**Section A - Burdens of Healthcare**

1. **What are some of the greatest challenges in U.S. Health Care today? Detail at least 5.**
   1. The cost is too high. Compared with other Organization for Economic Co-operation and Development (OECD) countries, the per capita cost of health care in the United States is more than double. In addition, the poor in the U.S. are more likely to not receive recommended treatment for economic reasons (Davis, Stremikis, Squires, & Schoen, 2014).
   2. The waiting time is too long. Instead of come-and-serve mode, in the U.S., a patient will usually need to schedule an appointment to visit their PCP. If the PCP would like to refer the patient to an specialist, or to a special examination, most likely, the patient will wait for extended period of time (Patrick, Bisgaier, Hasham, Navarra, & Hickner, 2011). Such waiting time increased patient’s suffering.
   3. There is no comprehensive medical care. Compared with other developing countries that provide universal healthcare, such as the UK, Japan, and Germany, U.S. customer spend double of their portfolio income in healthcare (Arnquist, 2009).. Healthcare became the largest reason why U.S. consumer go bankrupt (Austin, 2014).
   4. Complex regulation. Clinical trial of drugs became a business. The complex clinical trial system not only increased administrative cost, but also created obstacle for new drugs to reach potential patient (Cutler, 2013).
   5. Healthcare provider lack experience. The offset of high income in the healthcare business is that each of the healthcare provider will be exposed to less number patient, increasing the chance of medical errors. Compared with other developed countries, patients in the U.S. are 7% more likely to experience medical errors (Schneider, Sarnak, Squires, & Shah, 2017).
2. **What are some of the advantages of U.S. Health Care compared to the rest of the world?**
   1. Advanced technologies. As U.S. ranks first in all countries globally in the research areas of biology, biomedical engineering, and healthcare [ref], and have built multiple medical centers for medical research, new healthcare methods (e.g. CAR T-cell immunotherapy, genetic therapy, etc.) and new drugs are developed and/or improved in the U.S., and helped U.S. patients [ref]. In 2013, the United States spent $ 1,026 on medicines and other non-durable health care per capita, more than double the OECD average of $ 515 (OECD, 2015).
   2. Higher healthcare provider income. Physicians and nurses have higher income compared with most other developed countries ("Salary Guide for OFWs,"), attracting more talents to the U.S. healthcare business.
3. **What accounts for the majority of healthcare costs? Why?**

Highly complex system increases both the administrative cost and the drug development cost. Both of the costs are then transferred to the patients. For administrative cost, Duke University Hospital has 900 hospital beds and 1,300 billing clerks to bill the insurance company or the patient (Cutler, 2013). For drug development cost, people in the U.S. spent double the amount for pharmaceuticals and other non-durable medical care compared with average per capita cost in OECD countries (OECD, 2015). Furthermore, the U.S. government does not usually negotiate universal deals with healthcare providers. The Congressional Budget Office mentioned that the federal government would save $116 billion over 10 years if they give the low-income people the same discount as what the Medicaid receivers have ("Let Medicare negotiate drug prices: Our view," 2014), and low-income individuals lack the ability to negotiate with healthcare providers for better price.

1. **In your own words, describe how laws, regulations and policies have impacted the US Healthcare system as we know it.**

Compared with other industries, the health care is more consistent with basic human rights. For these reasons, laws such as the “Affordable Care Act” and the “21st Century Cures Act” have been proposed to increase the cost and standard of care in the United States. Furthermore, U.S. government promote everyone to hold health insurance, and penalize individuals that not doing so with higher taxes ("No health insurance? See if you'll owe a fee,").

**Section B - Chronic Illnesses**

1. **What is the CDC? What purpose does it serve?**

CDC stands for Centers for Disease Control and Prevention. According to their website, CDC is one of the most effective health and human resources agencies that protects the United States from health, safety and security issues. It fights disease and encourages communities and citizens to help to do the same thing ("CENTERS FOR DISEASE CONTROL AND PREVENTION,").

1. **What are chronic illnesses and why are they important to know?**

Chronic illness is the long-term illness. Chronic illness cannot be cured, and usually deliver pay to the patient. For example, Alzheimer’s disease and cancer are chronic diseases. As chronic diseases tend to happen more often with higher age, it become important in affecting life expectancy and quality in the people, especially the aged people in the U.S. (Ward & Black, 2016)

1. **What are some examples of acute conditions? How are acute conditions different from chronic illnesses?**

Acute conditions include appendicitis, flu, and heart attack. Compared with the chronic illnesses, acute conditions have a shorter lasting time, usually from a few days to a week, but an immediate onset.

1. **What are the differences between a PCP and Specialist?**

PCP stands for Primary Care Providers. A PCP interview patient for their first diagnosis visit. During the visit, the PCP could refer the patient to specialists, including such a surgeon ("Primary Care Provider (PCP) vs. Specialist," 2019).

1. **Describe the value of a PCP.** 
   1. Familiarity. By interviewing the patient, the PCP will get familiar with the patient’s health and wellness conditions. Thus, PCP can detect serious problems earlier through routine screening. Adults with PCP in the United States are on average 19% less likely to die prematurely than adults alone ("We're championing the heart of our nation's health,").
   2. Reduce cost. PCP can not only prevent patients from expensive emergency rooms, but also help patients to save financial and time cost from consultation with experts (Franks & Fiscella, 1998).
2. **How can information technology be used to help PCP's with care coordination?**

Information technology can help coordinate PCPs, as information from different healthcare providers can now share patient information, from height and weight, to medicine history, and thus help the PCP to make more accurate diagnostics.

**Section C - Learning Health Systems**

1. **In your own words, describe the good, the bad, the ugly of the US Healthcare system. You are not limited to the articles provided, in fact we highly encourage you to do a bit of research to get a better understanding.**

The good: The United States very competitive in biological sciences, biomedical engineering, and related fields. This progress not only brings hope to patients, but also brings economic benefits to the entire community. Moreover, the patient's medical history is stored in a database shared by all healthcare providers. Both the patients and the healthcare providers are benefited from this. When the patient travels and need health care, the patient’s new health care provider can easily gain most of the background/historical information to make diagnosis.

The bad: Health care in the United States is the most expensive and ineffective in developed countries. The insurance system is complex, and no universal health care for citizens.

The Ugly: Healthcare providers tend to test everything on a patient, to avoid the chance of a patient to sue them later. This created large costs on the patient – not only financial cost, but also time cost.

1. **In your opinion, how are learning health systems impacting the US Healthcare system? Good or Bad.**

Learning health systems enhances the U.S. health system by informing health care workers. For example, a learning health system may suggest that patients have the opportunity to develop some rare or infectious disease based on their measurements, and may recommend additional screening. Such assistance has the potential to reduce patient waiting times and provide better medical care.

**References**

Arnquist, S. (2009). Health care abroad: Japan. *New York Times*.

Austin, D. (2014). Medical debt as a cause of consumer bankruptcy. *Me. L. Rev., 67*, 1.

CENTERS FOR DISEASE CONTROL AND PREVENTION. Retrieved from <https://www.cdc.gov/about/organization/cio-orgcharts/pdfs/CDCfs-508.pdf>

Cutler, D. (2013). Why does health care cost so much in America? Ask Harvard’s David Cutler. *PBS NewsHour*.

Davis, K., Stremikis, K., Squires, D., & Schoen, C. (2014). Mirror, mirror on the wall: How the performance of the US Health care system compares internationally. *New York: CommonWealth Fund*.

Franks, P., & Fiscella, K. (1998). Primary care physicians and specialists as personal physicians: health care expenditures and mortality experience. *Journal of Family Practice, 47*(2), 105-110.

Let Medicare negotiate drug prices: Our view. (2014). Retrieved from <https://www.usatoday.com/story/opinion/2014/04/20/medicare-part-d-prescription-drugprices-%20%20negotiate-editorials-debates/7943745/>

No health insurance? See if you'll owe a fee. Retrieved from <https://www.healthcare.gov/fees/fee-for-not-being-covered/>

OECD. (2015). Environment at a Glance 2015. In: Paris: OECD Publishing. doi: <https://doi>. org/10.1787/9789264235199-en.

Patrick, G., Bisgaier, J., Hasham, I., Navarra, T., & Hickner, J. (2011). Specialty care referral patterns for the underserved: a study of community health centers on the South Side of Chicago. *Journal of health care for the poor underserved, 22*(4), 1302-1314.

Primary Care Provider (PCP) vs. Specialist. (2019).

Salary Guide for OFWs. Retrieved from <https://www.workabroad.ph/salary_guide_ofws.php>?

Schneider, E. C., Sarnak, D. O., Squires, D., & Shah, A. (2017). Mirror, Mirror 2017: nternationa Comparison Ref ects F aws and Opportunities for Better US Hea th Care.

Ward, B. W., & Black, L. I. (2016). State and regional prevalence of diagnosed multiple chronic conditions among adults aged≥ 18 years—United States, 2014. *Morbidity mortality weekly report, 65*(29), 735-738.

We're championing the heart of our nation's health. Retrieved from <https://www.primarycareprogress.org/primary-care-case/>