

Is the Doctor in? The Effects of Emigration on the Health Care Systems in Poland and Romania

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IS THE DOCTOR IN?
THE EFFECTS OF EMIGRATION ON THE HEALTH CARE SYSTEMS
IN POLAND AND ROMANIA

by

GABRIELA WOLK

A thesis submitted in partial fulfillment of the requirements
for the Honors in the Major Program in Political Science
in the College of Sciences
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at the University of Central Florida
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Abstract

The “brain drain” phenomenon encompasses the mass movement of highly educated individuals. Highly-skilled and well-educated migrants are moving to more developed and urban settings, often in search of a higher standard of living and better wages. Since joining the European Union and the Schengen Agreement, Poland and Romania have experienced significant emigration which has subsequently affected their health care systems. Motivations for emigrating from these two countries and the effects emigration has had on patients and other doctors will be considered. The paper also seeks to compare policy responses to the mass medical emigration phenomenon in both countries, as well as the outcomes of such policies. The main methodology of study throughout this project entails a comparative assessment of the governmental policy responses to brain drain. An analysis of Poland’s and Romania’s health care systems will be performed initially.

The analysis includes details on the causes and factors that bring about migration, the impact that emigration has had on patients, how doctors remaining in the sending country are affected, and what social upheavals and unrest result from such emigration. Following, the levels and flows of migration are considered for each country, looking at the type of people leaving, whether educated or not, and the range of professions, with a focus on health professionals that are migrating from both countries. After an analysis has been performed for both countries, the results will be compared to one another, paying special attention to any differences and potential reasons for these differences.

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Introduction

The era of globalization has been accompanied by the vast movement of people and ideas. International migration has grown steadily over the past several decades, seeing an increase from 75 million to 215.8 million in a span of fifty years, from 1960 to 2010 (Gibson and McKenzie, 2011). These trends are not expected to subside anytime soon. Part of these mass migration trends, the “brain drain” phenomenon encompasses the mass movement of highly educated individuals, including relocations across borders as well as within internal borders. Overwhelmingly, highly-skilled and well-educated migrants are moving to more developed and urban settings, most commonly in search of a higher standard of living and better wages.

Due to the investment that many developing and sending countries make in the education of their citizens, the ensuing emigration of these individuals has been of major policy concern. Funds have been allocated towards the free public education of these individuals, which they are expected to repay through several means, such as taxes, or other contributions during employment in their native country. However, when these individuals leave after completing their education, such returns are not actualized. The money that sending states had put towards education fails to deliver the expected economic growth and development.

Being unable to compete with the wages and living standards of developed countries means for poorer or developing countries that it has become increasingly more common for their professionals to seek work in highly developed countries, such as Canada and the United States. While many of the poorer states in the world are plagued by political instability, unemployment, and violence, there always exists a more appealing country elsewhere. Known as receiving states, developed countries also increasingly require the specialized expertise of intellectual

elites, in order to keep up high levels of growth and development. No matter how industrialized and modern their economies are, without the human work power and capital of educated individuals, these assets cannot be utilized to their utmost potential. Therefore, the global competition for an educated workforce is increasing, bringing about the massive migration of professionals and creating numerous challenges for all involved, but especially for poor, developing sending states.

Purpose of Research

This paper sets out to assess the extent to which emigration of medical professionals (brain drain) from Poland and Romania has impacted and affected the health care systems in both countries. These two countries are the largest additions to the European Union from Eastern Europe, and thus could be indicative of trends in other countries of similar backgrounds. Further, they are both developed countries experiencing significant amounts of brain drain, a phenomenon that is most often associated with developing countries, placing them in a unique situation. The emigration and ensuing shortages that Poland and Romania are facing is benefitting the western countries of the European Union, which are recruiting medical professionals to help accommodate their needs, creating an imbalance in the European Union as a whole. The focus of this study will thus be on the motivations for emigrating from Poland and Romania, and the subsequent effects emigration has had on patients and other doctors. Policy responses to the mass medical emigration phenomenon in both countries will be compared, as well as the outcomes of such policies. Both Poland and Romania have seen massive emigration among their health care professionals, accompanied with strikes from remaining doctors within

the country. By better understanding why these individuals are leaving, the two countries could be better equipped to deter further migration, and encourage healthcare professionals to return.

The main methodology of study throughout this project will entail a comparative analysis. An analysis of Poland's and Romania's health care systems will be performed initially, gaining a better understanding of the specifics of each. The analysis will include details on the causes and factors that bring about migration, the impact that emigration has had on patients, how doctors remaining in the sending country are effected, and what social upheavals and unrest result from such emigration. Following, the levels and flows of migration will be considered for each country, looking at the type of people leaving, whether educated or not, and the range of professions and what portion of these professionals are medical doctors. A closer look will then be taken at the health professionals that are migrating from both countries. After an analysis has been performed for both countries, the results will be compared, paying special attention to any differences and potential reasons for these differences. A comparison will also be made of the policy responses that each country had to the crises.

The thesis will be organized in three major chapters: a case study of Poland, a case study of Romania, and a comparison of the two countries and their policy responses. The same information gathered for medical doctors will also be collected for nurses in Poland and Romania. The wages of medical doctors and the amount of patients per doctor is seen to be significantly different from Western European countries. The destination countries of these medical professionals, such as Italy, Spain, and the United Kingdom, are seen to offer higher PPP corrected wages and less inhabitants are present per doctor. These two factors may thus play

a significant role in determining the migration of medical professionals from Poland and Romania.

Push and Pull Factors in International Migration: Remittances, Brain Drain, and their Impact on Sending States

Push and Pull Factors

The increase in skilled migration can be in large part attributed to the globalization of the labor market, and factors for migration are found at both the national and international levels. Migration is a phenomenon that occurs due to several reasons which stem both from characteristics of the sending country and those of the destination country. The varying natures of sending and destination countries allows for the separation of motivations for migration into push and pull factors. The push factors that are most relevant to potential migrants include several that are characteristic of underdevelopment: “poor condition of services, low wages or salary, misplacement of talent, human rights abuse, underemployment, political instability, lack of research facilities,” etc. (Ngoma and Ismail 747). These factors point to elements of corruption and a lack of opportunity for skilled individuals in developing countries to expound upon their education further. Eventually, these individuals will feel as if they have hit a barrier in their own development, and experience a limitation to further education or promotion. When it appears to them that their home country cannot offer them a higher standard of living, brought on by economic development and education, they are inclined to look elsewhere for these opportunities.

When making their choices, immigrants must evaluate the conditions of their potential destination countries. Thus, in accord with the push factors, there is a list of pull factors that attract migrants. These pull factors are characteristics of the destination, developed countries that skilled migrants head towards. These include: “better economic prospects, higher salary and

income, better career expectations, better research facilities, modern educational system and better opportunity from higher qualification, prestige of foreign training, intellectual freedom” and “better working condition” (Ngoma and Ismail 747). These factors represent the qualities that the sending countries are often lacking, and set up the grounds for improvement for the migrant. The higher standard of living that is associated with such factors effectively attract the skilled migrants that are feeling limited otherwise.

When making their decision to migrate, individuals take potential for advancement in terms of their careers and financial situations under higher consideration than any lack of facilities in their country of origin (Kangasiemi et al., 2007). Data from 102 developing countries show that personal advancement, whether it be career opportunities or research facilities, play a leading role in migration. Skilled migrants are attracted to higher wages, though the desire to migrate is reduced when the income gap narrows between a developing and developed country. Education is also seen to play a determinant role in levels of migration. Individuals with higher education levels are found to be more likely to legally migrate across borders and towards more developed countries (Carrington and Detagiache, 1999). Those with tertiary educations, asides from undocumented migrants from Central America and Mexico, had the highest rates of migrations as compared to other education levels in the United States. This shows that OECD destination countries may impact who migrates by showing favoritism towards those that are more educated. Educated individuals seek a similar lifestyle to those professionals in their field and educational bracket living in developed countries. They seek a different standard of living and potential opportunities for their children, which may be more readily available in countries outside of their home. This is why the United States, Australia,

Canada, France, and Germany, all developed countries, account for a grand majority (93 percent) of migratory flows from developing to OECD countries (Carrington and Detagiache, 1999).

Remittances

Remittances are a major area of study in relation to migration. However, disagreements arise over the nature of remittances, and whether or not educated migrants are likely to remit more. More educated migrants may actually be more likely to remit more. Concerns over the continued increase in skilled migration is often associated with equal concerns over a steady decrease in remittances, but this does not have to be the case. Instead, a strong positive relationship is shown between level of education and remittances, indicating that those who obtain higher levels of education, if they send remittances, will send more money home (Bollard et al., 2009). The major factor in these levels of remittances comes not from the family background, but rather from the higher income and wages that are likely to be earned by skilled migrants.

Three major reasons, or motivations, for remittances exist: altruism, exchange, and investment (Bollard et al., 2009). A special focus is taken to one of these, altruism. Altruistic tendencies and considerations often depend on the closeness of family members and their dependency on such additional incomes. While skilled migrants do often travel with more of their family and are also likely to have larger households and significant amounts of relatives in the destination country, low skilled migrants tend to have larger households still in the home country. Education does not have a clear cut effect, but rather depends on the likelihood of returning home. Educated migrants may in fact be more likely to remit more. The household

composition of migrants does not play as significant role in remittances sent home as was previously argued. Levels of income and wages earned instead play a larger role in this outcome. Due to the importance of remittances for many sending countries, and the continual increase in skilled migration, continued research on the effect of education on remittances is recommended.

However, an increase in wages may not similarly increase the amount of remittances being sent to the home country (Faini, 2007). Despite skilled migrants typically earning higher wages, they do not necessarily remit more money as sum. Further, these skilled migrants are likely to spend longer periods of time working abroad and eventually have their immediate family members join them in the destination country. Due to such tendencies, these skilled workers thus also have less incentive or motivation to remit to their home country. In these instances, brain drain actually results in less remittances.

When skilled migrants earn more, their levels of consumption also increase, offsetting any potential increase in remittances. As skilled migrants see increases in their salaries and wages, they will be able to relocate more of their family members. With less family members in the home country, there is less incentive to send back remittances. The balance between wage increases and reunification abilities can determine a net gain and level of remittances. Increasing skilled migration and brain drain may not benefit the sending country with an equivalent rise in remittances. The major reasons for this lack comes from the tendency of skilled migrants to come from wealthier families that do not depend on help from remittances and the likelihood of these migrants to relocate their families.

The Brain Drain Phenomenon

In the literature, disagreements abound over the nature of the brain drain and its effects on sending countries. Arguments exist for both the beneficial or positive and negative or hurtful aspects of these migratory trends. Brain drain has been a significant component of globalization, and though it has become a global trend, it is not entirely consistent for all sending countries. Brain drain is most typically defined as “the emigration of a nation’s most highly skilled individuals” (Gibson and McKenzie, 2011). These migrant movements usually occur from a developing country to a developed country. Brain drain rates tend to be higher for tertiary-educated individuals than for those with only primary or secondary schooling (Docquier and Marfouk, 2005). However, health professionals actually are not as likely to emigrate as other skilled professionals (Gibson and McKenzie, 2011). Overall, the rate of skilled migration has been increasing along with the amount of skilled workers in a country. Education levels have thus been seen to increase in countries, creating a larger pool of skilled workers.

High-skill migration has overcome the migration playing field, becoming the dominant pattern of movement and a major component of globalization. The levels and popularity of such international migration have thus become a significant concern for the sending countries, which are often times developing countries. The pattern of movement has created a situation in which human capital, and skilled labor, is becoming condensed and readily available in concentrated areas, while it is becoming increasingly scarcer where it had already been scarce. Educated migration and brain drain do not affect countries equally, though. Data on push and pull factors show that educated and skilled emigration is not as sensitive to variables of geographic quality, such as distance, and that it is likely to decrease based on the level of development. For instance,

for high-income countries, brain drain is not as responsive to distance and other geographic characteristics. These types of characteristics play a larger role for low income countries (Docquier and Rapoport, 2011).

Several researchers have argued that the brain drain actually coincides with a positive brain gain. Several positive long term effects in sending countries that result from brain drain can be identified. When individuals in a sending country observe the potential to migrate and obtain a higher standard of living, they are more motivated to pursue more education. Not all those that earn these higher levels of education will leave, though. In developing countries, higher levels of education have made workers that remain home more productive. Further down the road, migration results in the beneficial “take-off” of economies (Stark and Fan, 2007). Once human capital is sufficiently high, accomplished through the spread of education, developing economies will be more willing and likely to partake in international trade, assisting in its growth. These beneficial effects are labeled as “brain gain” (Stark and Fan, 2007). Such patterns have already been observed in both India and Ireland.

Three channels through which brain gain can occur are further identified. First, over-education has positive effects on children (who are more likely to attain higher education due to their educated parents). Secondly, “uneducated unemployment” gives the educated more time searching for a job and thus finding a better match for their skills, which eventually improves “the industrial structure of the economy” (Stark and Fan, 2007). Third, the educated workers that remain in their developing countries could increase technological change and development in their home country. The changes may include a readjusted focus on education as well, and positive changes in the economy. This has occurred in some instances in India, where some that

had intended to migrate but failed to do so, were able to attract foreign investment and generate economic growth. Or, skilled emigrants may eventually return home, where they can utilize the skills that they had hitherto only been able to use abroad. Brain drain can thus shape the traditional economies of sending countries and assist in their development.

Migration can further result in positive network externalities. However, positive network externalities can divide developing countries, leaving some behind while benefiting others based on several characteristics. These dividing factors among countries include “the ability of a country to capitalize on the incentives for human capital formation” as well as the ability “to seize the global benefits from having a skilled, educated diaspora” (Docquier and Rapoport, 2011). Therefore, it is not only important to have the human capital and advancement, but also the institutions and capacity to utilize them effectively.

Two conditions are needed in order for a brain drain to be beneficial in the long-term. The first of these is dependent on skill prices. Variation among skill prices ought to remain low in order to still generate strong incentive effects, but should not be on such a low level that educational costs become a hindrance. The liquidity of investment in education, which is vital for the expansion of education, cannot be constrained. If educational costs become too binding, the incentive is gone to invest and to pursue an education (Docquier and Rapoport, 2011). Secondly, the actual probability for skilled migrants ought to be low on sufficient terms. This would mean that more people are getting educated, most likely with the intention to leave, but not a large portion of them are actually migrating out of the country. The relationship between these variables would be strengthened when additional factors, such as career choices or networking effects, are added to the equation.

Some researchers are skeptical that the brain drain is actually beneficial. A survey of immigrant doctors in the UK finds that high-income country migrants have migrating as a goal itself, and incentives for migration to the UK are overall weak (Kangasniemi, Winters, and Commander, 2007). The benefits of brain drain are not plausible in practice due to the regulation that is present in medical professions, which hinder the migration of doctors that may not have a strong family background of education and development. Migrant doctors are far from a random assortment of doctors that vary drastically over educational background, and instead many have received education from top universities. By having already attended a top university, these doctors are likely not coming from the least developed countries, and are more likely to have parents or family members that have pursued similar courses of action. However, brain drain may still hold beneficial consequences when it comes to the balance between education costs and remittances, though this is still unclear.

Another typical consequence associated with brain drain is “a reduction in the ‘stock’ of better-educated individuals” (Stark and Fan, 2007). This reduction then affects the entire sending country by decreasing the average income. If there are less better-educated individuals, there is less competition for positions and employment that requires high skill sets. This lower level of competition provides a lower incentive for employers to pay higher wages, and less of the population is employed in highly skilled professions, subsequently decreasing the average income.

Another negative consequence outcome is that some who have become educated with intent of migrating remain in the developing country instead. These individuals would have otherwise occupied other jobs in the market, but pursued further education. Many end up

unemployed in their home country, and output shrinks. The unemployment of educated individuals is common in many developing countries, though contrasts from developed countries significantly. The “educated unemployment” is mainly caused by the prospect of migrating and attaining a job abroad, which is expected to have higher salaries than occupations in the home country. These educated individuals thus are holding out for a better job, and remain unemployed in their home country. This issue ensues due to the increase in supply of educated workers in a market where the demand for labor remains consistent.

The costs of education lead to further negative consequences of brain drain. In regards to those that have pursued higher education but remain in their home country, “the returns to their education could be less than its costs” (Stark and Fan, 2007). These individuals consider themselves to be overeducated. This education becomes inefficient in the short term, until the home country’s economy has the opportunity to “take off”. The combined effects of “educated unemployment” and over-education and their shared effects on the individuals affected are all taken into account. These effects are directly related to the proportions that a home country holds, where these affected may make up varying proportions of the overall educated population.

After spending a long period abroad, returning back to the sending country can be difficult and full of challenges. Acculturation is an important factor to consider in the study of returners, and it can be defined as “the pattern of interaction between members of majority and minority cultures in the target country” (Tung and Lazarova, 2006). According to Berry (1980), there exist four major modes of acculturation: integration, assimilation, separation, and marginalization. It was further found that out of these four, integration proved to be the most functional, followed by assimilation. Living abroad provides different attitudes and creates a new

culture for returners, who must relearn how to live in their country of origin. This often involves a process of reintegration that can vary drastically from individual to individual.

Overall, returners were more willing to work abroad than in their home country. Desire to leave hinged on the potential for better and more developed career opportunities abroad as well as a better quality of life. These factors, however, greatly depended on the level of the Human Development Index (HDI) of the home country, showing those in the medium HDI countries to be more willing to work abroad again. Despite being natives or familiar with the host country's language and culture, the exposure to foreign practices had a great effect on returners. Returners to medium HDI countries faced greater levels of challenges and frustrations. No major differences were found among gender or for-profit and not-for-profit sectors.

Policy Responses to Brain Drain

Globalization has changed the ways in which governments must face and respond to brain drain. As the rate of medical migration rises, governments must adapt to ensure that deficiencies and imbalances do not manifest within their borders. The current state of professional regulatory institutions and systems, however, has not been updating at the same rate (Epstein 2012). While borders, especially among European Union members, have become weak barriers, the nature of regulatory bodies must change. However, it may be that the “irresistible force of globalisation” is clashing with the “immovable object of bureaucracy” and a more “flexible” model for migratory regulation could be accomplished by turning away from governments and towards the market (Epstein, 2012). Market forces may hold the solution to brain drain.

Regulatory bodies have been closely associated with the expansion of bureaucratic measures due to the eventual plateau of professional development, and thus distinction by status. With limits on professional status, the old model is conversely limited as well. However, rather than be strongly modified or abandoned, the government-based model has “been subverted by inexorably rising bureaucratic intrusion into issues of professional competence” (Epstein, 2012). They have not been successful in managing the rise of medical migration, though, and need to be revisited. In fact, such migration may be motivated by political reasons stemming from the expansion and intrusion of bureaucracy (Epstein, 2012). Due to these limitations and challenges, several countries are altering their medical systems from “bureaucracy-dominated models”, and have adapted an increasingly “market-sensitive culture working together with clinical governance” (Epstein, 2012). These countries have turned to supply and demand relationships in order to maintain migratory balance.

The ultimate solution for developing countries to offset their high levels of skilled migration is difficult to attain when the resources are not readily available. For instance, individuals may be less inclined to emigrate if their country were able to provide “improved conditions, fair remuneration, and education” (Mackey and Liang, 2013). However, these improvements cannot be accomplished without adequate resources, and so in order to maintain a balance between tackling poverty and investments, resource-poor countries would need outside investors (Mackey and Liang, 2013). However, relief funds and organizations have traditionally been focused on specific illness-based assistance, rather than funding for governments to improve social benefits.

A method that some countries have utilized is task shifting, which is the process of decentralizing and delegating tasks from top professionals to those who have less specialized workers. This process is thought to assist in minimizing brain drain by relieving the pressure on healthcare professionals (Mackey and Liang, 2013). This moves the responsibility of tasks from physicians to workers such as nurses and volunteers. Such task shifting has shown a “positive impact on health outcomes,” particularly in the process of diagnosis and treatment while simultaneously reducing costs (Mackey and Liang, 2013). While task shifting may be able to train more healthcare workers, the problem of investment is still present. Proper funding is still necessary to successfully accomplish task shifting.

Some countries, such as Ireland, Malawi, and Thailand, have seen short-term success after reorganizing incentive packages offered to their healthcare professionals (Mackey and Liang, 2013). These packages included higher levels of funding for research, monetary gains and incentives, as well as other areas of assistance. However, although these new incentive packages have resulted in alleviating some migration, it is uncertain as to how long such financial incentives will be effective. Such methods include reworking governmental budgets, which not all countries may be stable enough to accomplish. If they are undertaken, increasing investment in these packages would thus result in cutting back on other spending areas, which could hinder other healthcare services (Mackey and Liang, 2013). If a country is capable of taking on such reforms, though, the financial incentives such as pensions, loans, tax waivers, funding for education and training, can attract and retain vital healthcare workers in various areas (Mackey and Liang, 2013).

Migration is closely related to wage levels, and thus policy based on wage reform can have an effect on levels of migration. Wage rate changes occurring due to policy reforms have a positive effect on the labor supply (Hall, 2005). When governments increase spending, the equilibrium of wages would consequently rise. Since wages, and the prospect of higher wages abroad, are a major determinant of migration, this increase in benefits for healthcare workers would assist in deterring brain drain.

Instances of reactionary policy also occurred heavily in Latin America. After key transitions in the 1990s, the questions of inequality and poverty dominated social issues (Roberts, 2012). Mass protests were seen throughout Latin America, in countries such as Ecuador, Argentina, and Bolivia. Leftists regimes took power in a great majority throughout the region, and a decline in inequality is often attributed to the more leftist responses to the era of post-adjustment (Roberts, 2012). These elements of redistribution signal a move similar to more neo-liberal policies, with a new way of approaching market-based structures and adjustments. However, its new economic shift left the region with low wages and a lack of security towards employment (Roberts, 2012). The population greatly supported market liberalization, though it also favored a key state role in welfare programs. Thus, people saw the benefit of state control over such resources.

Beyond the reforms of individual countries, the World Health Organization (WHO) has also set out to tackle brain drain. In hopes of addressing healthcare professional shortages, the WHO Global Code of Practice on International Recruitment of Health Personnel has recently been adopted (Mackey and Liang, 2013). However, this code is not binding, but rather is upheld on a voluntary basis. Further, it does not effectively address prior losses of health care workers in

member states. This does not go to say that the WHO Code has been unsuccessful, as some high-income countries that are top destination countries for skilled migrants have implemented the recommendations set by the WHO Code. These countries are few, though, and in order to increase the effectiveness of the WHO Code, a method of financing the proposed policies should be explored (Mackey and Liang, 2013).

There has been no standardized set of responses to brain drain. The prevalent push factor for emigration is low wages, and governments have been known to increase wages in certain circumstances, though often not to the degree that has been requested by medical professionals. Ireland, Malawi, and Thailand went further by expanding financial incentives to include funding for research and professional development. The success of such practices is still uncertain in the long term, however. Other methods of reorganization within the health care system has likewise been attempted, such as task shifting, reallocation of funds, and reassessing the role of bureaucracy. Poland and Romania have set out in their own ways to respond to brain drain, but often, the responses have been insignificant or lacking.

Case Study of Poland

Poland joined the European Union in 2004 and the Schengen Area in 2007. Despite the major modernization efforts and European Union funding and aid, Poland has still seen significant amounts of its population migrating elsewhere. By 2007, about 800,000 (2 percent of the population) are estimated to have emigrated from Poland (Krajewski-Siuda and Romaniuk, 2007). Within ten years of joining the Union, Poland saw at least 2.5 million young Poles leave (Baratyzel and McQuaid, 2014). According to surveys and the Polish Chamber of Physicians and Polish Chamber of Nurses and Midwives, an estimated 40 percent of physicians and nurses have considered emigration (Krajewski-Siuda and Romaniuk, 2007). Already by 2007, Poland saw 5 percent of its medical doctors emigrate (Easton, 2007). With the low wages and minimal professional opportunities to graduates, medical personnel have become “overrepresented” among the total Polish emigrants (Leven, 2007). This outflow of these medical professionals had affected and hindered the healthcare system in some regions. As ages of the population continue to increase, the need for healthcare services grows as well.

Little data or research concerning Polish healthcare professionals is accessible. However, it remains evident that there is a limited level of opportunities being provided in the medical sector, and the conditions under which they are available worsens the issue of health care in Poland. The aging population of Western Europe has created opportunities for healthcare professionals, including those in Poland. However, Polish doctors and nurses have been seeking employment abroad due to “inadequate working conditions” and the comparably low salaries that are available to them in Poland (Krajewski-Siuda and Romaniuk, 2007). Polish doctors have thus been seeking opportunities abroad, in particular in the United Kingdom and Germany, for

their employment needs after ascending to the European Union (Krajewski-Siuda and Romaniuk, 2007).

Important to consider under these circumstances are not just the doctors that have left, but the medical students or doctors that intend to leave. As many as 62.1 percent of fifth and sixth year medical students across Poland's universities plan on pursuing employment opportunities abroad after their graduation (Krajewski-Siuda and Romaniuk, 2007). Their main reasons for such plans include the benefit of higher salaries available, better working conditions, and the potential for new and different experiences. The prospects of employment in Poland were not appealing to these students due to the "lack of professional perspectives" offered (Krajewski-Siuda and Romaniuk, 2007).

In order for a medical professional from Poland to practice medicine abroad, they must first obtain the appropriate and necessary documents from The Polish Chamber of Physicians and Dentists. This process was adopted based off the European Union regulations in order to identify qualified physicians, and since 2007, they have been utilized according to the Supreme Medical Council Resolution No 17/07/V (Kordel 299). Due to these documents, there is a tangible means of gaging the quantity of medical professionals in Poland who have intended to migrate. Since the year of Poland's accession to the European Union, 7,323 doctors in Poland were issued certificates (Kordel 299). This indicates that 4.44 percent of all medical doctors in Poland had sought these certificates (Kordel 299). However, this number does not accurately represent the amount of doctors that emigrated from the country. Obtaining this certificate does not guarantee the emigration of the doctor.

As evidenced from the intentions of Polish medical students, it is more likely for younger doctors to leave the country. Indeed, based off of the certificates granted from the Chamber of Physicians, the majority of doctors that sought to emigrate were between the ages of 35 and 45 (Kordel 300). These professionals “are in the best period of their career,” having enough experience to be valuable to patients but young enough to still have obtainable potential and room for growth (Kordel 300). These doctors thus make up a vital portion of all Polish health professionals, and their emigration can have lasting effects on the healthcare sector in Poland.

As seen from sources such as EUROSTAT, the OECD, and EU professional organizations, the rapid increase in emigration of medical professionals following Poland’s accession into the European Union also substantially subsided once salary increases were adopted in response to medical strikes in 2007 (Czabanowska, 2009). Such a pattern in migration may point to a diminishing in adverse effects on the medical sector in Poland, and an overall stifling of brain drain from the country. The correlation between wages and emigration further points to the reveal of the true motivating factors for emigrating from Poland.

Relationship between Emigration and the Medical Sector in Poland

Europe is facing an aging population, and thus physicians are important to accommodate these rising numbers. Countries such as the United States and the United Kingdom are experiencing both lower birth rates and higher life expectancies, creating an increasing need for healthcare (Krajewski-Siuda and Romaniuk, 2007). With such situations in these countries that further provide higher salaries as well as work opportunities, health professionals from Poland are tempted and motivated to emigrate. With about 85 percent of health workers in Poland

having considered migrating westward, and about 3-4 percent having done so, the issue of free movement within the European Union and the effects it plays on the medical sector in Poland must be approached (Krajewski-Siuda and Romaniuk, 2007). One of the leading challenges for the healthcare system in Poland is its ageing population, similar to the situation in other countries (Orlewska, 2011). The ageing population increases the need for healthcare, and thus the costs associated with maintaining the system. However, due to other challenges, the situation is not as desirable in Poland.

The political past of Poland has continued to have an effect on its medical sector. During its communist period, the heavy subsidization of health care occurred. This process came with a large cost for the sector as a whole, however (Leven, 2007). Health care professionals were faced with lower levels of salaries than were even paid out to unskilled workers, and due to the high costs of new drugs, technologies, and treatment, they were largely unavailable to Poles (Leven, 2007). However, the benefit of this subsidization meant that the medical services offered by the state were “free” and open to all citizens. In order for this to be possible, about 8 percent of the Gross Domestic Product in Poland was allocated for its medical sector (Leven, 2007). Thus, in order to provide this free and open health care, the salaries of physicians were largely restricted, despite the years of rigorous schooling, coursework, and training that these physicians had undergone.

The prestige of being a physician was not enough for these Polish medical professionals, and due to the low state salaries that were being offered to them, they turned to “gratitude payments” (Leven, 2007). These bribes came from the patients and were welcomed by physicians who were looking to contribute to their disappointing wages. This corruption that

stemmed from bribes was utilized to assist the patient in the level of care that was received. With the subsidized medical system, the limited availability of medical equipment coupled with the long waits associated with medical services, motivated patients to bribe their own doctors for attention (Leven, 2007).

The system of bribes is an intricate reaction to the low wages of Polish doctors. The bribes stem from the heavy insistence and reliance that these physicians place on working overtime or seeking additional employment in multiple facilities. These healthcare professionals are allowed through sectoral reforms to use state facilities for their private patients in the after-hours, not only creating an extended workweek for the physicians, but also opening the door for a difficult situation for patients (Leven, 2007). The physicians oftentimes abuse these privileges, presenting their patients with two options: to wait for long periods of time for their free and promised health care or, for a fee, to return to that same location at a later time. Polish patients must thus choose between the health services that they can access for free, but which inevitably come with long waiting times, or to save time and pay for the service out-of-pocket. With such situations, Polish physicians are also known to work, on average, longer hours than most others in Europe. The low average hourly pay that they face may in part be due to these many hours, which average about 282 hours per month (Leven, 2007).

Another lasting effect from the time of Poland's socialist period comes from the regional monopolization of medical specializations (Leven, 2007). Small numbers of physicians, as well as their families, had a monopoly over certain specializations, which thus limited the range that these specialists were effective in the country. This process had been institutionalized further by the State Medical Boards, which are responsible for allocating funds for training programs. The

process of determining where these funds go and the number of specialists hired is an entirely internal matter, with no outside scrutiny to attempt to make the distribution more equal across Poland. The regional specialization is not guaranteed by such a system of funding, but it makes it possible (Leven, 2007).

Although the exact effects of physician emigration on the health system are difficult to distinguish, there are certain conditions that can be attributed to such out migration. For instance, staffing shortages can easily arise with the emigration of health care professionals from Poland (Sagan and Sobczak, 2014). In 2009, it was seen that across the country, there were 4,113 unfilled positions for medical physicians, most often positions that required specialists. These same specialists are also those most likely to migrate: anesthesiologists and internal medicinal doctors. Similar shortages are observed for nurses, with 3,229 vacant positions (Wegrzyn et al., 2009). These shortages can pose greater strains on the physicians employed throughout the system, increasing their hours and further diminishing their hourly wages.

Medical Strikes in Poland

Strikes by medical professionals in Poland have illustrated the struggles and challenges that face the medical sector. Nurses and physicians alike have protested their working hours, working conditions, and of course, their wages. In late 2000, Polish nurses began a strike over their wages which went on for several months. The protests were widespread across the country, with about 154 institutions having nurses that stopped their regular work responsibilities (Kovac, 2001). Nurses at the time were demanding that their wages double from the 700 zloty they were earning monthly to an average of 1,400 zloty (\$332). Compared to the average monthly salary of

2,000 zloty in Poland, it is clear that nurses were not earning a comparable amount (Kovac, 2001). Before the protests began, the health minister at the time, Grzegorz Opala, had promised a slight increase in the average wages, an increase of about 203 zloty. This proposed increase was deemed insufficient by the nurses. Disagreements between the health minister and the nurses arose over the nature of the spending being done in health services, with the nurses claiming that money ought to be spent “more wisely” (Kovac, 2001). Without major reform to the spending policy regarding the medical sector, however, nurses may never receive a high enough wage to make them feel that they are earning a living salary.

Similar situations have arisen in Poland over the wages of physicians and doctors. After joining the European Union, Poland’s medical sector had undergone several minor administrative changes in attempts to improve the system. One of the more significant changes came in 2006, when the selection process for the head of the National Health Fund (NFZ) changed (Leven, 2007). The NFZ head is now appointed by the prime minister of Poland, turning the medical sector into a more political institution (Leven, 2007). The concerns felt among medical doctors were not stifled by these limited changes, and in 2007, issues mounted as doctors went on strike, demanding a 100 percent wage increase. They justified such requests with the comparison of their wages to other European countries. In Poland, these doctors often took on other jobs and shifts in private clinics to compensate for their lower wages. Nurses similarly were still dissatisfied with their salaries and went on strike the following year. However, these strikes were not met with the wage increases that were requested. The government stated that such significant increases would not be possible under the current budget. Further, four of the nurses that had gone on strike were fired based off claims that a notification

policy had been improperly followed. Such a reaction by the government indicates a tendency to push the question of increasing medical professional wages to the side rather than appeasing the requests of the protestors.

The Polish government had deep-rooted challenges with medical professionals, beyond the scope of the wage-based strikes led in 2007. Mistrust arose between doctors and the government when the justice minister in Poland in 2007, Zbigniew Ziobro, had Miroslaw Garlicki, a well-regarded surgeon in Warsaw, arrested and charged with murder and corruption (Cienski, 2007). This action had been undertaken as part of the initiative set forth by the Central Anti-Corruption Bureau (CBA). Garlicki's arrest was explained as being performed on the grounds of not only accepting bribes and payments for medical treatments, but also for neglecting other patients that did not pay a bribe. However, Garlicki was not held under arrest for long, for it was soon determined that there was no strong evidence in the case against him (Cienski, 2007).

The arrest had adverse effects on health care in Poland, however. Due to charges made on negligence in a transplant operation performed by Garlicki, there appears to have been a fear among surgeons in Poland to perform similar surgeries. Before Garlicki's arrest, there were 103 transplant surgeries in January while this number fell to 34 in April (Cienski, 2007). The fear was found on both the side of the doctors and the patients. Despite the weak case against Garlicki and the affects it played on medical services, the anti-corruption initiatives of the CBA have persisted. In June 2007, an anesthesiologist was arrested and led out in handcuffs, only to be released several hours later (Cienski, 2007). In attempts to weed out corruption and any who may be involved in it, officers of the CBA have been searching through medical files and calling

patients to confirm information retrieved. Doctors have expressed strong opposition to such actions, claiming it induces heightened terror in the hospital settings and disrupts their work (Cienski, 2007).

The corruption that the CBA and its officials were claiming is not completely unfounded. Due to the low wages, Polish doctors have indeed been accepting bribes from patients to offset the long hours they work for low hourly wages. The long-held tradition of presenting gifts to doctors in the hopes of lessening long waiting times or to show gratitude for exceptional medical attention have continued (Cienski, 2007). These bribes, along with the strike that occurred earlier in 2007, exemplify the need to increase wages for doctors. However, the government has instead begun their attempt to discover and punish corruption within the system that they do not seem willing to fix.

The dissatisfaction with the administration was seen during the 2007 strikes, when symbols from the Solidarity protests in the 1980s were utilized to criticize the changes that were occurring in the medical system (Watson, 2011). Furthermore, key figures from the 1980 Solidarity movement were recruited to strike with the nurses in 2007, driving the strikes to be more symbolic and politically-heated. One of the women that was involved in starting the Gdansk strikes in 1980 compared the two sets of strikes. This woman, Krzywonos, claimed that the nurse strike in 2007 was actually more difficult than the Solidarity strike, which had benefited from a united Polish effort and better weather conditions (Watson, 2011). The government in turn set out to further demonize the protesters, with Kaczynski labeling the striking nurses as criminals (Cienski, 2007).

Policy Responses to Medical Brain Drain

Overview of Reforms in Poland

The brain drain phenomenon in Poland is a relatively recent and ongoing matter. Therefore, typical responses that have been studied in other countries have not become prevalent in Poland's policies or conditions. For instance, information on remittances is limited and the impact they have had on the economy is unknown. Further network externalities and the effects on education are also uncertain and may still be developing and improving as a result of emigration. However, the true changes and significance of these areas will be understood when more time has elapsed.

Poland has undergone several levels of reform throughout the years after the fall of communism. The legal groundwork of the medical sector has experienced two major reformations since the early 1990s, with the 1991 Act on Health Care Units dictating the rules of the system for 20 years, until 2011. Under this system, healthcare in Poland could be in the shape of one of three possibilities: 1) "budgetary units or establishments," 2) "autonomous public health care units," 3) "scientific research units" (Sagan and Sobczak, 2014). The majority of public hospitals were run as budgetary units, covering their cost of operation from their revenue, which mostly consisted of payments from the public (Sagan and Sobczak, 2014). With the introduction of universal health care in 1999, the hospitals were required to change into autonomous public health units. The rapidity with which the change occurred resulted in essentially little or no internal changes for the institutions (Sagan and Sobczak, 2014). Despite the changes, debts of the hospitals continued to grow and it became evident that this system was out-dated and was not functioning sufficiently in Poland.

The healthcare system in Poland is in need of major reforms, and the system often underperforms in relation to others in Europe. According to a survey conducted as part of a Health Barometer Report, Poland scored the worst in the multinational comparison. It finished with a score of 1.9 for healthcare organization, the lowest out of the seven European countries that were surveyed (Orlewska, 2011). How to address these shortcomings is not clear, however. The majority of Poles, about 75 percent, believe that healthcare is not equally accessible to all citizens, but likewise, they are not willing to accept higher taxes to improve the system (Orlewska, 2011). There is also a significant support of increasing private or optional supplemental insurance to offset the imbalance. With the dissatisfaction stemming from the system, policymakers will need to introduce new reforms to improve the system and encourage its medical professionals to remain in the country.

With the limited wages available for Polish physicians, wages become a leading motivating factor for immigrating to countries that offer higher salaries. However, wages are dependent not on legislation from the European Union, but rather on policies from health facilities and the structure of the medical sector (Krajewski-Siuda and Romaniuk, 2007). Poland has not succeeded in substantial reforms in these areas, though, due to a lack in “coherent national policy” in its medical sector (Krajewski-Siuda and Romaniuk, 2007).

After its communist period and as the country turned more towards open markets, there remained a limited amount of funds and political will that could make significant reforms possible (Leven, 2007). The underpayment of medical professions and the limited availability of equipment continued the cycle of corruption and dissatisfaction that plagued the system for both sides – doctors and patients (Leven, 2007). In order to achieve successful reform within the

medical sector, intervention from the government would be necessary. The government must take into consideration several elements: “market efficiency, availability, pressures from different stakeholders, and costs” (Leven, 2007). Further, the Polish public is accustomed to the free universal healthcare system, and is often not willing to sacrifice these services for a “more cost and quality focused alternative” (Leven, 2007). Because healthcare and the medical sector affect the entire nation, enforcing changes to the system are incredibly risky for politicians, and the larger and more significant the change, the more likely it will adversely affect portions of the population. This thus drives the discrepancy between what needs to be done and what wants to be done to improve the medical sector in Poland.

Power has transferred among many parties in Poland. With its socialized medical system, these power transfers among political parties has significantly affected the way in which the system has been modernized and reformed. Each party has had its own agenda and many pursued changes to the system that were often undone by the following party that was voted into power. The challenges that this places on the medical sector is exemplified by the fourteen Ministers of Health that have played a role in reforms in Poland between 1992 and 2006 (Leven, 2007). With these fourteen ministers, Poland had fourteen separate agendas and hands affecting the nature of its healthcare, in ways that often contradicted each other. Combined with the corruption of many high-ranking officials and government employees, the system has been sluggish in accomplishing any lasting or beneficial reforms that hinder medical brain drain.

One of the major changes that the medical system in Poland experienced came in 2003, when regional funding became replaced by a national system, the National Health Fund (NFZ). The NFZ would be responsible for allocating funds to its regional offices, setting appropriate

prices for services, and setting the patient groups that would be eligible for discounts (Leven, 2007). However, the NFZ faced corruption with the nationalization process. It had become evident that the NFZ was not adequately approaching change and handling its responsibility of equally distributing funds among the 16 regions. There were discrepancies in the levels and quality of care received by patients in different regions and by mid-2003, the NFZ had still not been able to transform the care to create equality across the country. Indeed, the fraudulent behavior of the fund caused it to be identified as unconstitutional for its failure in providing equal health care and treatment for all patients (Leven, 2007). The NFZ still remains in Poland, though it has undergone some administrative changes to amend its prior behavior and failures.

Poland has gone forth in attempting to increase the appeal of medical careers within its borders. The country has a significantly lower amount of practicing doctors and nurses than the OECD average (OECD, 2012). One way in which Poland has responded to these shortages has been through medical education reform. Legislation that was approved in March 2011 effectively lessens the amount of time that medical students spend in studies and training (OECD, 2012). Such measures may attract more students to pursue medical careers, though it does not guarantee that they will remain in Poland.

Commercialization of the Health System

Major changes occurred for the medical sector in Poland with the Therapeutic Activity Act that came into effect on July 1, 2011 after the 2008 world economic crisis increased financial pressure on the medical sector in Poland (OECD, 2012). This piece of legislation aimed to

transform the nature of public hospitals in Poland into a for-profit company, in line with Commercial Code companies (Sagan and Sobczak, 2014). These legal changes were expected to improve the financial performance of hospitals and transform them into more efficient bodies. The commercialization process was further implemented with the hope that it would strengthen the management of these institutions, which could not only improve the financial aspects of the hospitals, but thus result in medical professionals becoming more willing to remain in Poland.

The adoption of such legislation was not directly implemented in response to medical brain drain. Its aims were focused on improving the cost efficiency of hospitals, not in attracting doctors to remain in the country. However, by addressing the indebtedness of Polish hospitals, the government allows for creating a situation under which doctors could be more successful at obtaining the wage increases they desire. Furthermore, the conditions under which doctors operate would also improve. Early commercialization efforts of public hospitals showed that the 16 percent that had been transformed appeared to be in improved financial conditions, providing “high-quality health-care services” (OECD, 2012). Although this legislation does not directly address emigration, it does address systemic weaknesses which could consequently improve career prospects.

The 2011 Act was not the first attempt in Poland to transform hospitals into commercial companies. In 2005, the Act on Public Assistance and Restructuring of Public Health Care Units made the state able to assist transforming the system. Once the conservative party Civic Platform gained power in 2007, major attempts were made to begin the process of commercialization, including a failed attempt in 2008 which had been vetoed by the Polish president (Sagan and Sobczak, 2014). With the 2011 reforms, hospitals and health care units were now at risk of

potentially going bankrupt if poor management and financing went too far. This threat was expected to motivate the utmost professionalism in unit management, increasing efficiency and profits. However, this could be accomplished by not only maximizing the usage of beds within the hospitals, but also cutting back on staff (Sagan and Sobczak, 2014). Such conditions could severely affect medical professionals, whose jobs could be sacrificed for the sake of increasing profits.

As seen through other studies performed on the equality of the Polish healthcare system, patients and citizens already consider Poland as not managing an equally accessible system. The 2011 Therapeutic Activity Act could cause this issue to worsen. The Act allowed for institutions to remove unprofitable services from their repertoire, which could further create a system that is dependent on region and institution, one that is intrinsically unequal due to the independence in decision-making of each unit.

Poland's medical brain drain has not been massive, though it has been significant in showing inherent problems within the health care system. Although the government has not directly responded through legislative reform on an effective level, changes such as commercialization of public hospitals may be a start to creating an efficiently-run system. However, the Anti-Corruption Bureau and the unrest that remains among medical professionals needs to be appropriately addressed and managed in order to create an environment within which doctors and nurses feel safe practicing. Similar issues have arisen in Romania, though the rate of medical brain drain has been far greater and the responses less targeted towards creating a more equal system.

Case Study of Romania

On 1 January in 2007, Romania joined the European Union. This accession saw a steady increase in the emigration of medical professionals from Romania, with already 100,000 doctors migrating west between 2007 and 2013 (Feraru, 2013). Further, an average of 400 doctors each month apply to the Ministry of Health to work abroad. With such a flow of medical brain drain from Romania, a shortage of workers becomes evident and many counties suffer from a lack of doctors and specialists. The distrust that has arisen between the government that cannot efficiently manage the medical sector and the youth, and thus including young doctors and other medical professionals, has motivated many to leave the system and the country.

One of the leading factors determining the out migration of Romanian doctors is based on the unsatisfactory level of wages. Indeed, even though the level of confidence within their doctors is high, Romanian patients express dissatisfaction with their doctors' wages and their working conditions, which can in turn affect the quality and length of care. Doctors in Romania strive to improve the recognition and respect which they receive from society and their government, and ultimately increase the potential for professional achievement (Feraru, 2013). The main challenges that doctors face in Romania are their low wages, limited amount of staff for support, and the available technology and equipment.

Other reasons identified by medical professionals for their leaving Romania include “wages, working conditions, promotion, facilities offered by the organization that provides the necessary comfort, socialization opportunities, public recognition of the value of their work” (Feraru, 2013). These factors determine the level of satisfaction felt for medical professionals,

and the challenges faced within the system in Romania cause these levels to often be lower than acceptable for the employees. A sense of imbalance is further felt among doctors when they consider their own experiences and background and what the medical sector in Romania can in turn offer them (Feraru, 2013). A lack of professional development in the region can cause doctors, specialists, and nurses to look for opportunities in other areas. Therefore, with such a situation in Romania, doctors feel motivated to emigrate and search for jobs elsewhere, such as Germany, the United Kingdom, France, and Italy.

According to Vaile Astarastoe, head of the Romanian College of Physicians, such medical brain drain will continue to occur and worsen the health care crisis that is a result of the deficient of medical professionals. The quantity of public hospital doctors has dropped from 20,000 in 2011 to 14,500 in 2013, and unless the government initiates action to improve the conditions, such numbers will likely continue to drop (Stafford, 2014). The issues of wages, professional opportunity, and prestige will need to be amended to appease the motives of emigration. Migration has become an easier task since accession into the European Union, and these EU countries are often the destination for doctors, due to similar cultures and their ability to communicate in other languages (Stafford, 2014).

Relationship between Emigration and the Medical Sector in Romania

Among the Romanian population of 22 million, only about 6.5 million contribute to the health care system (Holt, 2012). At 5.5 percent of their monthly income going towards the state health insurance fund, this does not leave enough money for an efficient system. Patient groups claim that some of the funds allocated for their health care insurance has been lost due to

corruption or mismanagement in the system, creating a further strain on the already limited funds (Holt, 2012). This lack of funding becomes evident in the poor shape of many hospitals across the country, which often lack updated technology and equipment, and difficulties to improve due to the debt already incurred by them. Combined with the understaffing issue caused by emigration, patients are found suffering from poor treatment and requests for bribes.

The outflow of medical professionals is also not balanced across all regions of Romania. There is a large discrepancy between rural and urban areas, showing that in 2011 there were 46,949 doctors in urban areas, or about 89 percent of the total amount. In comparison, only 5,592 doctors were located in rural areas, or about 11 percent (Feraru, 2013). Further, there are reported about 100 rural towns in Romania that do not have a single doctor available. Urban areas are thus seen as obtaining and recruiting doctors from not only the urban universities, but also from surrounding rural areas, creating an imbalance and a disadvantage for patients living in rural areas. The urban settings within large cities are comparable to other centers in western Europe, contrasting with the difficult and imbalanced conditions of rural areas, where doctors are often forced to improvise solutions due to lack of equipment and treatments (Stafford, 2014). Working in rural areas tends to be a last choice for physicians and specialists, who are seen to prefer taking positions as representatives for drug companies or going abroad as preferable to working in the rural parts of Romania (Feraru, 2013). This leaves regional inequality in medical coverage and a shortage of doctors in conditions that are already more difficult to sustain. An exact number of vacancies could not be found for doctors or nurses, though the observable difference between the 56,000 physicians in 1989 and the 39,896 physicians in 2013 points to the shortages that the system is facing (Feraru, 2013).

Even when doctors remain in positions that keep them outside of urban centers, dissatisfaction often arises from their working conditions. Harsh conditions are not isolated to rural settings, however. Romanian doctors often face a lack of medical equipment and treatments for their patients, as well as limited access to medicines (Feraru, 2013). The poor financial structure of the medical system in Romania makes it more difficult for doctors to administer proper treatment to all of their patients, further causing a strain on the respect and recognition they receive from society. Along with these working conditions that can hinder the effectiveness of the treatment, doctors face corruption within the system itself (Feraru, 2013).

Economic reasons are most often the leading causes for emigrating. This is no different in the case of medical professionals emigrating from Romania. The differences between wages in Romania and abroad are drastically different. The average monthly salaries of doctors practicing in Romania range between EUR 500 and 600, while in other countries within the European Union these monthly salaries average between EUR 2000 and 3000 (Feraru, 2013).

Beyond lower wages, the doctor/patient ratio in Romania is significantly lower than in other countries in Europe. In relation to the European Union average, Romanian has one third less medical professionals per one thousand people (Feraru, 2013). The state continues to lose money as it treats its domestically-trained medical doctors as investments. The state is responsible for spending about RON 5,000 each year of schooling as well as RON 21,000 during the residency stage (Feraru, 2013). Over the course of six years, these costs accumulate and about RON 21,000 are spent, the equivalent of EUR 11,300. With such costs going into training and educating doctors and specialists that end up leaving upon graduation, the state is not

receiving any return on the money it has set forth, deepening the financial struggles that the medical sector is experiencing.

Medical Strikes

Medical professionals have responded to their unsatisfactory wages through strikes. In November of 2013, doctors threatened to go on strike. With these threats under hand, Romanian Prime Minister Victor Ponta introduced a scholarship program for resident doctors in Romania. The scholarships would consist of 150 euros per month during the residency of the doctor which would act as an addition to their salary of 200 euros. However, doctors had requested a doubling of their salaries prior to the strike. Doctors and nurses marched through the streets of Bucharest, requesting higher wages and improved working conditions. The demonstrations turned highly symbolic, with crosses and coffins being carried by the strikers to paint an image of the death of the health system in Romania.

These issues persisted through the summer of 2015, when August saw doctors and nurses threaten to strike once more. These striking efforts were a reaction to the Romanian court ruling on bribes, claiming that doctors and nurses would not be legally able to accept such payments and gifts. To appease the doctors and nurses, Prime Minister Ponta increased wages by 25 percent. Prime Minister Ponta stated that if he had the ability to raise wages further, he would have, and that reforms to the health care system were necessary. However, the system of bribery has become one that doctors and nurses have come to depend on due to their relatively low monthly wages. Such a wage increase did not come as an organic reform to the system, but rather as an attempt to stifle a strike.

Romanian Policy Responses to Medical Brain Drain

Similar to the case of Poland, the longer lasting effects of emigration cannot yet be determined for Romania. The consequences typically seen in other countries, such as positive network externalities, increase in levels of education, and remittances are still unclear for these countries. More immediate responses, then, are seen through certain minimal policy concerns or action taken by medical professionals, such as strikes and protests.

The Romanian system attempted reforms that had the potential to place it higher among its fellow European Union counterparts. The European system hold on to the principle of providing universal health care, though beyond this, the application varies across the continent. After difficult transitions in December 1989 with the drastic political change, Romania experienced years of slow health care reform. The efficiency of the Romanian medical system, as all other medical systems, is dependent upon, more than anything else, the level of funding and the effective nature of the usage of such funds. Further, the structure of the population and socio-economic development coupled with the perceptions held by patients are mirrored within the type of policies adopted by the government (Purcărea and Coculescu, 2015).

In order to adopt an effective policy response to the medical brain drain that Romania is experiencing, the government ought to focus on reforming working conditions, salaries, moral, and decentralization of management skills (Feraru, 2013). In order to properly address these matters, the system itself and the organization of its finance need to be restructured. Medical professionals cannot continue leaving the country in such high numbers if the government can hope to amend the flaws inherent within its healthcare system. To keep physicians and nurses

within the Romanian borders, the question of wages, working conditions, and professional development need to be addressed and optimized.

Without significant national reform towards health care policies taking place in Romania, the medical brain drain will continue to grow. There had been a limited response to attempt and stifle such out migration from the country which could not compete with the pull factors of more developed countries to the west (Feraru, 2013). These other countries, such as Germany, Italy, the United Kingdom, and France, have more attractive economic and budgetary policies that appeal to medical professionals leaving countries such as Romania.

Reforms to the health care system have been attempted. In 2012, new legislation failed to pass, and instead was met with massive protests by tens of thousands of citizens in mid-January (Holt, 2012). These protests resulted from the resignation of Raed Arafat, a popular health minister, who was opposed over a health-care bill (Holt, 2012). The legislation and its associated reform were concerned with the nature of insurance in Romania. The proposed reform would have replaced state-controlled health insurance with private insurance. Such reforms were intended to curb corruption that arose from politically linked firms obtaining preferential contracts from the government (Holt, 2012). However, patients and doctors felt that a switch to private insurance would cause health care to become too expensive. With the violent protests that swept across cities in Romania, the bill was withdrawn and Arafat returned to his former position (Holt, 2012).

The government has attempted several times to introduce reforms for the health care system, but they have not been popular among doctors and patients. Reform within the system, though, is not only necessary, but urgent. Doctors' unions and patient groups insist that for

reform to be meaningful and beneficial for Romania, the severe underfunding of the medical sector needs to be addressed, an issue that has previously been deemed by Romanian leadership as not a priority or major concern (Holt, 2012). They argue that simply moving the same amount of funds from one set of hands to another will not solve the issues that have been pushing doctors to leave or request bribes. In order for an effective system to emerge, there needs to be sufficient funding.

Even with years of transitional reforms, Romania has yet to address “the need to increase the volume of system resources, the need to increase transparency, to revitalize the primary health care, to recover the personnel deficit in all major specializations, to eliminate corruption” among other concerns (Drăgoi and Țarțavulea, 2014). The response has been adoption of elements of other systems found in Europe, though without the required commitment on a national scale. They have thus left disappointed effects on the system. Among these failed attempts are those concerning co-payment and merged hospitals.

The co-payment system of health care consists of patients contributing directly to the cost of their medical services. Such a plan is expected to deter patients from seeking unnecessary medical service, as it would cost them (Drăgoi and Țarțavulea, 2014). Such a system, however, puts a strain on low-income citizens, those chronically ill, or high risk patients, who may not be able to afford such co-payments for treatment. A co-payment system would assist in stabilizing health care spending and offset deficits in funding. In Romania, a co-payment system had been introduced without any specific expectations or evaluations, with no estimations made beforehand of the impact that it would have on health care. Further, the co-payment system in Romania was implemented only in primary care. It is an additional charge calculated at the end

of the patient's treatment, and does not apply to emergency care. By applying this additional charge unevenly across services, it encourages within the country a move toward emergency and ambulatory care (Drăgoi and Țarțavulea, 2014).

Romania has also set forth an initiative to reorganize and merge hospitals. However, hospitals in varying counties in Romania showed either a deficit or a surplus of hospital beds, indicating that the resources were there, but they were inefficiently distributed. These imbalances were not taken under consideration during the readjustment attempts, creating an ultimately inefficient merge (Drăgoi and Țarțavulea, 2014). Proper planning had not occurred before merging hospitals. Those with deficits ought to have been coupled to those that were experiencing a surplus, taking distance to patients and specialists into consideration as well. However, the reform had not experienced essential assessment before implementation.

With the lack of a centralized effort to reform the medical sector, Romanian doctors face many pull factors among the other EU member states which significantly contribute to the brain drain. Romania cannot afford to lose doctors at similar rates for much longer. The workforce of doctors has dropped to about 40,000 across the country, making it the lowest density of medical professionals within the European Union (Chiscop, 2013). The slight wage increases and stipends being offered after extensive medical strikes are not enough to maintain its population of doctors and nurses, however. The co-payment and reorganization programs could assist in increasing available funds for the health care system, though their implementation needs to be addressed in an effective and efficient manner. In their current state, they may decrease equality of health services across the country, putting a further strain on medical professionals. Romania

and Poland have thus addressed their medical brain drain in different manners and ought to continue the process of developing a system that satisfies both doctors and patients.

Comparison of Romania and Poland

Assessment of Policy Responses to Medical Brain Drain in Poland

Poland introduced universal health care in 1999, and the transitional period it allowed for hospitals to function as autonomous public health units was limited and insufficient. The changes that occurred did not effectively address Poland's problem of growing debt in the medical sector, and instead the debt continued to grow. This early shortcoming foreshadowed future challenges that the system would face, especially once joining the European Union. The country consistently underperforms in relation to other European systems, has general dissatisfaction among patients, and has high rates of medical brain drain.

The major motivation for Polish medical professionals to emigrate from the country is their low wages. The levels of emigration in turn negatively affect the system as a whole, creating an unequal distribution of physicians and specialists, resulting in staffing shortages. These shortages then contribute to the lack of medical equipment and treatments available to patients, increasing waiting times for medical care and services. With wages thus being the root of the issue, Poland's government ought to address emigration and the main push factors for such out migration.

The Polish system has been lacking a coherent national policy, however, and thus has been missing any meaningful and efficient reform to the system (Krajewski-Siuda and Romaniuk, 2007). The policy set towards medical professionals' wages is not dependent on European Union policy or legislation, and thus must be a national initiative taken on by the Polish government and health minister. Medical doctors have outwardly expressed their

dissatisfaction with their wages not only through emigrating from the country, but also through organized strikes. These strikes point to the inherent challenges, and the extent of such challenges, that doctors and patients face while working in the Polish medical sector.

The Polish government did not respond efficiently to the strikes that medical professionals undertook in 2000 and 2007. The 2007 strikes were especially poorly received, despite their powerful symbolism dating back to the Solidarity movement. These strikes sought to express the need for higher wages among doctors and nurses, and were indicative of the lack of reform that the system had experienced, even with the head of the NFZ being appointed by the prime minister. The issue of long hours and low monthly wages were dismissed by the Polish cabinet as unsolvable under the current level of funding for the system. The request for a 100 percent wage increase was not met under the budget limitations.

However, this lack of response was doubled with a negative onset of reactions by the government. Distrust between medical professionals and the government heightened as four nurses were fired as a result of the 2007 strikes. Further, the introduction of the Anti-Corruption Bureau (CBA) and actions undertaken by Zbigniew Ziobro, the justice minister in Poland saw attacks on medical professionals. Arresting physicians and specialists, such as Miroslaw Garlicki, a well-regarded surgeon, did not resolve or hinder challenges within the system. Such government action through the CBA created fear among both doctors and patients. Surgeons were not as willing to perform surgeries that had led to Garlicki's arrest and patients were more apprehensive of similar procedures. The CBA continued its anti-corruption raid by searching medical files and interviewing patients. Such action on the part of the government has not been an effective means of resolving issues within the system of encouraging medical professionals to

remain in the country. The major corruption charges have arisen from the system of bribes that arose within the system. These bribes are symbolic of the wage-related issues that plague medical professionals. By arresting those who accept these bribes, the government shows its lack of willingness to address the true ailment within the system.

The policy responses by the Polish government have not been an effective means of slowing medical brain drain. The entire system of reform has shown a lack of cohesion and national goals. The rapid transition among Ministers of Health and their unique contributions or redactions has left the medical sector with a disjointed set of initiatives. It has not been successful in responding to the claims of inequality, felt by both patients and doctors. The Therapeutic Activity Act of 2011 set forth a commercialization of the health system in Poland. It hoped to strengthen the management of hospitals and improve financial aspects of their operation. However, by creating a more commercial system, it set forth to accomplish efficiency and cost-saving methods, including maximizing space in hospitals by increasing usage of beds and cutting back on staff. Such policy responses are indicative of the lack of serious attempts to reform the system to appeal to concerns brought up by doctors and patients.

Taking the levels of medical professionals emigrating from Poland and the clear reasons they present even as students for their reasons of leaving, the government ought to pass reforms that would appeal to the voiced concerns. This process must begin with allocating more resources for health care, which has been underfunded and thus suffering inequality, long waiting periods, and shortages as a result. Poland has strayed away from such methods of allocation, though, as their economy has taken a page from neo-liberal philosophy, depending on the free market to solve social problems. This reliance on the free market may be symptomatic of

its recent communist past, and the general distrust of the system that people in Poland still feel. However, this system has not benefited the medical sector. Instead, wages have increased in other areas, such as among the military and banking. While similar policies were successful in Latin America, the perspective of government control and intervention may be key to understanding this discrepancy. The Polish population is fearful of state control over welfare and resources, still remembering the communist past of the twentieth century. Their apprehension may be hindering the true potential of such neo-liberal philosophies.

With more resources headed towards the medical sector, the government could then increase wages in order to remain competitive with the other European Union countries. Further change needs to come with the perception of medical professionals and their relationship with the government. The Anti-Corruption Bureau does not create a work environment that is preferable for such professions, and can easily be avoided by doctors by simply moving abroad. The nature and aims of this government agency should thus be reconsidered and restructured to truly benefit patients and doctors alike, rather than taking an offensive against medical professionals. Such changes would show the initiative to take direct responses to medical brain drain, which has otherwise gone mostly unmentioned.

Assessment of Policy Responses to Medical Brain Drain in Romania

Romania holds some of the lowest paid medical professionals in Europe, and its system falls behind many of its neighbors and co-members of the European Union. It has seen significant medical brain drain, which has placed a further strain on challenges within the sector. Romania's health expenditure falls below 4 percent of its GDP, indicative of an underdeveloped

health system (Drăgoi and Țarțavulea, 2014). Indeed, in Romania, resources are seen concentrated in urban areas, including physicians and specialists. Romania has attempted to resolve the distribution problem its hospitals face by merging hospitals. However, proper assessments and evaluations were not taken into consideration during the process and the mergers were not successful. Hospitals with bed deficits were not appropriately coupled with hospitals that were facing bed surpluses, leaving further conditions that need to be addressed to create an effective system.

The co-payment program that Romania has introduced into its health care system is an effective manner in which to increase available funds to further reform the system. In of itself, though, such a program is not sufficient to fix the inherent problems. For instance, a co-payment system offsets the need for bribes within Romania, which had been deemed illegal by the Romanian Court regardless. Doctors and nurses showed the upset such a decision caused by striking. Co-payment thus does not necessarily change the situation for patients, who must contribute additional funds to receive treatment regardless. It does change who the payments go to, though, and it is no longer directly into the pockets of medical professionals. These bribes had been an important reaction to the low wages that medical doctors receive, and so co-payment programs do not assist them in earning more money.

Romania has also attempted, and failed, to implement an insurance switch. The proposed legislation would have implemented private insurance over state-controlled health insurance. This move was again an action against the corruption that grew inherent within the Romanian system. With the legacy of communism still tainting the medical sector, Romania has a weak private medical sector which has resulted in minimal competition among insurers (Chiscop,

2013). This lack of competition within the medical sector aids in the expansion of inefficiency and further creates a job scenario in Romania that does not benefit doctors.

The privatization attempts were not introduced to deter medical brain drain but rather build contracts with other insurance agencies, and it was thus not held for the initial benefit of patients and doctors. Violent protests resulted from such propositions, while doctors' unions and patient groups claimed that such reforms would not be beneficial for Romania. These proposed changes were viewed as radical under the current system, where Romanians pay 5.5 percent of their income and their employers pay 5.2 percent into the state-run system (Bunduc, 2011). The protests succeeded in delaying any positive action on the proposed legislative reform. Rather than adhering to such requests, the Romanian government has not taken proper action to implement reforms of a different nature.

Rather than taking action to improve working conditions and health care services, the measures undertaken by the Romanian government have been increasing the problem. For instance, in 2009 a law was adopted that aimed to reduce differences among salaries of the health sector and other public sectors but resulted in maintaining the same discrepancies (Chiscop, 2013). Austerity measures further increased challenges in the system. In 2010, under these austerity measures, salaries were cut in the public sector, increasing the frustration and grievances of medical professionals further. These cuts amounted to a 25 percent decrease and included a freeze on any further recruitment to the health care sector (Chiscop, 2013). Such initiatives by the Romanian government do not motivate medical professionals to remain in Romania, but rather act to push them out of the country. It is evident that budget constraints remain within the administration of the health system, however, Romania does not spend as

much on its health services as other countries. A change in the allocation of such government funds may be the first step towards effective reform.

As in Poland, the mention of brain drain has been minimal or nonexistent for the government. It is a problem that needs to be addressed directly, and the easiest way to discover why medical professionals are leaving is through assessing their reasons for continually striking. The issues have been laid out clearly for the government: low wages and the illegality of bribes. Either way, these issues both point to the low wages that are offered to medical professionals in Romania. These wages cannot compete with other European Union member states, which show wages at multiple levels higher. Thus, in order to address brain drain, the government in Romania, as in Poland, ought to allocate more resources to the functioning of the medical sector and subsequently increase salaries for doctors and nurses. More extreme measures may also be available, such as charging individuals who have obtained a free higher education and immediately leave the country. However, as members of the European Union, Poland and Romania would need to fall in line with EU expectations and regulations, and such changes may not be a viable option for these countries. Therefore, they must resort to improving the working conditions, rather than focusing on restructuring the medical sector itself.

Comparison of the Effectiveness of Reforms

The major overarching theme of concern in both Poland and Romania is the low wages offered to medical professionals. Medical doctor PPP corrected wages in 2011 range between \$1498 and \$3222. In Romania, these wages range from \$808 to \$1819. The destination countries

for medical professionals emigrating from Poland and Romania show a significantly higher rate of pay. For instance, the PPP corrected wages in France range from \$4271 to \$7383, in the United Kingdom from \$2052 to \$9155, in Italy from \$4241 to \$9425, and in Germany from \$3652 to \$7098. These differences in wages for the same position across the European Union shows a clear motivation for settlement in other countries.

Table 1 Sending Countries

	Medical Doctor Wages (PPP Corrected Wages, US\$) (2011)	Doctor/ Patient Ratio (per hundred thousand inhabitants) (2003)	Doctor/ Patient Ratio (per hundred thousand inhabitants) (2010)	Strikes of Health Professionals
Poland	1498-3222	250	220	2007 2008
Romania	808-1819	190	240	2013 2015

Data from Eurostat

Further, as seen in Table 1.1, the doctor/patient ratio is low in both Poland and Romania. These two countries share a similar ratio in 2010, with Poland having 220 doctors per 100,000 inhabitants and Romania having 240 doctors per 100,000 inhabitants. These numbers indicate the difficulty that medical professionals face in these two countries as there are greater densities of doctors in the destinations countries for Poland and Romania. As seen in Table 1.1, the ratio of doctors in Romania followed an ascendant trend from 2003 to 2010. Regardless, they are still

below the European Union average of 346.1 physicians per 100,000 inhabitants in 2011 (European Health for All Database). Poland is likewise beneath this average.

Table 2 Destination Countries

	Medical Doctor Wages (PPP Corrected Wages, US\$) (2011)	Doctor/Patient Ratio (per hundred thousand inhabitants) (2003)	Doctor/Patient Ratio (per hundred thousand inhabitants) (2010)
France	4271-7383	340	340
United Kingdom	2052-9155	220	280
Italy	4241-9425	410	410
Germany	3652-7098	340	380

Data from Eurostat

Four of the main destination countries for Poland and Romania are France, the United Kingdom, Italy, and Germany. Table 1.2 shows the doctor/patient ratios for the destination countries that have been popular with Polish and Romanian physicians, and all of these ratios for 2010 are higher than those in either Poland or Romania. The highest ratio is actually within Italy, having 410 doctors per 100,000 inhabitants. Others are similarly ranked, France showing 340 doctors per 100,000 inhabitants and Germany 380. In comparison to Poland and Romania, the United Kingdom is surprisingly similar, with 280 doctors per 100,000 inhabitants. However, such a density of doctors may be causal to the requirement efforts that the United Kingdom has been conducting.

In Europe, Poland and Romania rank among the lowest for density of physicians. Italy and France do not rank among the highest, though they fall in the top half among other European

countries. This similarly relates to the overall ranking that the World Health Organization provided each of these countries. While France was ranked 1st, Italy was ranked 2nd. The United Kingdom was ranked 19th and Germany 25th. However, Poland was ranked 50th and Romania 99th. The higher ranking countries all show much higher densities of physicians as well as more efficient health care systems.

The challenges that Poland faces are generally similar to those faced by the medical sector in Romania. With a history of strikes led by doctors and nurses and their distinct requests for significant wage increases, the main concern in the medical sector becomes evident. However, neither country has responded with effective reform towards wages or the system as a whole. Small increases have been made to wages in both Poland and Romania, but these have not met the requests set forth by doctors and nurses. The level of wages are still not competitive on the European market, and so medical brain drain ought to still be a concern for these governments.

In order to adopt an effective health care system, the financial aspects must be reformed on a national scale. Neither country has committed to extensive national reforms that could properly redistribute medical services in a truly equal fashion. Instead, the reactions have been largely attacking the working conditions of doctors and nurses, mainly through placing restraints and repercussions on the system of bribery that has become prevalent in both countries. Doctors and nurses have come to rely on the personal gifts and payments that patients would offer in return for better, quicker, and more effective treatment. The acceptance of such bribes were criminalized by the Anti-Corruption Bureau in Poland and the Romanian Court, without being equivocally replaced by higher wages.

The reforms seen in Poland and Romania have thus both been highly ineffective in capping the medical brain drain or encouraging return migration. Reforms need to be implemented across the entire medical sector and focus on drastic financial restructuring. Despite patients being opposed to higher contributions on their part, they are necessary to increase the medical budget. Romania has taken a step in the right direction by introducing a co-payment program for primary care in hospitals. This program can offset costs as well as limit unnecessary medical attention sought by some patients. However, the nature of the co-payment program in Romania falls short by not including ambulatory or emergency care, thus opening the door for patients to seek medical attention through these facets instead. Furthermore, the system needs to ensure that it does not disproportionately affect lower-income or chronically ill citizens who may not be able to afford such co-payments. Poland's commercialization reforms are not as positive of an initiative, as they attempt to decrease debt rather than bring in more funds for the system. They have been met with staff decreases and maximizing hospital beds to the extent of inconvenience for patients.

Despite the nature of these reforms, however, an interesting trend has emerged over the past several years. While emigration levels for Poland have come to a plateau, this is not the case for Romania, which sees a steady increase. The cause for such a discrepancy is not clear, though it may be related to the starting salaries for medical doctors in both countries. Poland offers a significantly higher salary to its medical professionals than Romania, and Poland likewise has seen economic growth during the 2008 world economic recession, and thus may be providing a better market for expansion. For Poland, the health expenditure has been slowly rising, though still falls short of the OECD average. From 2000 to 2012, the health expenditure as a percentage

of total GDP rose from 5.5 to 6.8, and thus shows a positive trend that still has room for improvement. For Romania in 2013, the percentage was still just 5.34 percent, well below the OECD average of 9.3 percent.

Both Poland and Romania strove to join the European Union, expecting multiple benefits from working closely with the other member states. The recent EU directive on patients' rights for cross-border healthcare, which was largely introduced in 2013, can have significant effects on the health care that Poland and Romania offer and the health care that their citizens can have access to. This directive leads to the potential migration of patients, rather than just medical professionals. Under the directive, patients are able to seek healthcare away from home and receive reimbursement for their costs. This initiative, although beneficial for patients in areas such as Poland and Romania, with less efficient healthcare systems, provides a lack of incentive for these same countries to improve their systems. If their patients can easily cross borders and receive higher quality treatment, then these countries do not necessarily have to improve and update their systems. Reimbursing their travelling patients may be cheaper and simpler for the governments. The directive thus poses a further element of competition among the countries that fall behind their fellow EU member states.

As other countries in the European Union show, a system with universal coverage is not necessarily one that is run by corruption and inequality. Instead, the health care system should be a priority for the countries, especially when experiencing an aging population, as is the current trend across Europe. The more successful systems are seen to allocate 6 to 14 percent of the national GDP towards health care (Drăgoi and Țarțavulea, 2014). If Poland and Romania want to see a more efficient system within their borders, and to in turn maintain sufficient numbers of

doctors and nurses, they will need to be willing to spend more money on maintaining and operating their hospitals and medical services. Wages need to increase, medical equipment needs to be updated, and treatments should be equally accessible in all parts of the country. Without such reforms, the countries should expect to continue seeing a consistent decrease in their population of medical professionals.

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