Alex Smith

PICO question: For low-income patients, does a government-mandated universal coverage healthcare system result in a higher quality of life/healthier population compared to the current U.S. system?

Compared to citizens of the European Union (EU), most Americans are isolated from other cultures and people. This isolation also tends to exist in our professional lives. For a practicing healthcare professional, knowledge of best practices and policies, not just from the United States (U.S.), but from around the world, is essential in providing effective care. It is especially important to explore health care systems from countries that continually rate higher than the U.S. in health status. I would like to enter my career in physical therapy as an advocate for the health of my patients and for the good of the profession. The better informed I am about what works worldwide, the better I can advocate here in the U.S.

Currently, healthcare reform is an important issue in the U.S., primarily due to the new controversial provisions of the Patient Protection and Affordable Care Act (PPACA), commonly known as Obama Care.[1] Obama Care and the Health Care and Education Reconciliation Act of 2010 comprise the new health reform law in the U.S. This is the most significant health care reform endeavor since the establishment of Medicaid in 1965.[2] Even before these ambitious reforms are implemented, the U.S. already spends more on health care, per capita, than any other country in the world.[3] Obama Care will add over one trillion dollars in new health care spending and is estimated to result in 52 billion dollars in new taxes. Opponents argue that much of these new costs will be forced upon businesses.[4] Similarly, the lowered Medicaid eligibility standards will add 16 million individuals to Medicaid by 2014, a 50% increase in Medicaid beneficiaries.[2]

With this expansion, it is estimated that by the year 2019, 80 million individuals will be on Medicaid with the majority of the funding (billions of dollars) coming from individual states budgets and taxpayers.[4] Critics contend that many of those individuals who do not qualify for Medicaid will still remain uninsured. Likewise, it is estimated that Obama Care will result in 800,000 fewer jobs.[4] It is clear that these new health care reforms will have far-reaching effects both for beneficiaries and for taxpayers. However, the U.S. already outspends the world and ranks below most EU countries in health status.[3] Will these extensive and expensive health care reforms be worth the price tag? To predict the success of Obama Care it is wise to investigate other health care systems around the world.

The Swiss healthcare system is considered by many to be one of the best in the world and differs from the U.S. system in several important ways. Many experts believe that Switzerland's healthcare financing system is far superior to the current U.S. system and that, unlike other European systems; it could actually work in the U.S. While the Swiss system mandates universal heath insurance coverage for all citizens, it is not the "socialized medicine" system that many Americans abhor. Instead, all insurers are private and insurance companies are required to charge the same price to every individual regardless of age, disability, or health status.[5] Swiss citizens must purchase health insurance from any one of the 87 private insurers, with the Swiss government subsidizing healthcare for all low-income citizens.[5,7] For low-income individuals who are unable to pay, individual Swiss states provide tax-financed subsidies so that they are able to afford basic package premiums.[5] The basic insurance package is very comprehensive and offers many services, including physical therapy. Secondary insurances may also be purchased, but they are non-obligatory.

This consumer-driven, integrated approach to healthcare has enabled the Swiss

government to reduce costs and improve the quality of healthcare.[7] Reports also indicate that the Swiss spend 40% less than Americans do on healthcare.[7] In 2009, the Swiss health care system, Santé Suisse, reported that government spending on health care was 11.4% of the gross domestic product (GDP) compared to the United States rate of 17.6% of GDP.[5,6] The purpose of this review is to investigate various countries, including Switzerland, that utilize universal health care to determine if universal coverage would be a beneficial option for implementation in the United States.

Several studies support the conclusion that individuals in the U.S. have a lower health status than those in most European countries.[8,12,13,14,16] A cross-sectional study by Avendano et al.,[8] compares the health of older U.S. and European adults, stratified by wealth. For example, the U.S. spends two to three times as much on health care than Great Britain; however, research indicates that American older adults (55-64) are less healthy than their English counterparts, across all socioeconomic levels. Comparable measures were used in the U.S., England and ten other European countries to examine cross-country health variations in non-institutionalized individuals age 50-74, stratified by wealth. Results show that across all levels of wealth, Americans report worse health than do the English and other Europeans. However, the greatest U.S. health disparity was for those in the lowest economic tier. Interestingly, Americans in the lowest quartile of wealth report the worst health, but even wealthy Americans report health comparable to significantly poorer Europeans. The fact that poor Americans have the worst health of all groups supports the assertion that access to health care is a major determinant in U.S health status disparities. The universal health care system that much of Europe has adopted appears to have increased access to care and has led to reduced health disparities.[8] This issue will be further addressed in studies by Schoen,[9] Brubaker[10] and Pritchard.[11]

A case-control study by Martinson et al[12] compares health indicators, primarily focusing on chronic disease indicators, between individuals age 0-80 in the United States and England. Despite the fact that the U.S. spends two to three times as much on health care;[8,12] Americans have lower life expectancies and higher mortality rates throughout the lifespan.[12] Data obtained from two nationally-representative surveys, the National Health and Nutrition Examination Survey (NHANES) and the Health Survey for England (HSE), were used to analyze and systematically assess cross-country health differences across the lifespan of Americans and Brits.[12] In order to make these health comparisons across the lifespan, the 108,933 respondents were categorized into 6 different stages: 1) infant (age 0-3), 2) children (age 4-11), 3) adolescent (age 12-19), 4) young adult (age 20-34), 5) middle-age adult (age 35-64) and 6) old-age adult (age 65-80). Results indicate that Americans have higher rates of chronic disease, including diabetes, obesity, and asthma, than do their English counterparts. This was true for every age group. Similarly, Starfield et al.[13] also found that the U.S. ranked "generally poor" on most health indicators. The authors hypothesize, as do Collet et al.,[14] that one explanation for the cross-country differences is because England and the rest of the United Kingdom spend more and put a greater emphasis on preventative care than does the U.S.

A retrospective cohort study by Collet et al.,[14] examines the delivery of preventative and chronic health care for individuals in Switzerland, a country with universal health coverage. Unlike the U.S., Switzerland, as well as many countries with universal health care, has limited data on quality of care indicators for preventative medicine. Thus, this study is one of the first to assess preventative quality of care in a country with universal health care.[14] A random sample of 1,002 Swiss patients aged 50-80, seen in university primary care settings, were assessed using RAND Quality of Assessment (QA) tools to examine preventative care related to cardiovascular

risk factors. RAND QA is a comprehensive system for assessing quality of care indicators for children and adults.[15] Results found that while U.S. adults receive approximately 55% of recommended preventative care, Swiss adults in university-based primary care settings receive approximately 69% of recommended preventative care.[14] As in the U.S., prevention indicators were least likely to be met in the elderly and in women.[14,16] However, up to 66% of the U.S. elderly do not seek recommended preventative health care, compared to only 32% in Switzerland.[14,16] This study, as does one by Thorpe et al.,[17] concludes that there is not only the need for improved U.S. health prevention programs, but also and the need for improved access to these programs[14]

A case-control study by Thorpe et al.[17] investigates the differences between the U.S. and ten other developed countries regarding disease prevalence and treatment rates for ten of the most costly medical conditions. As indicated previously,[8,12,14] individuals in the U.S. have higher rates of chronic disease and seek less preventative medicine than those in various developed European countries with universal health care. The U.S. also has a much higher disease prevalence rate.[17] Yet despite the poorer overall health, the U.S. continues to spend exceedingly more on health care than does any other European country.[17] Thus, the focus of the Thorpe et al.[17] study was to determine if increased U.S. spending is a reflection of increased disease diagnosis and consequent higher rates of treatment. The authors analyzed two previously collected databases, the U.S.-based Health and Retirement Survey (HRS) and the Survey of European Health, Aging and Retirement (SHARE), to compute and compare condition-specific spending for several chronic diseases in individuals over the age of 50.[17] Outcomes were assessed by comparing "treatment prevalence rates" and "cost per diagnosed case" in order to compare the U.S. system with those in European countries. Interesting findings from the study

include that obesity and smoking rates were higher in the U.S. than in the ten other countries studied; in fact, obesity rates in the U.S. are nearly double that of the other countries. Likewise the "treatment prevalence rate" and the "medication-treated prevalence" was highest in the U.S., indicating that America's overall poorer health status[12,14,17] may be related to more aggressive diagnosis and higher treatment prevalence rates.[16] As is also indicated by Collet et al.,[14] programs designed to prevent these chronic conditions, rather than only screen for these conditions, may result in decreased U.S. spending.[14,17] In a case-control study, Starfield et al.[13] found that the U.S. has a "poor primary care infrastructure". The authors believe that a strong primary care infrastructure has a positive effect on both health and wellness. Likewise, a strong primary care infrastructure is associated with lower health care costs.[13]

Three studies assess insurance design and its direct effect on access to care, costs, and patient's perception of affordability.[9,10,11] In a cross-sectional study, Schoen et al.[9] conducted an extensive review of the differences and advantages and disadvantages of U.S. insurance design and the design of ten other "high-income" European countries. Telephone interviews were used to assess patient confidence in their insurance system, health care affordability, cost-related access, access to providers, wait times for primary and secondary care, and problems dealing with insurance companies. Results were then analyzed comparing low and high-income respondents from all of the countries. Results indicate that individuals from the U.S. were least likely to have confidence in their ability to afford health care, most likely to have gone without health care because of cost, and most likely to have a serious problem paying medical bills. Americans were also least likely to have confidence that they would receive effective treatment when needed. Respondents from countries with insurance design that provided comprehensive benefits and cost sharing (e.g. the U.K. and the Netherlands) were most confident about health

care affordability. In all areas relating to either affordability or access, the U.S. stands out among all of the other countries for having wide differences in experience for high and low-income respondents. Similarly, Americans reported spending the most time on insurance paperwork and disputes and were the most likely to report that they had been denied claims or reimbursed at lower rates than expected. The authors contend that the U.S. needs a system, like Switzerland's, which is designed to both protect access and reduce income disparities.[9] They advocate for, as do Brubaker et al.[10] and Starfield et al.[13], that the U.S. needs to consider a more universal health care system.[9,10,13]

Brubaker et al[10] surveyed world-renowned radiologists from various developed nations (all of which have a universal health care system) to identify their impressions of the U.S. health systems and to offer suggestions for how to improve it. Approximately 70% of the radiologists state that the greatest strength of their health care system is their universal care coverage and none of the respondents believe that the quality of health care suffered from a more universal system. Similarly, 82% of the respondents report that the number one recommendation for the U.S. system would be to switch to a "publically funded health care system."[10]

As is well-documented, the U.S. spends remarkably more on health care per capita than does any other country.[8,12] A cross-sectional study by Pritchard et al.[11] examines the efficacy of health care expenditure over the past 25 years in the U.S. and 17 other Western European countries. To do this comparison, the authors developed a new formula, the gross domestic product health expenditure (GDPHE):reduced mortality ratio."[11] The larger the GDPHE: reduced mortality ratio, the more cost-effective the health system. Results indicate that every country has had a reduction in mortality rates over the past 25 years. Interestingly however, most countries had higher reductions than the U.S., despite our comparative increased spending.

These results suggest that the majority of other countries are "achieving more with proportionally less," further emphasizing the point that health care in the U.S. could benefit from a more universal design.

The current literature examined provides strong support for a more universal coverage health care plan for individuals at every wealth tier and age class in the United States. Avendano et al.[8] directly addressed the issue of lower socioeconomic status and its effect on health status, finding that at every socioeconomic level, Americans report worse overall health than their European counterparts. However, this study contained major limitations in that it only targeted individuals age 50-74 and the data was based solely on self-reports.[8] Martinson et al.[12] did address health status all across the lifespan, finding that Americans experience poorer health status and higher rates of disease than their British neighbors in every age group. However, because this study only analyzed a minimal number of health indicators, a more comprehensive study examining various health indicators should be conducted.[12]

The issue of decreased utilization of preventative medicine in the U.S. appears to play a major role in Americans poorer health status.[14,17] However, in both of the studies examining health prevention, it is difficult to get a clear picture of the population sample. Health insurance design is a key aspect of Americans poor health. Brubaker,[10] Pritchard,[11] and Schoen[9] all emphasize the need for insurance design change and argue for use of a more universal coverage health care program. However, because the study by Schoen[9] is a "general population study," it is more difficult to assess the reliability of respondents. Similarly, the study by Pritchard et al.[11] does not take into account the socioeconomic factors or cultural variations between individual countries and the study by Brubaker et al.[10] shows inherent attendant and selection bias.

There was limited information regarding how socioeconomic status relates to overall health status in countries with government-mandated universal health care. Therefore, it was difficult to answer my PICO question. However, all of the literature presented provides overwhelming evidence suggesting that universal health coverage is critical for reducing health disparities.

The information collected for this research paper will be invaluable as I develop my capstone project. As the Assistant Program Leader of East Carolina University's 2013 summer study program, "Switzerland and the World Health Organization", I will be responsible for developing online modules about the Swiss health care, with a special emphasis on physical therapy services. Ultimately, with my increased knowledge about the health care systems of some of the countries with the highest rated health statuses, I will be able to advocate for health care policy change here in the U.S.

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