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THE IMPACT OF CULTURAL PERCEPTION ON THE INDIVIDUAL HEALTH CARE CONSUMER: A COMPARISON OF GERMANY AND UNITED STATES

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ABSTRACT

The cultural impact of health care consumers provides a stark reality to the true difficulties in both the implementation and measurement for population health management initiatives. Two similar communities in two different countries, one with the oldest health care system in the world and one with the most radical and recent health care policy reformation, illustrates the impact that culture plays in the perception of health care by the individual consumer. These dimensions are investigated through the lens of the IHI Triple Aim framework. To empirically test our hypotheses, data is obtained from a survey instrument administered to the residents in both regions. Analysis of 454 usable responses show statistically significance differences and lead credence to the underlying cultural implications between the two populations. Inferences can be made about the impact of culture on the measurement of health care consumer's perceptions and the implications this has upon the perception of any systemic initiative, from both a policy development and procedural implementation standpoint, and in turn exacerbate the acceptance or failure of an initiative at the consumer level across different regions or locations.

KEYWORDS: Triple Aim, health care consumer, sickness funds, socialized health insurance, moral hazard.

INTRODUCTION

Health care systems around the world are faced with the daunting task of systemic system-wide reform driven by a variety of new cost and quality constraints. Due to rising costs, new legislation, changing population health care needs, and discrepancies in the quality of care, this multifaceted initiative has no clear single solution and, even more daunting, no ubiquitous problem definition. In an attempt to juggle these varied attributes, numerous so-called population health management (PM) initiatives are being developed within the United States and around the world in an attempt to provide a top-down systemic solutions. One example of these types of PM initiatives is the IHI Triple Aim. The IHI Triple Aim has shown considerable success at the systemic level, but little research has focused upon the behavior attributes of the individual consumer of the health care system in this new age of systemic healthcare reform. Though this individual framework provides an expedited roadmap for policy adjustments and procedural redesign, the end-user is primarily only quantified through their overall personal satisfaction. This provides a limited scope of behavioral contexts and more importantly neglects to maintain the primary goal of such an initiative; providing a comprehensive view, in the eyes of the consumer, of the systems attempts to improve the health of the population, improve the overall patient experience and maintain or reduce overall cost to the consumer.

The principal concern, from a behavioral perspective, is not just the simultaneous measurement of the desired dimensions, but the lack of context for comparison of these dimensions over time. Behavioral attributes vary widely across populations and cultures and become more diverse as one changes geographical and geopolitical climates. With the global environment that corporate health care and institutionalized medicine has become, varied behavioral context across multiple locations may need to be addressed. Simple comparisons of behavioral contexts assume the supposition that the various potential samples will be homogenous across the assorted consumers of the health care system. This disregards the basic premise that regional, national, and/or global legislation will influence the various attitudes of the individual healthcare consumer. These varied baseline viewpoints can radically skew the perception of any systemic initiative, from both a policy development and procedural implementation standpoint, and in turn exacerbate the acceptance or failure of an initiative at the consumer level across different regions or locations.

To illustrate the impact of both geographical and geopolitical impacts upon the views of the healthcare consumer and to highlight the flawed nature of a simplified sampling policy, research was conducted on samples in two of the world's more dynamic healthcare environments, the United States of America and Federal Republic of Germany. In the past decade, both countries have implemented some manner of large scale systematic healthcare reform that has significantly altered healthcare operations within their respective borders. The United States Congress passed a massive comprehensive health care reform in 2010, and at the same time the German government also completed a less comprehensive reform of its own.

The U.S. reform known as the Patient Protection and Affordable Care Act, expands coverage and makes health care less expensive for those disadvantaged in the market. In Germany, the focus of the reform is on containing rising costs resulting from a demographic transition toward an older population. In 2010 the German public health insurance system faced a projected of deficit of €9 billion for the upcoming year. In an effort to combat rising costs in Germany, the *GKV-Finanzierungsgesetz* for insurance reform and the *Arzneimittelmarktneuordnungsgesetz* (AMNOG) for pharmaceutical reform went into effect on 1 January 2011.

These two geographically and economically similar locales provide a notable account of the difference in behavioral views of these two communities regarding cost, access, and quality of health care. This provides the underlying basis for a discussion regarding the importance in understanding and measuring the differences in perceptions of the end user at the regional or local level. The corresponding material is presented as follows. A review of both the United States and German healthcare systems provides a detailed appraisal of both the political and financial differences in their approach to healthcare. This is followed by the methodological approach and detailed result of the analysis. Finally, a comprehensive discussion on the implications and detailed conclusions are provided.

U.S. Health Care System

Both historical and current factors have shaped the U.S. health care delivery system including cultural beliefs, values, technological advances, social changes, economic constraints, and political opportunism, into a complicated and fragmented system. The U.S. health care system is unlike any other health system in the world and recently completing the largest reforms in recent history and is facing a repeal of the ACA reform. Public opinion polls clearly show that Americans are not satisfied with the United States (U.S.) health care system (Shi & Singh, 2015).

In 2009, the Organization for Economic Co-operation and Development (OECD) report that 82% of Americans feel that the health care system needs fundamental changes or a complete reform (Khoury & Brown). The following year the 2010 Harris poll reveals that 6% of Americans rate the U.S. healthcare system as excellent, 27% as pretty good, 39% as fair, and 29% as poor and 48% of Americans responding believe that the U.S. system needs fundamental changes while 34% feel it needs a complete overhaul (Jonas & Kovner, 2010). In 2011, more than half (55%) of those surveyed by Robert Wood Johnson Foundation give the quality of American healthcare a letter grade of C or D (Datz, 2011). In 2013, Gallup's annual Health and Healthcare poll, shows that Americans perceive the quality of the healthcare received as positive and believe the care they personally receive is better than the care provided by the U.S. health care system in general; 79% of American's rate the quality of the health care as good or excellent while only 54% rate the quality of the health care for the entire country as good or excellent (Newport, 2013).

Blinded by the best in the world mythology, health care leaders and professionals are slow to examine underlying factors in professional training and health care system performance which determine how, and how well, the care is delivered. Various strategies and policies to address public concerns regarding cost, access and quality through the decades of change in political philosophies have not fixed the system. There remains serious concern that market-driven reforms have clearly not resulted in a health care system that meets the needs for all Americans. As long as the dominant interest groups, government, employers, the public, and major providers groups continue to disagree on how to change the system in order to accomplish widely desired reforms, the American people continued temporizing.

The U.S. healthcare system historically had spent far more per capita on health care than the rest of the world. Data from The World Bank showed the U.S. spent approximately $9,146 for health per capita (The World Bank, 2015). A watchdog for Canadian universal health policy pointed to the fact that the U.S. spent more than any other country, yet ranked 37th in overall healthcare systems (The Patient Factor, 2016). A 2014 Commonwealth Fund reports that despite spending more money on health care, the U.S. ranks last in overall performance among 11 other industrialized countries in access, efficiency, and equity, and failed to achieve better outcomes than other countries and actually demonstrates far poorer outcomes than many developing countries (Davis, Schoen, & Squires, 2014). This marks the fifth report from the Commonwealth Fund since 2004 and in each report the United States ranks last. The report, expanded from seven countries to eleven in 2010 to include Australia, Canada, France, Germany, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom and the United States.

The U.S. falls short in virtually every category and subcategory reported despite significant increases in

health care spending. The prediction and promise is that with health reform, the United States will be able to make improvements in "delivery, coordination, and equity of the health care system" in years to come (Stremikis, Schoen, & Squires, 2014, p. 4). The Commonwealth Fund reports that although the U.S. does provide adequate and effective care, there remains a deficiency in safety, access, equity, and healthy lives. There also remains a perception among many Americans that despite coverage, cost and other problems in the health care system, the quality of health care in the United States is better than anywhere else in the world (Jonas & Kovner, 2010).

Other industrialized nations have adopted universal health insurance coverage to allow access to health care for all citizens despite socioeconomic status (Commonwealth Fund, 2010, 2014). Access to care by all U.S. citizens remains an issue despite the implementation of the Affordable Care Act (ACA) in 2010 (Kovner & Knickman, 2011). Providers and other health care systems refuse to treat patients who have Medicaid, Medicare, and healthcare plans offered through the Exchange due to the low reimbursement structure (Matthews, 2013). Reform proves difficult when the health outcome for the patient is not the key driver in decision making. In spite of one of the most radical and recent health care policy reformations, the United States health care system remains unequal in access, high cost, and quality outcomes that calls for improvement.

German Health Care

In 1883, German chancellor, Otto von Bismarck, introduces a social insurance model of health care known in the world today as the Bismarck model. The Bismarck model is rooted in the philosophy of national solidarity and is the oldest health care system model. The Bismarck model protects German citizens from health problems by spreading the risk over the whole community (Sawicki & Bastian, 2008). The national government provides the backbone and foundation of Germany's health system. Furthermore, health insurance is mandatory for all citizens and permanent residents in Germany.

Under this model of health care, workers and employers contribute to a social insurance system through a payroll tax proportionate to income (Kover & Knickman, 2011). Premiums are calculated on income only; age, health, and numbers of dependents are not considered (Ridic et al., 2012). These contributions, from the payroll tax, create "sickness funds" that cover medical expenses. Germany's social insurance system includes around 500 "sickness funds" that collects and redistributes payments directly to providers (Ridic et al., 2012). Sickness funds are forbidden to make a profit; workers choose between the competing not for profit sickness funds based on access and quality (Kovner & Knickman, 2011). The statutory health insurance covered inpatient and outpatient hospital care, preventive services, physician services, dental care, optometry, mental health care, physical therapy, prescription drugs, medical aids, rehabilitation, hospice and palliative care, and sick leave compensation (Mossialos, Wenzl, Osborn, & Anderson, 2015).

Nongovernmental and not-for-profit health insurance funds or "sickness funds" compete in the statutory insurance system (Mossialos et al, 2015). Private health insurance can also be substituted in by choice of resident. While the states own most university hospitals and the cities own over half of public hospital beds, they have very little role in the actual delivery of the health care. Private not-for-profit then accounts for approximate one-third of all beds, with the remaining split between various other sources (Mossialos et al., 2015). Every hospital is staffed by salaried doctors who are typically not allowed to treat outpatients. However, if the necessary care cannot be provided by office-based specialists, exceptions may be made. Most regulation is completed by self-governing bodies of the sickness funds and providers. These associations combine to form what is perhaps the most important cog of the network called the Federal Joint Committee (Mossialos et al., 2015).

All employed residents earning less than 54,900 euros per year are covered by the statutory health insurance; all nonearning dependents receive coverage at no cost. Residents who earn above this salary can choose to remain within the statutory coverage or purchase their own substitutive plan. In 2015, over 75% of those above the threshold choose to remain on the statutory plan (Mossialos et al., 2015). The set contribution rate, as of 2015, is 14.6 % of gross wages. In 2008, sickness funds cover health care expenses for approximately 90% of Germany's population (Tanner, 2008). In 2008, Germany's health expenditure was 10.7% of its gross domestic product (GDP) (Sawicki & Bastian). It has since risen to 11.3% of GDP in 2014, well above the Organization for Economic Cooperation and Development (OECD) average of 9.3%.

German physicians typically report higher workloads and longer working hours than physicians in comparable countries without salary compensation. Because the German health care model does not include practice managers or health administrators, physicians spend a considerable amount of time on administrative tasks (Sawicki & Bastian, 2008). A heavy load of administrative tasks coupled with a high caseload of patients result in German physicians having less time to spend with patients. General practitioners (GPs) and specialists in ambulatory care are reimbursed by Socialized Health Insurance (SHI) are by law mandatory members of regional associations which negotiate contracts with sickness funds (Mossialos et al., 2015). These regional associations are responsible for managing care requirements in their region. Yet, "ambulatory physicians typically work in their own private

practices—around 60 percent in solo practice and 25 percent in dual practices" (Mossialos et al., 2015pg.).

There are two facets of the German model that are different than most other countries. The first of these differences is the shared decision-making abilities between states, self-regulated organizations, and the federal government (Mossialos et al., 2015). The second difference is that even though the statutory health and substitutive health sectors are separated, they still use the same providers. While this is fairly similar to the United States, it is vastly different from many other systems (Mossialos et al., 2015).

A German poll on satisfaction with the health care system resulted in 41% of respondents indicating that minor changes in the health care system were needed, 35% that fundamental changes are needed, and 13% that the system needs to be completely rebuilt (Ridic et al., 2012). Interestingly, the same poll in the U.S. shows only 10% of those polled believe that minor changes are needed, 60% believe that fundamental changes are necessary, and an alarming 29% believe that the system needs a complete overhaul (Ridic et al., 2012).

The German Federal Joint Committee, comprised of doctors, sickness funds representatives and patients (equal representation) and three nonvoting impartial members, holds an important management role in the statutory health insurance system. The 2007, health reform meant changes to authority for both sickness funds and the Federal Joint Committee. Sickness funds ceded their ability to set contribution rates to the state. For sickness funds and service providers their "scope for action" and "scope for financial redistribution" had steadily shrunk which in turn limited the power of the Federal Joint Committee (Gerlinger & Schmucker, 2009).

Germany's Bismarck plan is the oldest health care system in the world and the various reforms places this system eerily similar to over 80% of Americans who receive their health insurance through their employer. This change began in 1993 when sickness funds lost their guarantee of existence as members are allowed to choose the sickness fund to belong to. Competition among funds became the driving point for membership. Then, case fees and individual budgets transferred the risk to the service providers; "the new payment models limited the incentives for service providers to expand volume and in some cases even created incentives to reduce volume within the individual case of treatment" (Gerlinger & Schmucker, 2009, p. 8). Gerlinger and Schmucker note that "market orientated management reforms play a growing role in the control of health care processes, and the state intervenes more strongly than ever in the statutory health insurance structures, appropriating a series of important management powers for itself" (2009, p. 17). Views of the German health care system continue to be shaped by personal biases and experiences, culture and behavioral attributes of the individual health care consumer.

The United States healthcare system is ranked 37th by WHO while Germany ranked 25th. U.S. healthcare costs are approximately twice that of the German system. Germans spend $4,495 per person or 11.3% of GDP on health care compared to US which spends $8, 058 per person or 17.7% of GDP (OECD data health 2015). These differences in spending levels across the two regions in conjunction with their underlying social and political contexts provide an interesting starting point to investigate the differences in the perceptions of the end-user of the each healthcare system. To minimize the potential of additional confounding factors, multiple societal and geographical criterion were held constant. Respondents were sampled from a region containing a liberal arts university with a law school, business school and medical school in the Germany compared responses of residents in this university city to responses of those in a liberal arts university with a law school, business school and medical school in United States Midwest with very similar latitudes. Would the attitudes of health care in cost, access, and quality prove to be similar across these two populaitons?

METHODS

To empirically test our hypotheses, data was obtained from a survey instrument administered to the residents in both regions. An *a priori* power analysis using Gpower3.1 (Faul, Erdfelder, Lang, & Buchner, 2007) was performed to determine a minimum necessary sample size of 176 observations (88 respondents per region) for a medium effect size of 0.50, with an alpha error probability of 0.05 and corresponding power of 0.95. The instrument consisted of multiple 1 to 5 Likert-type scale items with anchors orientated from positive responses (1) to negative responses (5). The items of interest to this study focused on the three primary building blocks of patient perception emphasized for measurement under the IHI Triple Aim; cost, quality and accessibility. The initial instrument was designed in English and then translated into German. Next, the German language version was then back-translated into English to verify both consistency of message as well identify potential cultural dialect inconsistencies. Based on this double translation process, minor corrections were made to both the English and German versions of the instrument to ensure that the meanings of each item had been preserved during translation.

Students that participated in a faculty-led program to study healthcare in and near Freiburg, Germany conducted a paper-based survey with the German residents in the Alsace/Black Forrest region regarding perceptions of health care. Those participating in the survey were offered the survey in written form with English on one side and German translation on the other side. Interestingly although each individual approached by the student was asked if they speak English and

nearly all affirmed this; every survey collected in Germany was the German version. A total of 235 usable responses were collected.

The same survey was offered in and near Vermillion, South Dakota in the Great Plains /Black Hills region regarding perceptions of health care. Those participating in the survey were offered the survey in the English only written form; a total of 219 usable responses were collected. The resulting number of usable responses from each of the two populations provides a sample that each exceeds the minimum to ensure adequate statistical power in the analysis. In addition, evaluation of the early and late respondents in both samples revealed no significant differences (Armstrong and Overton, 1975).

RESULTS

Initial multivariate analysis of two groups of responses were conducted through Hotelling's T-square test (Sheskin, 2000) with a computed F-value of 797.688 and corresponding p-value of less than 0.01. Analysis confirms a statistically significant difference at the 0.01 level among the responses across all variables in the two separate populations, the German and US respondents. Additional *post hoc* analysis of each of the three individual survey items provides greater clarity to the differences between the two groups. As seen in Table 1, examination of the induvial survey data reveals a statistically significant difference at the 0.01 level in the average survey response in each of the three items and their corresponding effect size.

Table 1: Multivariate Analysis of German and US Respondents.

	German Respondents		US Respondents		Statistical Significance and Effect	
	Mean	Standard Deviation	Mean	Standard Deviation	Pairwise Comparison	Effect size
In your opinion, how good is the healthcare system in your community?	1.85	.721	2.51	.787	0.66*	0.8744 "Large effect"
In your opinion, how easy is it to access healthcare in your community?	1.77	.782	2.49	.930	0.72*	0.8380 "Large effect"
In your opinion, is the cost of healthcare worth the value to patients?	1.93	.632	2.17	.921	0.24*	0.3038 "Small Effect"
** Statistically significant at the 0.01 level*						

A *post hoc* power analysis was conducted using the realized effect sizes each of the three univariate tests and the associated data parameters. The analysis of the three tests yield a minimum realized statistical power of 0.9435, far exceeding the threshold put forth by Cohen (1988) of 0.80.

DISCUSSION

The three questions from the survey that emphasize patient perception for measurement under the IHI Triple Aim provide as a surprising account of the behavioral views of these two communities regarding cost, access, and quality of health care. The group surveyed in Germany consistently scored their health care system markedly higher than Americans in the population in these three areas. In the area of cost this may be attributed to both fundamental political platform differences to most recent economic factors. Germans in this area embrace socialistic view especially as it relates to education and health care. While at the same time Americans were experiencing increasing costs and/or less coverage from their employer-based health care insurance.

Getting to and receiving health care in Germany presents no barriers to residents except geographic location and even in rural locations throughout the country (and Europe) the public train system is efficient and convenient. Access in the United States can be difficult for a host of reasons the two most common being lack of money which include funds for co-pay or out of pocket for non-insured, services available within approved health system and most importantly, especially in rural areas, transportation to required services and/or lack of services in community. The majority of Americans continue to suffer from moral hazard and a genuine lack of knowledge or even a desire to understand health care. Some may argue that this is by design as a result of corporation's profit margin mentality; others say this is simply the result of the American capitalistic political platform.

The behaviors of communities seeking health care services are the result of personally held opinions that may be rooted in culture. It is these basic foundations that prevent countries from adopting other successful and efficient health care systems as their own. Change is eminent in health care in the United States; legislators and policy-makers should look to other successful countries for suggestions but policy initiatives such as the Triple Aim need to be organically driven with transparency of cost, access, and quality of services at the forefront. Clearly the 37th ranked United States health can glean some insight into the behaviors driving health care at the 25th ranked Germans for half of the cost. Similar latitudes but significantly differing attitudes on health care.

CONCLUSION

The balancing act between the role of government and the role of corporatizations in American health care will once again be in play with the promise of repeal and replace. A key concern should center on the potential issues when attempting to measure the viewpoints of the individual consumer and the potential impact those measure can have on both the creation and implementation of measures to facilitate this newest wave of legislation. As illustrated by the results of this study, cultural norms and societal expectations can directly impact the behavior attributes of the individual consumer of the health care system. Inferences can be made about the importance of culture on the measurement of health care consumer's perceptions and the implications this has upon the perception of any systemic initiative. With the cultural and geographical diversity of the United States, one can draw several potential corollaries that can provide insight into the importance of baseline sampling for any form of policy development and procedural implementation. With the corporatization of American healthcare and the need to show progressive gains to support the various proposed changes, the perceptions of the individual consumer can help exacerbate the acceptance or failure of an initiative at the consumer level across different regions or locations. By being cognizant of the potential for regional and even local differences in the perceptions of the end-user, actions can be taken to measure the true continued improvement of the initiative, instead of a flawed perception of an aggregate measure.

REFERENCES

1. Achieving a High-Performance Health Care System with Universal Access: What the United States Can Learn from Other Countries. (2008). *Annals of Internal Medicine*, *148*(1): 55-75.
2. Armstrong, J. S., & Overton, T. S. (1977). Estimating Nonresponse Bias in Mail Surveys. Journal of Marketing, 14(3): 396–402.
3. Cohen, J., "Statistical Power Analysis for the Behavioral Sciences Second Edition," 1988.
4. Conover, C. (2012). Latimes. Retrieved 28 August, 2015, from http://articles.latimes.com/2012/mar/15/opinion/la-oe-conover-health-myths-20120315.
5. Docteur, E. (2009). How Does the Quality of US Health Care Compare Internationally? Retrieved 28 August, 2015, from http://www.urban.org/research/publication/how-does-quality-us-health-care-compare-internationally
6. Datz, T. (2011). When it comes to quality, new poll shows Americans give U.S. health care low grades. *Harvard T.C. Chan School of Public Health.* Retrieved August 26, 2015 from http://www.hsph.harvard.edu/news/press-releases/poll-us-health-care-quality.
7. Davis, K., Schoen, C., & Stremikis, K. (2010, June*).* Mirror, mirror on the wall: How the performance of the U.S. health care system compares internationally, 2010 update. *The Commonwealth Fund*. Retrieved from http://www.commonwealthfund.org/publications/fund-reports/2010/jun/mirror-mirror-update.
8. Davis, K., Stremikis, K., Schoen, C. & Squires, D. (2014, June). Mirror, mirror on the wall, 2014 update: How the U.S. health care system compares internationally. *The Commonwealth Fund.* Retrieved from http://www.commonwealthfund.org/publications/fund-reports/2014/jun/mirror-mirror.
9. Faul, Erdfelder, Lang, and Buchner, "G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences." Behavioral Research Methods, 2007; 39: 175–191.
10. Gerlinger, T., & Schmucker, R. (2009). A long farewell to the bismark system: Incremental change in the German health insurance system. *German Policy Studies*, 5(1): 3-20.
11. Kovner, R. & Knickman, J. (2011*). Health care delivery in the United States*. Springer Publishing: New York.
12. Khoury, C. & Brown, I.T., (2009) Among OECD Nations, U.S. Lags in Personal Health. Gallup World, March 3, 2009. Retrieved from http://www.gallup.com/poll/117205/Americans-Not-Feeling-Health-Benefits-High-Spending.aspx Jonas & Kovner's (2010) Health care delivery in the United States. (10 edition). New York: Springer Publishing Company.
13. Lende, D. (2012). Why Does the United States Rank So Badly in Health. Retrieved: http://blogs.plos.org/neuroanthropology/2012/08/12/why-does-the-united-states-rank-so-bad.
14. Matthews, M. (2013) When will the Governments Start Forcing Doctors to See Obamacare Patients, Forbes. Retrieved http://www.forbes.com/sites/merrillmatthews/2013/11/25/when-will-the-government-start-forcing-doctors-to-see-obamacare-patients/#2713ec334be6.
15. Morris, MD, M. (2015). 2015 health care providers outlook United States. *Deloitte*. Retrieved August 26, 2015 from http://www2.deloitte.com/content/dam/Deloitte/us/Documents/life-sciences-health-care/us-2015-global-hc-country-reports-011215.pdf.
16. Mossialos, E., Wenzl, M., Osborn, R., & Anderson, C. (2015). 2015 International profiles of health care systems.
17. Newport, F. (2013). Americans' Views of Healthcare Quality, Cost, and Coverage. Gallup. Retrieved August 26th, 2015 from http://www.gallup.com/poll/165998/americans-views-healthcare-quality-cost-coverage.aspx.
18. Schulte, T., Pimperl, A., & Hildebrandt, H. (2015). Comparing Accountable Care Organizations in the Public Sector of the U.S. Healthcare System to the Integrated Care System Gesundes Kinzigtal in Germany and Potential Lesson Learned. *International Journal Of Integrated (IJIC), 151*-2.

19. Sheskin, D., Handbook of parametric and nonparametric statistical procedures, 2nd ed. Chapman and Hall, 2000.
20. Shi L. & Singh D. (2015) Over View of Health Care: A Population Perspective. In Falvine C. & Alakel N. (Eds.), Delivering Health Care in America: A Systems Approach (pp. 3-7). Retrieved from http://www.jblearning.com/catalog/9781284074635/
21. Sutherland, J. M., Fisher, E. S., & Skinner, J. S. (2009). Getting past denial—the high cost of health care in the United States. *New England Journal of Medicine*, *361*(13): 1227-1230.
22. The Patient Factor (2016). World Health Organization's Ranking of the World's Health Systems/ August 16, 2016., Retrieved from http://thepatientfactor.com/canadian-health-care-information/world-health-organizations-ranking-of-the-worlds-health-systems/.
23. The World Bank Group. (2015). Health expenditure per capita (current US$). *The World Bank*. Retrieved August 26, 2015 from http://data.worldbank.org/indicator/SH.XPD.PCAP?order=wbapi_data_value_2013+wbapi_data_value+wbapi_data_value-last&sort=desc.