in our hospitals.

Read the above article and write an essay to answer the following question: Do you think that Asian innovation can drive down the cost of medical care in the US? You may answer yes, no or both, but give as many economic reasons for your answer as you can.

<u>Evaluation will be based on the accuracy, clarity, completeness, and originality of your answer. A good essay should be well written, well organized, and coherent.</u>

ESSAY EXAMPLE - score 6 or 5 – Very Strong

Yes, it is possible that Asian innovation can drive down the cost of medical care in the United States, but only if they do it in the right way, and with some limitations.

Asian firms (and their Western partners) have responded to the demands of growing markets for medical technology in China and India, countries with large but relatively poor populations, by developing their own versions of expensive western products. They are able to do this for a few reasons. First, consumers in the US and Europe generally do not pay the full price for their own medical care and so have not demanded low-cost, high-quality medical products in the past. Firms have had no incentive to lower costs. Now that the incentives exist, engineers will work hard to create these products. Second, with low wages and many highly trained workers, Asian countries have a comparative advantage in both skilled and unskilled labor. Asian firms can design and build technology at lower costs than western firms. Governments may also help this process along, as the Chinese government has helped to encourage local manufacturing by offering subsidies to Chinese firms, thus lowering manufacturing costs further.

With these advantages in hand, Asian firms have been able to create high quality technology that is acceptable to US consumers at much lower costs than have previously been seen in the US. What remains to be seen is whether they will succeed in marketing them there. So far, western firms have been hesitant to introduce these products for fear of successfully passing through the many layers of bureaucracy necessary to get approval to sell health related products in the US. They also must deal with the US consumer's demand for highest quality health care at any price, given that they themselves seldom pay that price. But just like Japanese cars once revolutionized the US auto industry, once Asian firms get a foothold in the lucrative US market, their high-quality and low-cost products should become a success.

Still, technology is only one part of the health care picture. Doctors and nurses, hospitals and their administrators, all are more expensive in the US due to higher wages and land costs. These costs will not be affected by Asian innovation unless we find a way to export these services as well. This idea is not that far-fetched, given preferential immigration policies for health care workers and the increasing popularity of "health care travel". Perhaps the growing recognition that health care costs must be lowered lest they take over our economy will encourage policy makers to find even more ways to promote these ideas.

Tips: This answer can see both sides of the issue and discusses both, regardless of whether they choose to answer yes or no. It discusses the majority of the points highlighted in the article and uses the correct economic terms. The essay has a point of view that is supported by the arguments and grammar and punctuation do not hinder the reader's understanding of the author's points.

Good Answer (Score 3 or 4):

Yes, it is possible that Asian innovation can drive down the costs of health care in the United States.

Asian firms have responded to the demands of growing markets for medical technology in China and India, countries with large but relatively poor populations, by developing their own versions of expensive western products. They are able to do this because large markets of low-income consumers create incentives for firms to innovate and create low-priced medical goods. In the US, in contrast, most consumers do not pay the full price of their medical care and are insensitive to price.

Asian countries also have low wages and many highly trained workers. This gives them the ability to design and build technology at lower costs than western firms. Governments may also help this process along, as the Chinese government has helped to encourage local manufacturing by offering subsidies to Chinese firms, thus lowering manufacturing costs further.

The ability of Chinese firms to enter the U.S. market bringing a superior product at a lower price should revolutionize the market for health care. With the encouragement of insurance companies, all hospitals will want to use these lower priced-innovations once the FDA has approved them.

Tips: This answer understands the main points of the article and is able to repeat them. It may miss a few points or be unable to see both sides of the issue clearly. Fewer economic terms are used and grammar and punctuation may make the essay more difficult to understand.

Poor Answer (Score 1 or 2):

Yes, Asian firms will dominate Western firms and create all medical technology. This will lower costs and decrease the ability of Western firms to compete for customers.

The superiority of Asian manufacturing processes can be seen through the low costs that they charge. If Western manufacturers can no longer compete on price, then they will no longer be able to sell in the market place. Lower cost labor is always superior to higher cost labor and gives the low-cost country an absolute advantage.

If the US bureaucracy is not able to approve these medical devices then the people who will lose out will be consumers and insurance companies, since they will be the ones paying the high prices. If insurance companies did not cover so many procedures, consumers would probably be able to demand Asian medical technologies for themselves.

Tips: This answer shows little understanding of how to form an economic argument. The writer may repeat one or two salient points, but he or she also interjects unsupported or unrelated points and may misunderstand the economics. There is very little structure to the argument and grammar and punctuation severely inhibit clarity.