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Polish Healthcare System in Transition - Perceptions of the OLD and NEW Systems

Paul Puchta
Wright State University - Main Campus

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Polish Healthcare System in Transition – Perceptions of the OLD and NEW Systems

Paul Puchta

Wright State University
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Abstract

Poland is the largest country in central Europe. During the Second World War (WWII) Poland lost 39% of its physicians. After WWII, Poland fell under Soviet influence. Socialist parties dominated its government until 1989. Poland was the first country from the Soviet block to adopt economic reforms and turn away from centrally planned system.

Poland is presently a stable democracy with a growing economy, and was accepted to the European Union as a full -fledged member in May 2004. Startling results of the population perception of national healthcare system were published in 2013. Polish customers rated current system poorly, giving it 2.8 points on 10-point scale.

The purpose of this research was to investigate how Polish citizens perceive their NEW healthcare system compared to OLD healthcare system pre-1990. Data was collected through semi-structured interviews conducted with customers of the NEW healthcare system who also used the system during communist times.

OLD healthcare system was defined as taking care of all healthcare issues pre-1990. The NEW healthcare system was defined as system that provided healthcare benefits to the general population post-1990.

The research was conducted through face-to-face audio-recorded interviews conducted after Institutional Review Board (IRB) approval. No personally identifiable information was collected. Participants included customers and medical providers who used both OLD and NEW healthcare systems. Interviews were conducted in Polish. Interview recordings were transcribed, translated and subjected to qualitative content analysis. Results indicated that the perceptions of interviewees did not entirely reflect the true situation of the NEW healthcare system.

*Keywords:* Poland, healthcare transition, quantitative analysis, Post Communism Era
Polish Healthcare System in Transition – Perceptions of the OLD and NEW Systems

Background

The Republic of Poland is the largest country in Central Europe with regards to population and area. Covering an area of over 312,000 square kilometers (Central Intelligence Agency [CIA] 2014), the country has borders to the west with Germany, to the south with Czech Republic and Slovakia, to the east with Ukraine, Belarus and Lithuania and to the north with the Russian Federation and Baltic Sea (Figure 1).

![Map of Poland](image)

*Figure 1. Map of the Republic of Poland (CIA, 2014).*

In one thousand years of its history Poland went through very turbulent and difficult times. In the eighteen century Poland disappeared from the European map after it was partitioned by Russia, Austria and Prussia. It regained independence at the end of the World War I (1918) after one hundred twenty six years of nonexistence. A short twenty-year period of relative prosperity ended with the start of World War II (1939). Poland was occupied first by Nazi Germany and within two weeks was invaded by Soviet troops (Engel, 2005). During the five years of Nazi occupation (1939-1945) the country suffered tremendous losses in population and material infrastructure. Poland lost 20% or six million of its citizens including 39% of its
physicians, 30% of its scientists and higher education professors and 26% of its lawyers (Staniszewski, 2009). After World War II Poland fell under Soviet influence, and its government and parliament were dominated by socialist parties until 1989 and the fall of communism. Poland was the first country from the failed Soviet block to adopt economic reforms, turning away from a centrally planned system to a free market economy (Stolarczyk & Laszek, 2012). The Republic of Poland is presently a stable democracy with a growing economy. In May of 2004 Poland was accepted to the European Union as a full-fledged member.

Startling results of the population’s perception of the Polish healthcare system were published in 2013. A survey conducted showed that Polish customers rated the existing healthcare system poorly giving it 2.8 points on a 10-point scale. The same survey reported that of 39% of responders admitted to giving up medically related expenses due to financial difficulties (Europ Assistance, 2013). This manuscript examines the healthcare changes resulting from this turbulent history from the perspective of customers and physicians.

**Purpose**

From 1990 until today Poland’s economy underwent major reforms culminating in a significant improvement of economic status. According to the World Bank, Poland, once one a middle-income country is now classified in a cluster of high-income countries (United Nations Secretariat, 2013). The Polish healthcare system also underwent significant changes since the fall of communism. The old system was centralized and its customers were provided with a “full spectrum” of healthcare benefits (Maria Paczkowska, 2007). However, customers had no authority to initiate systemic changes or healthcare reforms. The average recipient of its benefits was unaware of funding sources required to cover for medical expense such as provider salaries,
medications, outpatient/ inpatient care and rehabilitation. The NEW healthcare system is more transparent and its customers share some of the financial obligations resulting from its provisions. While this may not be an ideal healthcare system in the opinion of its customers, it serves as a good example of a global healthcare system in transition. Analysis of the Polish healthcare reforms may elucidate factors that influence people’s views and perceptions with regards to a national healthcare system that requires its beneficiaries to participate in cost sharing.

The purpose of this research was to investigate how the Polish citizens perceive their NEW healthcare system as compared to the OLD healthcare system during the communist era. This was done through a series of semi-structured interviews conducted with the customers of the Polish healthcare system who used the Polish healthcare system during communist times (pre-1990) and who currently use the system (2013).

**Population Demographics and Health Indicators**

In 2010 Poland was inhabited by 38.2 million people with 61% of its population living in urbanized areas (GUS, 2013). Life expectancy for females (81 years) (The World Bank, 2014b) was slightly less than that in Western European nations from 2009 to 2012, but the same as in the U.S. The life expectancy for male population was significantly lower at 73 years. Infant mortality has significantly dropped since the fall of communism from 16 per 1000 live births in 1989 to four per 1000 live births in 2012 (The World Bank, 2014f), which indicates significant improvement in healthcare. Also the health expenditures per capita as calculated in US$ have increased fourfold in the past twenty years from $199 in 1995 to $915 in 2011 (The World Bank, 2013b).
These positive trends in health indicators of the Polish population are the result of increased wealth and reforms instituted by the Polish government, which views population health as one of its main priorities (Platforma Obywatelska, 2011). The growing affluence of Polish society has also had negative effects: recent studies indicate that Poland has entered into a phase of demographic aging of its population (GUS, 2013). The fertility rate decreased from 2.1 in 1989 to 1.3 in 2011, and the cumulative life expectancy has increased from 71 years to 77 in the same time period (The World Bank, 2014c). As the result of this process the population of Poland has decreased in the past decade (2002-2012). It is estimated that if this trend continues, by 2050 the Polish population will decrease to 31.9 million; that is 6.3 (16.5%) million citizens less than today (GUS, 2012). This implies that the demand for scarce healthcare resources will increase with population aging.

**Economy**

After World War II Poland’s centralized communist government’s economy was strongly based on industry and agriculture. The transition period to the market economy commenced in the 1990s and the years that followed were characterized by a significant increase of the services sector. In 2010, 72% of the Polish Gross Domestic Product (GDP) was attributed to the services sector, indicating that the Polish economy transitioned from what the World Bank describes as a less developed middle-income country economy to a more developed high-income country economy (The World Bank, 2014e).

The last years of the centrally planned economy (pre-1990) were characterized by prolonged stagnation, economic decline and a dramatic increase in the rate of inflation (Marchewka-Bartkowiak, 2011). In 1990 the inflation rate reached three digits and by the end of the year it was estimated to be 588% (Stepinska, 2002). While changes instituted by the newly
democratically elected government led to stabilization of the market, at the same time new reforms caused a substantial decrease in GDP (The World Bank, 2013a). Unintended socioeconomic changes were also observed, including an increase in the unemployment rate that peaked at 20% in 2003 and an increase in the percentage of the population living below the poverty limit (GUS, 2012). Such existing conditions increased the financial burden on a weak economy.

**Healthcare System Review**

The scope of this paper requires explanation of important concepts such as Healthcare System and Healthcare Financing System. The World Health Organization (WHO) (2007) defines a healthcare system as: all organizations, people and actions whose primary intent is to promote, restore or maintain health. This includes efforts to influence determinants of health as well as more direct health-improving activities. A health system is therefore more than the pyramid of publicly owned facilities that deliver personal health services. It includes, for example, a mother caring for a sick child at home; private providers; behavior change programs; vector-control campaigns; health insurance organizations; occupational health and safety legislation. It includes inter-sectorial action by health staff, for example, encouraging the ministry of education to promote female education, a well-known determinant of better health (page 2).

The effective functioning of a healthcare system is sustained by a stable Healthcare Financing System, which is an aggregate of laws, organizations and financial institution that enables a smooth flow of financial resources to sustain normal its functioning (Owsiak, 2002). Every country has a different Healthcare Financing System that varies in its complexity. The methods of collecting and dispersing financial resources earmarked for funding of healthcare
differ among countries and depend upon the model of healthcare. There are four traditional healthcare models that serve as keystones in building the national healthcare systems (Table 1).

Poland’s Healthcare Financing System during the centralized communist government era (1945-1989) was based on the Semashko model, while the post-1990 system follows the Beveridge model.

Table 1. Traditional Healthcare Models*

<table>
<thead>
<tr>
<th>Traditional Healthcare Models</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Beveridge Model</td>
<td>Named after William Beveridge, social reformer who designed Britain's National Health Service. In this system, healthcare is provided and financed by the government through tax payments. Similar to the police force or the public library funding.</td>
</tr>
<tr>
<td>The Bismarck Model</td>
<td>Named after Prussian Chancellor Otto von Bismarck. It uses an insurance system; the insurers are called &quot;sickness funds&quot; typically financed jointly by employers and employees through payroll deduction. Unlike the U.S. insurance industry, Bismarck-model health insurance plans must cover all citizens.</td>
</tr>
<tr>
<td>The National Health Insurance Model</td>
<td>National Health Insurance Model uses private and /or government providers, but payment comes from a government-run insurance program that every citizen pays into. The single payer tends to have considerable market power to negotiate for lower prices or even monopolize the market (A modified NHIM known as Nicolai Semashko model was adopted by Soviet block countries)</td>
</tr>
<tr>
<td>The Out-of-pocket Model</td>
<td>Only high-income countries have established healthcare systems. Many middle and low-income countries are too poor to provide mass medical care. In the poor world patients pay doctors out of pocket or whatever else they may have to give (farm produce, manual labor).</td>
</tr>
</tbody>
</table>

*Source: Reid, 2010

**The Polish Healthcare System**

The Republic of Poland was reestablished after the World War I in 1918, after almost 130 years of non-existence. During the process of independence Poland inherited three different
social care systems because they unified regions previously held by three different world powers: the German system, The Austro-Hungarian system and the Russian system (Paszkowska, 2004). One of the first challenges for the government was the unification of these three systems.

The beginning of Polish healthcare has roots in the same time period. Healthcare in the new republic became the focal point action of the Ministry of Health, Social Care and Protection of Work, which was created in 1918 (Rada Regencyjna Krolestwa Polskiego, 1918). The Ministry’s main function was to fight communicable diseases and to introduce hygienic behaviors in the society.

The first healthcare coverage law was introduced in 1920. Although the German social programs at that time were very advanced and innovative, the Russian social program was underdeveloped, characteristic of an agrarian and poorly industrialized nation (Szafenberg, 2008). The healthcare coverage system it created was modeled on the German healthcare system which uses the Bismarck Model (Cichon & Normand, 1994). The Polish system’s Bismarck model was very similar to the current American healthcare system. It used the insurance system and the insurers were part of what was called Kasa Chorych (“sickness fund”). Employers and employees financed the “sickness funds” jointly through payroll deduction. Regrettably, the “sickness fund” system provided medical coverage only to wage-earning workers (14% of population) (Cichon & Normand, 1994).

In 1934 the “sickness fund” system was transformed to Ubezpieczalnie Społeczne (Social Insurers) in order to cut costs. As a result, healthcare insurance was canceled for a majority of rural workers (Paszkowska, 2004). This systematic change deepened the already unsatisfactory state of health in the Polish population and the public health situation in the country. Poland experienced high adult mortality rates of 13.9 per 1000 individuals and high infant mortality
Before the Second World War there was no universal healthcare coverage in Poland: such privileges were limited only to small groups of white-collar workers and government employees. Health insurance premiums were generally paid by employees and, to a certain extent, by large employers. The state did not participate in the financing of healthcare and healthcare benefits therefore depended on premiums paid by the workers themselves.

After the Second World War (1945), Poland fell under the influence of the communist Soviet Union and implemented a more centralized healthcare model based on Soviet experiences. The adapted model was based on the healthcare doctrines developed by Nicolai Semashko in 1930 (Paszkowska, 2004). In this model every citizen was guaranteed universal access to healthcare and medical services. All health services were financed by the state budget; physicians and medical staff were state employees, medical treatment and medical care were free of charge and the only exception was a small co-payment for certain medications.

Building the universal health coverage system in communist Poland followed four developmental stages, as outlined below.

**Stage One: 1945-1954**

During the late 1940s and early 1950s the unpopular Polish government widened social security and healthcare benefits for the rapidly growing population of post-World War II Poland. This was the communist approach to “wining the hearts and minds” of the predominantly Catholic population. In 1952 the newly adopted constitution of the People’s Republic of Poland recognized the right to healthcare as the essential civil right (Sejm Polski, 1952). However this did not mean that all social groups received universal health coverage; only
the workers of government-owned plants and federal employees benefited from this “universal” health coverage. Independent farmers and their families finally gained access to universal health coverage twenty years after adoption of 1952 constitution (1972).

**Stage Two: 1955-1970**

During this stage the firmly established communist government focused mainly on training of medical personnel and establishing new research and educational institutions. Ten years after the end of Second World War the Polish medical system was still suffering from heavy losses sustained in the number of healthcare providers. Out of 13,300 physicians practicing in 1939, only 7000 survived the war (Glinski, 2011). The demands of the universal healthcare system required a larger professional medical workforce. For the communist government the number of practicing medical professionals was seen as more important than the quality of care (Paszkowska, 2004).

**Stage Three: 1970-1980**

The civil unrest of the early 1970s ushered in new governmental reform. In 1970 the Polish government created a roadmap that provided guidelines for the continued development of the healthcare system and universal health coverage through 1990. A network of *Zespol Opieki Zdrowotnej* (Primary Care Groups, ZOZ) was built during this stage. This was a major systemic development as the main function of ZOZ was to integrate inpatient and outpatient medical care. ZOZ functions also included delivery of social support for elderly and retired populations (Sejm Polski, 1991). In 1972 universal health coverage was extended to independent farmers, as the result of social unrests of 1970. By doing so the communist government mended social differences with the intention of building a more egalitarian society (Podstawka, 2010).
Stage Four: 1980-1995

The backbone of this stage was the improvement of health conditions of the Polish population. The responsibility for healthcare advances fell on the government, employers, and citizens. However, in 1988 the federal government started noting financial difficulties in the normal functioning of the healthcare system. This was the direct consequence of the economic downturn resulting from implementing the communist system. By 1990 the poor economic situation of Poland required quick implementation of free market reforms in the healthcare system recommended by inside forces. However, a lack of political will among the governing establishment and political parties delayed the implementation of healthcare reform for five years (Sawa-Czajka, 2011).

In 1990 Poland successfully transitioned from a communist regime to a freely-elected democratic parliament and market economy after two opposing political parties signed the document known as a “Round Table Agreement” (Trebicka, 2005). Since 2004 the Polish Republic has become a full member of European Union (EU) with constant economic growth. The current government (2007-present), led by the Platforma Obywatelska (Civic Platform Party, PO) introduced a major program of reforms attempting to introduce the market economy to their National Health Insurance model to improve healthcare and living conditions of the Polish population (Platforma Obywatelska, 2011).

Article 68 of the Constitution guarantees all Polish citizens the right to equal access to healthcare services financed from public sources (Sejm Polski, 1997). In the current Polish system, health insurance premiums are collected by two institutions: the Zaklad Ubezpieczen Spolecznych (Social Insurance Institution, ZUS)(Siporska, 2009) and the Kasa Rolniczego Ubezpieczenia Spolecznego (Agricultural Social Insurance Fund, KRUS) (Podstawka, 2010).
The collected funds are transferred to the central account called the *Narodowy Fundusz Zdrowia* (National Health Fund, NFZ). The NFZ is then responsible for contracting healthcare services with institutions and providers using the transferred funds from the ZUS and KRUS. The finances of NFZ are overseen by the *Ministerstwo Finansow* (Ministry of Finance, MF) and its activity by the *Ministerstwo Zdrowia* (Ministry of Health, MZ), which is also the policy maker and a regulator in the healthcare system.

**Structure and Development**

While the level and structure of healthcare financing in Poland has undergone substantial changes since 1990, the percentage of Gross Domestic Product (GDP) allocated to health has remained unchanged (The World Bank, 2014a). The period of the past two decades is characterized by an over six-fold increase in healthcare spending, from Polish Zloty (PLN) 18.5 billion ($6 billion) in 1995 to PLN 123.5 billion ($40 billion) in 2011 (World Health Organization [WHO], 2014). The GDP grew considerably during that period but the GDP percentage devoted to healthcare expenditures increased only by one and a half percentage points (from 5.5% of GDP in 1995 to 6.7% in 2011). Approximately 70% of health expenditures come from public sources. Eighty three and a half percent (83.5%) of these expenditures can be attributed to the universal health coverage (Sikorski, 2011). The second largest contributor to this fund is the federal budget, followed by territorial self-governments. Private healthcare financing comes mainly from out-of-pocket spending that accounts for over 22% of total health expenditures (Krakowińska, 2006).

**Individual Healthcare Coverage**

Poland’s current universal healthcare insurance covers 98% of the population and guarantees access to broad range of healthcare services. However, the inadequate financial
resources of the NFZ means that the entitlements guaranteed by this institution are not always available. Healthcare insurance premiums take the form of tax paid by employed workers. The federal budget covers healthcare premiums for vulnerable groups such as disabled, unemployed, veterans, or those living below poverty level. Premiums are collected and pooled by the NFZ and next allocated to NFZ branches in regional offices. The NFZ regional branches contract healthcare services for the insured and allocate their budgets across various types of medical services. Healthcare providers meeting criteria created by MZ compete for contracts with the NFZ. The amount that providers are paid depends on the bids and eventual contracts with the NFZ, which means that different providers receive different compensation for the same services, even within the same region. Because the NFZ is the only payer in the Polish healthcare system, there is no possibility for individuals to opt out even if they choose to self-pay for healthcare. Cost sharing between individuals and the NFZ is limited to some pharmaceuticals, medical supplies, ancillary medical devices and certain dental procedures. Lists of reimbursable pharmaceuticals and medical supplies have been issued by the MZ since 2009 and have been updated periodically. Selected pharmaceuticals such as diabetes and cancer drugs are provided free of charge by NFZ, but others are not. For more information, interested readers should refer to www.mz.gov.pl/en.

**Healthcare Providers**

In 2009 the Polish healthcare system employed 82,900 physicians, 12,100 dentists, 24,200 pharmacists, 200,500 nurses and 22,400 midwives (Sikorski, 2011) that provided healthcare services. Although there are no dependable assessments on the adequacy of staffing levels, some sources suggest shortage of health professionals. For example, OECD (Organisation for Economic Co-operation and Development) data show there were 2.2
physicians per 1000 population in 2010 (Organisation for Economic Co-operation and Development [OECD], 2013). This indicates to the number of physicians per capita in Poland is therefore significantly lower than in most of OECD countries (3.2), and has been significantly decreasing since 2003. Lesniowska (2009) suggests this is mostly due to so-called “brain drain”, which is healthcare worker emigration attributable to better compensation, working conditions, and prospects for personal advancement available in richer EU countries. In fact between May 2004 and March 2008 over 6,500 qualified specialists left Poland (7.8% of the total workforce)(Lesniowska, 2009). However, other data suggests that there is no shortage. Data from Naczelna Izba Lekarska (The Polish Chamber of Physicians and Dentists) shows that the number of practicing physicians is Poland is 126,815 (Naczelna Izba Lekarska, 2014).

A primary care provider is an individual’s entry point to the healthcare system. These providers direct patients with complex issues to specialists. At each level of care, patients have the right to choose among contracted providers. While referral from the primary care physician is needed to access specialist medical care, there are certain exceptions to this rule. For example, there is no referral needed for obstetric and gynecological or infectious disease appointments. Ambulatory care is provided by outpatient clinics and by medical practices. Because a majority of Polish hospitals provide healthcare services in several specialties, single specialty hospitals (cardiac hospitals, maternity hospitals) are rare.

**Patient Rights Ombudsman**

In 2009 the Polish Parliament (Sejm) established the Office of the Patients Rights Ombudsman to protect patients’ interests. The national legislature replaced the Office of Patient Rights that had been the part of the MZ since 2005 to guarantee political independence of this institution (Sejm Polski, 2009).
The Ombudsman acts independently of the MZ and the NFZ. His position guarantees that patient rights are protected and the office provides support in implementing of these rights. The main competencies of Patient Rights Ombudsman include:

- taking action in cases of infringement of collective patients rights through the actions or inactions of healthcare providers that restrict rights of patients or deprive them thereof;
- taking actions in cases of infringement of individual patient rights and participating in civil lawsuits related to infringement of individual patient rights;
- organizing and managing educational programs aimed at raising awareness of patients rights;
- analyzing patient complaints in order to identify threats to patient rights and areas requiring improvement.

(taken verbatim from National Parliament Bill, 6th November, 2008)

The Ombudsman can impose penalties of up to PLN 50,000 ($15,000) “for any individuals violating patient rights and failing to eliminate the consequences thereof” (Sejm Polski, 2009, p. 19). Every NFZ branch office, as well as the NFZ’s head office, has a Department of Complaints and Requests that deals with patients’ complaints in case of rights violations by healthcare units contracted by the NFZ. These departments function independent of the Office of Patients Rights Ombudsman (Sejm Polski, 2009).

**Population Health Status**

The transition period that started with the political democratization in 1990 shows a significant improvement in the health status of the Polish population. This may be related to social and economic changes that took place in Poland, increased health promotion and public health activities, and reorganization of healthcare services. After a 20-year period of no
substantial improvement in the 1970s and 1980s, Polish life expectancy began to increase in the 1990s and reached 81 years for females and 73 years for men in 2012 (Table 2). Table 2 presents trends in life expectancy Poland and selected high-income countries. There is still a considerable gap between life expectancy in Poland and Western EU countries.

Table 2. *Life Expectancy in High Income Countries 1990-2012*

<table>
<thead>
<tr>
<th>Country</th>
<th>1990</th>
<th>2012</th>
<th>F/2012</th>
<th>M/2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>76</td>
<td>81</td>
<td>84</td>
<td>78</td>
</tr>
<tr>
<td>Czech Rep</td>
<td>71</td>
<td>78</td>
<td>81</td>
<td>75</td>
</tr>
<tr>
<td>France</td>
<td>77</td>
<td>83</td>
<td>86</td>
<td>79</td>
</tr>
<tr>
<td>Germany</td>
<td>75</td>
<td>81</td>
<td>83</td>
<td>79</td>
</tr>
<tr>
<td>Italy</td>
<td>77</td>
<td>83</td>
<td>86</td>
<td>80</td>
</tr>
<tr>
<td>Poland</td>
<td>71</td>
<td>77</td>
<td>81</td>
<td>73</td>
</tr>
<tr>
<td>Portugal</td>
<td>74</td>
<td>80</td>
<td>84</td>
<td>77</td>
</tr>
<tr>
<td>Spain</td>
<td>77</td>
<td>82</td>
<td>85</td>
<td>80</td>
</tr>
<tr>
<td>UK</td>
<td>76</td>
<td>82</td>
<td>84</td>
<td>80</td>
</tr>
<tr>
<td>USA</td>
<td>75</td>
<td>79</td>
<td>81</td>
<td>76</td>
</tr>
</tbody>
</table>

Source: The World Bank (2013)

Also, since the transition to democracy, infant mortality has been markedly declining. The improvements in public health and living conditions, decline in environmental pollution, and initiatives to improve maternal and child health contributed to this change. In 2012 the infant mortality was 4.3 per 1000, which is still higher than the average for Western EU countries (3.0) (The World Bank, 2014d).

**Methods**

The purpose of this study was to determine how the users of the Polish healthcare system view specific aspects of the OLD healthcare system and the NEW system. The OLD healthcare system was defined as the healthcare system taking care of all healthcare issues during the communist regime (pre-1990). The NEW healthcare system was defined as the healthcare
system that took over the responsibilities of providing healthcare benefits to the general population after the transition to the market economy (1990- present). It is understood that change in the provision of healthcare was a continuous process. For the purposes of this study the year 1990 was chosen as the division between the two systems, since it was when initial significant economic reforms were introduced in Poland (Czarny, 2005).

Specific questions with regards to the healthcare system that were of interest were:

1) Does the customer understand financial coverage for clinical services (which party pays for which service, what services are covered and under what circumstances, etc.)?

2) Does the customer understand types of clinical services available?

3) Does the customer understand how to access specific clinical services and waiting times to be seen/get appointment?

4) Does the customer understand the type and level of medication coverage?

5) Does the customer understand how to address their satisfaction or displeasure with current healthcare coverage and the healthcare system?

The study participants are called customers in order to better describe their role in the OLD and NEW healthcare system i.e. people receiving healthcare services.

Hypothesis

The hypothesis generated for this study was:

Current health system users are not fully aware of the past two decades of changes in the healthcare system that have quadrupled the amount per capita spent on healthcare ($197 in 1995 to $915 in 2011) and increased the life expectancy of both men and women by 6 years (The World Bank, 2013b). Infant mortality declined almost fourfold from 15 in 1990 to 4 in 2012.
**Interview Questions**

A semi-structured interview was developed by the author. Interview questions were organized into three separate groups (Appendix A). The first group probed past experiences with the socialist healthcare system. The second group probed recent experiences with the new healthcare system and the third group asked for general opinions. For each question participants were also asked to quantify their statement regarding the OLD and NEW healthcare systems. A two (2) to five (5) point scale system was used because it is traditionally used by the Polish educational institutions to grade students, and was therefore culturally familiar. In this scale, grade two (2) is equal to failure and five (5) corresponds to an excellent score. The questionnaire was written in English and translated into Polish. A Polish linguist and a medical provider reviewed the questionnaire before it was presented to customers.

At the end of each interview I turned the audio recorder off, thanked the customer for their participation and asked if they had any further questions. I subsequently transcribed the interview for use in content analysis.

**Ethical Approval**

I submitted the research protocol for the review by Wright State University Institutional Review Board (IRB) and it was approved in December 2013 (Appendix B).

The primary author (P. Puchta) was the only individual to conduct data collection and to interact with the Polish medical providers and healthcare system customers.

**Invitation to Participate**

Initially, I met with local Polish primary care providers/physicians and asked if they were willing to invite their patients to participate in my study. I provided a full description of my project in Polish including the IRB Protocol and a copy of the Consent Cover Letter (Appendix
C) used to solicit participant consent. I answered questions and addressed all concerns.

Participating providers signed the Provider Permission Form (Appendix D) to document their willingness to invite their customers to participate in my study. They were provided a script (Figure 2) to follow when they invited their customers to participate.

---

The researcher is an American physician currently in a student status at the Wright State University in Dayton, Ohio. He is conducting research of the National Healthcare System access and quality of healthcare. He would like to conduct a face-to-face interview with you, and ask your opinions about your understanding of healthcare and its quality of, which would take no more than forty five to sixty minutes. There is no payment intended for your participation. Here is a letter describing the study and your rights as a participant: it is your copy to keep and consider. If you would like to participate we can make an appointment at your convenience.

---

Figure 2. Script presented to Polish providers.

When the customer agreed to participate, I would accommodate their schedule and met with them at the clinic office at a time set between the customer and clinic office.

**Data Collection**

I met with each customer at the appointed time and place. The face-to-face interview was conducted in Polish (I am a native speaker). I introduced myself and described the purpose of the study. I provided the participant with another copy of the consent cover letter and explained that they had the right to refuse to answer any or all of the questions without any consequences. I explained to the customer that there were no individual benefits; however the results could be disseminated to them through their physician’s office. I asked them for permission to audio record the interview so I could focus on their answers rather than taking detailed notes. I asked
them to refrain from mentioning any personally identifiable information such as age, date of birth, name, name of spouse, etc. during the interview. After they consented, the interview was audio recorded. Each recording was started by documenting the customer’s verbal consent to participate and audio record. I used the semi-structured interview attached to this protocol (Appendix A).

**Results**

Semi structured interviews were conducted in outpatient and inpatient medical facilities belonging to *Poradnia Rodzinna “Zdrowie”*. Participants at the time of interview were either inpatients or outpatients. Also interviewed were providers working at inpatient and outpatient locations. The sample was composed of twenty-three healthcare system beneficiaries (18 customers and 5 providers). The results section analyzes opinions regarding the OLD and NEW system expressed by customers and providers of the Polish health care system.

**Question #1**

First question inquired if the customers used the Polish healthcare system before 1990 (that is the OLD system, before the healthcare reforms were instituted in Poland). The logic supporting this question was that if the customer used the OLD communist system he or she would be able later on to compare the two systems and possibly indicate the positive and negative perspectives of the two systems. Out of the group of 23 people interviewed only one person gave an ambiguous response. This woman responded to the question, “Not necessarily, I was a young woman” (female, provider). This indicates that she was a healthy young person, and probably was seen by health providers only for preventive medical care. The remaining customers were very candid with their responses. They provided very detailed personal accounts of the two healthcare systems. The group included individuals that used all segments of the
OLD healthcare system. It included beneficiaries of special governmental healthcare systems for
military, ministry of interior and national railroad workers. Over 91% of interviewees used the
medical system available for the general population.

**Question #1a**

Question #1a was designed to find out if the customers of the OLD healthcare system had
any knowledge about how the system was financed and where the funding to pay for services
provided came from. Figure 3 shows the results of Question #1a. Eighteen respondents (78.3%)
believed the government centrally funded healthcare. Three respondents (13%) mentioned, “I
don’t know where the funding came from”. Two respondents (8.7%) said that “it was deducted
from my paycheck”.

Those beneficiaries that indicated that they didn’t know the source of healthcare funding
in the OLD system also stated that it was provided at no cost to them. This potentially increases
by additional 13% the group of the beneficiaries that indicated that they received no cost
healthcare.

It is worth mentioning that until 1970 independent farmers – that is farmers that owned
and worked on privatively owned land had to pay for medical services. “When I was giving birth
to my daughter 50 years ago I had to pay for 100% of the hospital stay costs. But that was before
1970” (female, hospital patient). Responses indicate that two (8.7%) customers remembered
paying for healthcare out of pocket prior to 1990.
Figure 3. Source of healthcare funding before 1990, as observed by customers.

**Question #1b**

Question #1b was designed to let the interviewees rank their knowledge about how the OLD healthcare system was financed in Poland before 1990. Figure 4 shows the results of Question #1b. Fifteen (65.2%) respondents described their knowledge of how the healthcare system was financed as satisfactory or below. Three (13%) of interviewees assessed their knowledge as very good or excellent. It is worth noticing that this group consisted mainly of well-educated healthcare providers, and all of the providers interviewed had first-hand experience working in the OLD communist healthcare system. Usually there were meaningful differences between currently employed interviewees and retirees. Five (38%) of currently employed respondents and one (10%) of retirees acknowledged their knowledge of OLD system financing as unsatisfactory. This suggests that the younger population has little knowledge of the OLD system.
Question #1c was designed to allow interviewees express their knowledge about available clinical services in the OLD healthcare system. The people interviewed were also encouraged to provide information on additional costs incurred for services provided. A majority of twenty (86.9%) interviewees said they had a good grasp of available clinical services and stressed that all services were provided free of charge. Three (13.1%) said that they either did not know what services were available or that they did not care much about it. Five of the interviewees mentioned the existence of privileged groups in the old system. The privileged groups had better quality of care than the general population. Included in this group were: higher government employees, military, police, national railroad workers, coal mining industry workers and employees of the national healthcare system. The first five groups had separate healthcare systems that were financed from the budget of appropriate ministries (Ministry of Defense, Ministry of Interior, and Ministry of Health). These separate healthcare systems had newer and better-equipped hospitals, pharmacies and rehabilitation centers. Only people employed by these
organizations and their families had access to medical facilities owned by the appropriate ministries. Further, employees of the national healthcare system had extra benefits, regardless of their position in the system, such as priority to access specialist care and no-cost pharmaceuticals.

**Question #1d**

Question #1d asked customers to provide information and rate how well they understood range of available clinical services in the OLD system. This question generated relatively confusing responses. Even with clarification the respondents avoided the direct answer of assessing their own understanding of the available range of clinical services and rather provided their assessment of access to clinical services. It is worth noting that the meaning of the question was lost in translation. The external reviewer double checking the Polish translation unintentionally changed the meaning of the question from one that assessed the customer’s knowledge of the available clinical services to one that asked the respondents to provide an assessment of available clinical services. This change however provided more information than the original question. It enabled respondents to voice their opinion about the OLD system and available clinical services. Fifteen (65.2 %) of the respondents assessed the OLD healthcare system as very good or better than the NEW one. Seven (30.4 %) respondents assessed the OLD healthcare system as satisfactory or better. One (4.4 %) respondent had a completely negative opinion of the OLD system. Nineteen (82.6%) of people assessed the system as providing clinical services as better than satisfactory, meaning that the respondents were satisfied with the available clinical services in the OLD system.
Question #1e

Question #1e asked customers to express their knowledge and opinion on access to primary care in the OLD system. All customers repeated that they knew how to access primary care providers and how to schedule a visit or follow-up appointment. The main topic explored was not the knowledge of how to access primary care providers, but how easy it was to schedule appointments or follow-up visits in the OLD system. Twenty (87%) of customers reported good access to primary care. One (4.4%) did not use primary care services and two (8.6%) reported that it was harder to access primary care before the healthcare reforms. The majority of customers commented on their familiarity with the system and the ease at which appointments were scheduled. “I did not have to wait, I was seen the same day by a physician”; “I only had to wait a couple of minutes to be seen by my doctor” (male, hospital patient); “All I had to do was to show up in the clinic, no fancy scheduling or calling the reception” (retired male). The customers did not comment on the quality of care provided, as the quality of care was not an issue for people living in communist Poland. It was considered more important to be seen by qualified personnel. The most important fact for beneficiaries was that they did not have to wait for lengthy periods of time before seeing a provider. They stressed they had same day services without the need to schedule the medical appointment either by telephone or by showing up in the office in person to schedule a medical appointment.

Question #1f

Question #1f asked the customers to rate the accessibility to primary care providers in the OLD system. Figure 5 shows the results of Question #1f. Twenty (87%) of customers were satisfied with the access to primary care services. This group was equally divided with 50% agreeing that the access to primary care was very good and 50% saying that the access was very
good or even excellent. Seventeen (94%) of beneficiaries rated the OLD system as satisfactory of above. There were no unsatisfactory ratings among beneficiaries of the OLD system.

Figure 5. Access to primary care services as understood by beneficiaries and providers.

Customers stated that a majority of the visits were provided on a walk-in basis, which is much different from what happens in high-income countries. “I live in a rural area and all I had to do was show up in the clinic to receive care, no advance calling, no unnecessary scheduling” (female, hospital patient). “We only had one telephone in our village and it was at the post office” (female, beneficiary). It is implied that older customers might be anxious to use new and unfamiliar technologies, even if it’s only a cellular phone, and that prefer social interactions with other people. This is not surprising, given that in 1990 Poland had one of the lowest telephone availability rates in Europe (133 telephones /1000 population) (GUS, 2014). This means that only 10% of population had access to telephone at home. By the end of 2013 there were 54.85 million cell phones in Poland; that is twice as many as in 2003. Statistically there were 1.5 cell phones per capita in 2013 and 93% of businesses had access to the internet (GUS, 2013).
**Question #1g**

Question #1g asked customers to provide their opinion on the accessibility to specialist and hospital care in the OLD system. All customers who used the OLD system were knowledgeable about how to obtain specialist and hospital care. The opinions about specialist care can be divided into four perspectives (Figure 6). Group one (the smallest n=1) was totally dissatisfied and said that specialist care did not exist in communist Poland. This group is represented by a single male provider who said, “Practically, specialist care did not exist. The health system was totally backward because of the lack of funding and advanced diagnostic apparatus”. Group two (n=4) encompasses younger healthy customers that did not need specialist care, because they had no major health issues. Group three (n=2) included customers that disliked the OLD system because it was hard to access specialists. The largest was group four (n=16) who liked the OLD system and the ease by which a patient could access specialist care.

“Before all I had to do is, go and see my primary care doctor. He gave me a note and with his note I was accepted in the hospital. To see a specialist I did not need a referral. I went to the specialist and waited in line” (male, outpatient). It was common for the patient to self-refer themselves to specialists when they believed their sickness was beyond the scope of primary care physicians. Figure 6 portrays access to specialist care in the OLD system as seen by the customers.
Figure 6. Access to specialist and hospital care before 1990 as reported by customers.

Question #1h

Question #1h asked customers to evaluate specialist and hospital care in the OLD system. The overall rating of the specialist and hospital care was no surprise. Seventy percent retirees and 60% of hospital patients evaluated the ease with which they could access specialist and hospital care as excellent. Overall every group of customers preferred the OLD system and the ease with which they could access specialists and hospital care. Apart from one provider, none of the customers commented on the quality of care provided by specialists working in the OLD system.

Question #1i

Question #1i evaluated customers’ knowledge about medication coverage and payment system in the OLD system. This question provided wide range of responses. One (4.3%) customer did not see any difference between the previous OLD communist system and NEW system regarding provision of medications for its beneficiaries. This respondent was a male who said, “I believe the access to medication was the same as it is now, no major problem”. Eight (35%) of the customers believed that medications were cheaper in the OLD system. “There were plenty of medications and the medications were cheaper. Now medications are expensive and not
everyone can afford them” (male, outpatient). Two (8.7%) respondents indicated that they could previously purchase medication at a discounted price. “The price of medications were significantly lower. My father was in the military and we did not have to pay for any of the medications, or for imported medications, only retain portion of its costs” (female, provider). Three (13%) respondents received medications at no cost to them. “I can only say that I did not have to pay for medications. I worked for the healthcare system and we received our medications free of charge” (female, hospital patient). Six (26%) respondents commented that the OLD system was adequate for their needs. Three (13%) customers were dissatisfied with the OLD system, saying that the medications were not available or hard to get. Overall, 82% (19) customers were satisfied with the OLD system. Two statements summarize the general feeling of the nineteen who were satisfied. “Our income and salaries were lower than today, but we were able to afford to pay for medications, not like today” (male, outpatient). “The price of medications was lower and it was easier to purchase them, not like today where we have to worry whether we will have enough money to pay bills” (female, outpatient).

Question #1j

Question #1j asked customers to rate medication coverage and payment system as it existed before the healthcare reforms. Nineteen (83%) customers rated the system as “very good” or “excellent”. Two customers evaluated the quality of medication. One stated that, “Until the reform we used medications that did not prolong life. Those were very simple medications that treated the symptoms but not the cause of illness” (male, provider). A majority of the respondents focused more on the price of medications rather than the quality. “Medications were available to the general population. I am not a pharmacist but those were good and cheap tablets”(female, outpatient). It is worth noting that the preponderance of
medications available on the OLD market were locally manufactured by government owned pharmaceutical companies. After the integration of the Polish economy with the European Union more than half of the pharmaceuticals available on the market are manufactured by multinational companies (Horodecka, 2012).

**Question #1k**

Question #1k asked customers to comment on how well they understood the process of expressing their dissatisfaction with the OLD healthcare system. Thirteen (56.5%) respondents did not know how to or where to address their medical complaints. The most common response is exemplified by two statements: “I did not know how or where to complain, because I did not have to do so” (female, inpatient); “I was not interested in this matter. There were no problems with healthcare providers before like now” (male, outpatient). Only 4.3% (1) of all of the customers attempted to criticize quality of care and professionalism of OLD system medical providers. In one case the customer complained to the attending physician, but no action was taken. The customer was embarrassed to talk about the incident and asked for the audio recorder to be turned off. In general interviewees reported that the health profession is a vocation and a “calling” and a person should therefore not complain about a doctor. This is similar attitude as is held of priests. One customer stated, “I would not complain about my pastor. How can I complain about my doctor?” (female, inpatient).

**Question #1l**

Question #1l assessed customers’ knowledge how to complain about shortcomings of the OLD medical system. Eleven (48%) customers said their knowledge was unsatisfactory. Six (26%) respondents assessed their knowledge at the satisfactory level, and 26% (6) assessed their knowledge ranging from very “good level” to “excellent”. Most of the respondents that assessed
their knowledge as “very good” or “excellent” have been or are currently employed by the Polish healthcare system.

**Question #2**

Question #2 asked if the interviewee was a customer of the Polish healthcare system after the introduction of health reforms that is of the NEW system. All of the interviewed people confirmed having used the reformed healthcare system; therefore they can be characterized as customers of the NEW Polish healthcare system. None of the interviewees were using the special government medical system available for military and ministry of interior employees. It is worth noting that these systems, previously closed to the general public, are now open to all beneficiaries of the NFZ (National Health Fund). The NFZ is the single federal payer providing funding for the NEW healthcare system. The National Railway Healthcare System was dissolved and its hospitals now incorporated within the NFZ system (Sobolewski, 2014).

**Question #2a**

Question #2a was designed to find out what the customers know about financing of the NEW reformed healthcare system. Four (17.4%) of the interviewed customers did not know and could not name the funding source of the NEW healthcare system. This group made generalized statements such as, “A premium is charged from my wage that covers all medical costs” (male outpatient) or “Now the funding goes towards the NFZ but, where the funding is coming from I really don’t know” (female, retiree). Nineteen (82.6%) of the interviewees said they are knowledgeable about funding sources. Respondents in this group mentioned that a certain percentage is deducted from their salaries or retirement and is applied toward healthcare insurance. The respondents were very outspoken in their statements and opinions that not everybody is giving an equal share into the NEW healthcare system. “The farmers are not
paying enough into the NFZ system” (male, outpatient). “Some social classes like military and police don’t pay at all into the system” (female, outpatient). There is a discussion in Polish society as to the unequal premium payments for provision of healthcare. The average worker earning monthly of PLN 2,500 ($850) pays PLN 700 ($240) in Social Security and Healthcare taxes (GUS, 2012). The average farmer is taxed according to the size of his farm rather than on the basis of his income. For the average Polish farmer, a monthly premium is PLN 87 ($30) (Podstawka, 2010). The unequal premium payment by citizens is a source of social tensions.

There was also voice of discontent from a customer that lost “privileged” healthcare benefits. The National Railway Health-care system was absorbed by NFZ in 2009 (Sobolewski, 2014). The customers of this National Railway Health-care system enjoyed benefits similar to those available to military and police. Under NEW reformed system they lost their privileges and are considered as a part of general population.

**Question #2b**

Question #2b asked the customers to evaluate their knowledge about financing of the NEW healthcare system. Three (13%) of respondents estimated their knowledge as unsatisfactory and 56.5% (13) of respondents estimated their knowledge as satisfactory. Eighty percent of retirees assessed their knowledge just as satisfactory, which is double that of the working population. Similarly, the assessment of unsatisfactory knowledge was double of that in the working group. Five (21.8%) and two (8.7%) respondents evaluated their knowledge of healthcare financing as “good” and “very good”, respectively. There were no respondents who reported that they have “excellent” knowledge of healthcare financing system. Respondents indicated that there should be more information available to the public about how the NEW healthcare system is funded and identifying the funding sources. “I mean that my knowledge
about the funding of our healthcare system is average. I would like to see more programs on television addressing this issue. However, I estimate my knowledge of this issue as good” (male, retiree).

**Question #2c**

Question #2c was designed to evaluate knowledge of the customers regarding the cost and availability of clinical services in the NEW system. The analysis suggests that the customers can be divided into four groups. The first group (21.7% [5]) includes customers that do not know what services and what costs are incurred by patients. “I don’t know. I have never given much thought to this issue. Maybe NFZ covers all costs” (male, outpatient). The second group (47.8% [11]) believed that all clinical services are provided without any additional cost. “I think that according to the constitution of our country currently everything is covered without additional costs” (female, provider). The third group (21.7% [5]) believed that customers incur partial costs. “Theoretically we have a basket of guaranteed procedures. Some procedures and treatments I have to pay by cash, like the last visit to the dentist” (female, provider). In the fourth group, (8.8% [2]) stated that customers incur all costs. “Currently you have to pay for everything and the scope of procedures performed is proportional to the wealth of the patient” (female, outpatient). The NEW reformed healthcare system accepts the component that some of the healthcare cost is incurred by its customers. This is done either in the form of healthcare tax and social security tax deducted from salary, retirement and in the form of copayment for medications. The NEW healthcare system has a limited annual budget and there can be lengthy waiting periods for costly procedures. It is customary for patients who want to speed up the waiting period to have costly diagnostic procedures performed at private institutions. The cost of such procedures is incurred by the customer and is non-reimbursable by the NFZ. Wealthy
customers also complain that these incurred costs are not tax deductible. As one of the customers said “I pay for the healthcare twice: once when I am taxed by the government and the second time when I pay the doctor out of pocket. This is not a fair treatment of hard working people by this system” (male, outpatient).

**Question #2d**

In Question #2d the customers were asked to rate their knowledge about available clinical services in the NEW system. The customers were divided into five groups. Group one reported unsatisfactory knowledge (17.4% [4]). In this group the customers voiced their disappointment because some of the services requested were not covered by the NFZ insurance. “My infertility medications and infertility procedures are not covered by government provided health insurance. Therefore I will rate it as unsatisfactory” (female, provider). Group two reported satisfactory knowledge (43.4% [10]). Group three rated their knowledge as “very good” (21.8% [5]). One of the customers explained her reasoning: “My daughter is a medical doctor and I believe I can rate the system as very good” (female, inpatient). Group five (17.4% [4]), gave “excellent” ratings to the system for the new and expensive technologies. “There are new and technologically sophisticated cardiologic procedures that are at no cost to the patient nowadays. This is a great accomplishment of this system” (male, provider).

The present government in Warsaw understands the weaknesses of the current healthcare system (Platforma Obywatelska, 2011). However, the government looks at the population as a whole and not from the perspective of the individual. It encourages changes in the branches of medicine were it can receive the largest return on investment. The health indicators demonstrate that the greatest improvement in the morbidity and mortality can be obtained by decreasing the burden of non-communicable diseases, especially by decreasing the prevalence of ischemic heart
disease, stroke and cancer. This is the reason why the government is largely investing in cardiology and oncology. According to the latest news reports 2014 is the year when cardiac and oncologic procedures are going to be streamlined with minimal waiting periods experienced by patients (Ministerstwo Zdrowia, 2014).

**Question #2e**

Question #2e asked the customers to provide their opinion about access to primary care in the NEW healthcare system. There are three characteristic groups of customers. Group one, (17.4% [4]) did not see any difference between the access to primary care before 1990 and now. “I believe that the access to primary care is similar to that during the communist era” (male, outpatient). Group two (43.5% [10]) believed that after the reforms in the healthcare system the access to primary care improved. “I think that it is easy to obtain an appointment with a primary care provider. On the other hand, obtaining an appointment with a specialist is a completely different issue” (male, outpatient). The respondents in this group were younger, better off financially and had better access to cellular phones. “To get an appointment all I have to do is call the registration from my cellular phone and come to the office on time” (male, outpatient). Group three (39.1% [9]) believed that the access to primary care providers has worsened in the NEW system. This group is comprised mainly of older, poorer patients with more health issues. Customers indicated that they were more comfortable with the OLD system. “For me access to primary care has significantly worsened. I have to get up at 5 AM to come to the registration office and wait in line until 7 AM when they open the registration. Some people will call and schedule the appointments, they know how to play the system” (male, retiree). The providers taking care of older customers suggested that the NEW system in not working for their patients, noting that patients do not understand the concepts of different acuity and priority as utilized by
primary care providers. “Sometimes I have to see 60 patients that come with fever to my office”
(female provider). “Last night I got called in for menstrual cramps. This is ridiculous. I believe
that such patients should be penalized by authorities” (male, provider). As the provider explained, these situations are reminiscence of the OLD system where people did not pay for medical care. They recommend they need to be avoided if the new system wants to be more efficient and provide better care.

**Question #2f**

Question #2f asked the customers to rate the accessibility of primary care services in the NEW reformed system. Four distinctive groups were identified. Group one is comprised of 17.5% (4) customers who rated primary care accessibility as “unsatisfactory”. Group two is comprised of 34.8% (8) customers who rated the NEW system as “satisfactory”. Group three is comprised of 30.2% (7) customers who rated system as “very good’, and group four is comprised of 17.5% (4) customers who rated accessibility to primary care as “excellent”. Group one customers were older and reported multiple health issues, while group four customers were younger and more affluent. Overall 82.5% (19) customers rated the accessibility of NEW primary care system as satisfactory or better.

**Figure 7.** Access to primary care after 1990 the NEW system as rated by customers.

<table>
<thead>
<tr>
<th>Rating</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Excellent</td>
<td>18%</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>35%</td>
</tr>
<tr>
<td>Very Good</td>
<td>30%</td>
</tr>
<tr>
<td>Unsatisfactory</td>
<td>17%</td>
</tr>
</tbody>
</table>
Question #2g

Question #2g asked customers to provide their opinion on accessibility to specialist and hospital care in the NEW system. With regards to specialist care there were four distinct groups. Group one, (8.7% [2]) did not use specialist care. Group two, (8.7% [2]) perceived no difference between the OLD and the NEW system. Group three, (26.1 % [6]) indicated that specialist care improved significantly. “I don’t have a problem with obtaining an appointment with the specialist, even if I have to go to Warsaw to see the neurologist” (female, inpatient). “I don’t have a problem seeing a specialist or being admitted to the hospital nor do my friends” (male, outpatient). On the other hand, group four, (56.5% [13]) indicated significant issues with obtaining an appointment with a specialist. “For a specialist appointment you have to wait for a long time. To see a cardiologist I had to wait for 9 months” (male, outpatient). “The lines to see a specialist are pretty long. To see a neurologist it is not that bad. However, to have an appointment with endocrinologist one has to wait a couple of years” (female, outpatient). One of the respondents who was a medical specialist suggested that, “The problem with the long lines to see specialists is that primary physicians do not do their job well and send their patients with minor problems directly to the specialists” (male, provider). “There are limits set by NFZ on how many patients I can see and be reimbursed for my services” (female, provider).

Additionally customers provided their opinions on accessibility to hospital care. There were three distinct groups. Group one (17.5% [4]) did not use hospital care services. Group two (13.0% [3]) indicated that access to hospital care has deteriorated in the NEW system compared to the OLD system. “For my eye operation I had to wait two years in line” (female, outpatient). Group three (69.5% [16]) were satisfied with the accessibility to hospital care. “It was only 40 minutes from the time I made a telephone call until I reached the ICU and received care” (male,
Patients indicated no issues with emergency acute care in the hospital setting. However, for scheduled procedures, patients reported that they had to wait for a prolonged time, sometimes counted in years. This is due to procedures’ limits set by NFZ, which will pay only for a set number of procedures in a given year. As the budget of NFZ increases, the number of procedures for which hospitals and physicians receive reimbursement also increases (Ministerstwo Zdrowia, 2014).

**Question #2h**

Question #2h asked customers to rate the accessibility to specialist and hospital care in the NEW system. This question caused some confusion since some customers indicated that accessibility to hospital was different than accessibility to specialists and they would have preferred to give two separate ratings. “For accessibility to specialist care I would give a 2 (unsatisfactory). However, for the hospital care my rating is 5 (excellent)” (female, provider).

Four distinct groups were identified: Group one (8.7% [2]) rated both specialist and hospital care as “unsatisfactory”, and it was the smallest group. Group two (39.1% [9]) rated specialist and hospital care as “satisfactory”, and it was the largest group. Group three and four (26.1% [6]) both rated specialist and hospital care as “good” and “excellent”. This indicates that over 50% of customers are satisfied with specialist and hospital services in the NEW system.

**Question #2i**

Question #2i asked customers to provide their opinions on medication coverage and the payment in the NEW healthcare system. There were multiple opinions with one common theme; in Poland medications are generally available and there are no shortages of medications on the market. The wealthier group of customers stated that, “There is not the slightest problem with obtaining medications and the price is no problem for me” (male, customer) and “The access to
medications is good. We have the largest number of generics available in Europe here in Poland” (male, provider). The older less wealthy group of customers with chronic diseases seemed to have a different point of view. “In the old system I did not have to pay for my medications” (male, retiree). This statement suggests that the study participants included special groups that received medications free of charge in the OLD system. As denoted before these special groups were the uniformed services personnel and employees of the national healthcare system. The most common responses from the elderly population were about price. “Medications are expensive and affect the personal budget” (female, inpatient). “The access to medication is not a problem, generally all medications are available. However, the price of medications eats up large portion of my budget” (male, retiree). “My husband is sick and I have a chronic disease. We are spending a lot of our money on medications. This affects our household budget” (female, inpatient). Such comments suggest that although medications are available for purchase, high prices are an access-limiting factor.

**Question #2j**

Question #2j asked the customers to rate the medication coverage and payment in the NEW system. A significant number of respondents expressed their dissatisfaction with the existing healthcare system. While pharmaceuticals are available for purchase, there are no discounted prices available for low-income households. The list of reimbursable medications is short and insufficient in the view of the customers. Group one (43.5% [10]) rated the NEW medication coverage and payment system as “unsatisfactory”. Group two (26.1% [6]) rated the existing system as “satisfactory”. Group three and four (17.4% [4]) and (13.0% [3]) mainly younger and wealthier customers rated existing medication and payment system as “very good” or “excellent”.
Question #2k

Question #2k asked customers how well they understood the process of expressing their dissatisfaction with healthcare issues in the NEW system. Almost half of the respondents (47.8% [11]) reported that they don’t know how to express their dissatisfaction or file complaints with regards to healthcare issues. Twelve (52.2 %) respondents noted that they had no problems with their healthcare professionals and therefore did not have to communicate their dissatisfaction or complain to higher authorities. Six (26.0%) respondents were quite knowledgeable and aware of the exact procedures and institutions to voice complaints if needed. One female provider stated “There is the watchdog institution created especially for patient issues by the national parliament”. A female outpatient said “Every healthcare institution has an information notice placed next to the registration, explaining the patients rights and how to voice complaints. In Polish society medical professionals experience very high esteem and rarely the courts see medical provider litigation”. As one customer said, “It is not the provider that I don’t like, it is the new system that makes me angry” (male, outpatient).

Question #2l

Question #2l asked the customers to rate their knowledge how to complain about the NEW medical system. Group one (52.2% [12]) of respondents rated their knowledge as “unsatisfactory”. Group two (8.7% [2]) rated their knowledge of the system as “satisfactory”. Group three (26.0% [6]) rated their knowledge as “good”; they represented the younger, better-educated population. Group four (13.1% [3]) rated their knowledge as “excellent”; all of the respondents in group four were medical providers.
Question #3

One of the factors influencing life expectancy of the population is the quality of healthcare provided. Advances in provision of healthcare positively influences average life expectancy. In 2012 the average life expectancy in Poland was 8 and 73 years for females and males, respectively (Table 2). Question #3 asked customers to provide their opinion on how life expectancy has changed in Poland over the past 10 years. The information obtained from this question was designed to serve as a proxy of evaluation of the NEW healthcare system. Group one (4.3% [10]) customers thought that life expectancy had not changed since the fall of communism. Group two (21.7% [5]) indicated that there has been a decrease in average life expectancy among Polish population. “Poles live a shorter life because of poverty and malnutrition. Abroad people live longer” (male, inpatient). “Poles live a shorter life because there is no remedy for cancer. Everywhere I turn I hear cancer, cancer, cancer” (female, inpatient). Group three (79% [18]) believed that the average life expectancy increased considerably. “I believe the average life expectancy has been prolonged because of the better healthcare, affluence of the population and greater awareness of our society” (female, outpatient). Another respondent stated, “I read obituaries and before I saw a lot of people die in their early sixties and seventies. Recent obituaries are for people in their eighties. Rarely, I see a person die of natural causes in their sixties” (female, inpatient).

Question #4

Question #4 asked customers to provide their opinion about the governmental expenditures on healthcare and how they have changed over the past ten years. According to the information provided by the World Bank (2013), Poland’s health expenditures per capita have doubled over the past 10 years and quadrupled since the fall of communism. However, the
Polish general public has a different perception. Four, (17.1%) of the respondents did not have an opinion on government health expenditures. Five, (26.1%) indicated that the government is spending significantly more on health now than it was spending ten years ago. This group of respondents was comprised of healthcare providers and wealthy customers. “I believe the government spends significantly more on the healthcare system, mainly on expensive medication and high tech equipment. A large portion of funding goes toward salaries of healthcare providers” (female, outpatient). “From what I hear on television, government is spending billions more. However, they cannot complete the healthcare reform” (male, outpatient).

Thirteen (56.5%) of the customers said the government is spending significantly less on provision of healthcare. This group of customers was comprised mainly of older people with more healthcare issues. “I believe that the government is spending less on healthcare, since the television is showing people that continuously complain about the healthcare system” (female, inpatient). “The government is trying to cheat us out of our medical funds and is spending less on healthcare” (male, retiree).

**Question #5**

Question #5 asked the customers to describe the changes in the healthcare system since the fall of communism. Eight (34.8%) respondents did not see any changes in the healthcare system for better or worse. Two (8.7%) said that the healthcare system has deteriorated because of significantly fewer specialists and that physicians are more oriented towards making money than caring for patients. Thirteen (56.5%) respondents acknowledged positive changes in the healthcare system. The main characteristic points included better organization, greater availability of advanced equipment, privatization of primary healthcare and private hospitals.
Respondents also discussed system decentralization, better availability of newer medications, and noted that patients are now informed about the costs of healthcare.

**Question #6**

Question #6 asked customers to describe changes that they would make in the healthcare system if they had ultimate power. Respondents provided input that covered a wide spectrum of healthcare issues. The most prevalent theme was the waiting time that patients have to endure before being seen by a specialist. Respondents suggested that the waiting period for specialist appointments should not be greater than one month and that the government should increase the list of refundable medications for retirees. The younger and more affluent group suggested the introduction of private insurance companies into the Polish healthcare market. “I would introduce the free market mechanisms into our healthcare insurance system” (male, provider). Healthcare providers said they would like to see more of the free market and less regulation with regard to their salaries. Providers also suggested the introduction of patient co-payments for physician visits to decrease the number of unnecessary patient visits and their financial burden on the public healthcare system.

**Discussion**

All research participants were customers of both the OLD (pre-1990) and NEW (post-1990) Polish healthcare systems. Respondents were able to provide meaningful insights into the healthcare system that a foreigner is unable to realize from researching available literature.

Today, over twenty years after fall of communism participants’ perception of the NEW healthcare system does not fully reflect the existing reality. The NEW healthcare system is often perceived as significantly inferior to the OLD healthcare system. The general population according to mass media (Europ Assistance, 2013) perceives an overall reduction in quality of
care. This perception is encouraged by anecdotal reports of longer waiting periods for appointments with primary and specialist care physicians. The media reports patients waiting for specialist visits and hospital admissions for up to two years. Some television and radio programs state that elderly people cannot afford necessary medication due to high pricing.

It is important to understand how scheduling of medical appointments has changed the perception of the NEW healthcare system and how inpatient/outpatient care and availability of pharmaceuticals is perceived by customers and providers.

The background review of this study provides important insights as to why the NEW system is inaccurately perceived as providing lesser quality than the OLD system. To comprehend the OLD and NEW healthcare one must to understand the Polish geopolitical and socioeconomic situation before and after the Second World War. In 1939 there were 14,000 practicing physicians in Poland (0.4 physicians per 1000 individuals). This statistic drastically declined to 0.3 physicians per 1000 people by 1946. The universal health coverage by the communist regime had insufficient number of providers to support the system. Education of new medical providers was the priority rather than quality of healthcare. Satisfying population needs meant providing large numbers of physicians. By the year 1975 the number of practicing physicians rose to 46,000 or 1.3 per 1000 population (GUS, 2012). This however, was not accompanied by building of better infrastructure until the 1980s. This was due to the structure of communist system, which operated on narrowly defined single goal five-year plans. While the communist government was able to provide the working force (i.e. medical personnel), the healthcare system infrastructure was very rudimentary for example no sonograms or x-ray machines. Currently as of April 2014 there are 126,000 practicing physicians in Poland
This is equal to 3.2 physicians per 1000 individuals, which is comparable to OECD average (OECD, 2013).

In the OLD system a customer simply came to a clinic during working hours and waited in line to be seen by a medical provider. By the end of the working day the provider usually attended all patients and referred more severe cases to hospitals for diagnostics and treatment. There was no advanced scheduling because telephone services were not available to a majority of the population. By the fall of communism in 1990, only 13% of the Polish population had access to telephones (GUS, 2014). Today there are 53 million telephones in Poland: statistically each citizen owns 1.5 telephones (GUS, 2014). Physicians now require patients to schedule the appointments through available scheduling services. The elderly customers (retirees) do not like this newer scheduling approach and would prefer to be seen on a “walk in” basis. The younger group of customers approves the scheduled approach to prevent unnecessary waste of time. This is basically a cultural preference for the system in which one grew up.

A similar situation is seen with specialist appointments. The OLD system permitted self-referrals to specialist care. Patients who did not like the medical skills of their primary provider were able to self-refer themselves to a specialist. This is not the case in the NEW system. Primary care providers serve as “gate keepers” and are obligated to see their patients before providing referral to the specialist or hospital if they deem it necessary.

The OLD system provided medications at discounted rates (33% of cost) to all insured customers. Within the populations there were privileged groups (military and police personnel, government and healthcare workers) that did not pay for pharmaceuticals. Almost all medications available on the OLD market were produced either by local pharmaceutical companies or were imported from other communist countries. While this meant that the
pharmaceuticals available were affordable, they were also outdated and of questionable quality (Chmielinski A, personal communication, 6 January 2014). Today multinational pharmaceutical companies supply more than 50% of the Polish pharmaceutical market (Horodecka, 2012). Available medications are newer generation and more effective. However, the cost incurred by the population is proportionally higher in the NEW system than it was in the OLD system.

Medications are available at no charge for all hospital patients, military veterans, people with disabilities and for selected illnesses (i.e. diabetes, cancer). The overall perception by study participants is that medications are more expensive now than they were in the OLD system, and this likely reflects a true effect. Elderly and lower middle class customers complained that this state affected their household budgets and they had to make difficult choices whether to purchase medications or not. One of the recommendations provided by physicians was to “Extend provision of no-cost medications to low income families and retirees”. However, medical providers indicated that they currently have a wider range of better medication to treat patients.

None of the interviewed customers complained about hospital care. The inpatients stressed that they received life-saving procedures promptly. Providers commended the government for implementing new no-cost cardiac procedures as a part of government initiative to combat chronic diseases (Chmielinski A, personal communication, 6 January 2014). Recent MZ programs focus on decreasing waiting periods for cancer patients on medical procedure wait lists. The problem exists with scheduled procedures; the government reimburses hospitals only for a specific number of contracted procedures per year. Therefore for some scheduled procedures patients are placed on waiting lists for extended periods of time. Generally speaking, there is no problem in the NEW system with provision of acute medical care in hospital or ER settings.
The medical profession is held in high esteem by the study participants. Older people tend not to even question medical providers and blame failures on the system rather than the healthcare workers. Younger and more affluent customers saw medical providers in the NEW system less as a social group but rather as specialized service providers who should not have elevated status in society.

**Conclusion**

In summary, the overall opinion of the customers in this study was that the NEW system provides adequate care with regards to primary and hospital care. However, customers would like to see improvements in specialist care in term of a decrease of waiting time for specialist appointments (less than a month). The less affluent customers of the population would like the current government to provide better benefits for low-cost pharmaceuticals and increased government participation in cost sharing for drugs. In general, a large portion of the interviewees was unaware of the improved health status the NEW system has provided which includes greater health expenditures per capita, decreased infant mortality and longer life expectancy for both males and females (The World Bank, 2014c). This study documented several misperceptions of the NEW healthcare system.

After noting changes that have taken place in the Polish healthcare system during the transition from the centrally directed communist political system to a modern democracy and analyzing trends of healthcare indicators set by WHO, one can conclude that the NEW healthcare system is associated with health improvements for Polish citizens. The NEW healthcare system is not as technologically advanced as systems in Western EU countries (Europ Assistance, 2013). However, after talking to the customers of this system it appears that the
NEW system meets the majority of needs and expectations of interviewed customers and providers.
References


Podstawka, M. (2010). Ubezpieczenia w rolnictwie Materiały i Studia (pp. 6–15). Warsaw. doi:ISSN 1507-4757


Appendix A – Interview Questions

1. Did you have experience with the healthcare system prior to 1990, that is, the “OLD” system?
   
   Yes/no
   
   If yes--

1a. How well did you understand the OLD system’s financial setup for clinical services?

1b. On the scale 2 to 5, please rate how well did you understand the OLD system’s financial setup for clinical services.

   Note: this question doesn’t apply to medications, just services.

1c. How well did you understand the OLD systems range of available clinical services?

1d. On the scale 2 to 5, please rate how well did you understand the OLD systems range of available clinical services.

1e. How well did you understand how to access clinical services for regular primary care in the OLD system?

1f. On the scale 2 to 5, please rate how well did you understand how to access clinical services for regular primary care in the OLD system.

1g. How well did you understand the how to access clinical services for hospital or specialty care in the OLD system?

1h. On the scale 2 to 5, please rate how well did you understand how to access clinical services for hospital or specialty care in the OLD system.

1i. How well did you understand the OLD medication coverage and payment system?

1j. On the scale 2 to 5, please rate how well did you understand the OLD medication coverage and payment system.

1k. How well did you understand how to complain about problems in the OLD system please describe?
11. On the scale 2 to 5, please rate how well did you understand how to complain about problems in the OLD system.

2. Did you have experience with the healthcare system after 1990, that is the “NEW” system.

   Yes/no

   If yes--

2a. How well do you understand the NEW system’s financial setup for clinical services?

2b. On the scale 2 to 5, please rate how well do you understand the NEW system’s financial setup for clinical services.

   Note: this question doesn’t apply to medications, just services.

2c. How well do you understand the NEW systems range of available clinical services?

2d. On the scale 2 to 5, please rate how well do you understand the NEW systems range of available clinical services.

2e. How well do you understand how to access clinical services for regular primary care in the NEW system?

2f. On the scale 2 to 5, please rate how well do you understand how to access clinical services for regular primary care in the NEW system.

2g. How well do you understand the how to access clinical services for hospital or specialty care in the NEW system?

2h. On the scale 2 to 5, please rate how well do you understand how to access clinical services for hospital or specialty care in the NEW system.

2i. How well do you understand the NEW medication coverage
2j. On the scale 2 to 5, please rate how well do you understand the NEW medication coverage and payment system.

2k. How well do you understand how to complain about problems in the NEW system please describe?

2l. On the scale 2 to 5, please rate how well do you understand how to complain about problems in the NEW system.

3. Do you think that the life expectancy for Polish folks has changed in the last 10 years?

4. Do you think that the government has increased its per person spending for medical services in the past 10 years?

5. Can you describe the changes in the healthcare system since the fall of communism? What is your opinion about these changes?

6. If you had ultimate power to change the current healthcare system, what would you change?
Appendix B – IRB Communication

DATE: December 20, 2013

TO: Paul Puchta, MD, MPH student
    Community Health
    Nikki Rogers, PhD, Fac. Adv.
    Community Health

FROM: B. Laurel Elder
      Chair, WSU-IRB

SUBJECT: SC# 5373

'Health Systems in Transition: Access to Health Care in Opinion of Polish Citizens'

Your study does not meet the definitions for human subjects research. Therefore the proposal submitted does not need approval from the Wright State University Institutional Review Board.

If you have any questions or require additional information, please call Robyn Wilks, IRB Coordinator at 775-4462.

Thank you!
Appendix C – Consent Cover Letter

Cover Letter - English

The study entitled Health Care Systems in Transition: Access to primary health care in opinion of Polish citizens is conducted by Dr. Paul Puchta, a MPH student at Wright State University’s in Dayton, Ohio. With assistance from providers from Poradnia Rodzinna “Zdrowie”, Dr. Puchta is gathering opinions from the beneficiaries of Polish primary health care system. The interviews will help him paint a full picture of the changes in primary health care system that have taken place since the fall of socialist system in Poland.

I am asking adult customers of our primary health care clinics who have time to participate in my research study. The Polish culture and law considers people who are aged 18 years old and above to be adult. Therefore, this study is open customers of primary care clinics who are aged 18 and over. Your name will not be associated with the research - it is anonymous. The study conducted will not be able to link your identity with your answers. Your participation is completely voluntary and I will protect your anonymity. You may choose to end the interview at any time without any penalty. Because I am not taking down your name or asking for your signature that would identify you, a completed interview implies your consent to participate in this study.

The interview has several semi structured open-ended questions about polish primary care health care system. I expect that it will take you about 45 to 60 minutes to complete the interview. There are no risks or benefits accompanying your participation. I will use results from up to 30 adults and will look at overall group results, not individual results. For example, I might note that 20 females completed the survey and their ages ranged from 18 to 66 years.

If you have any questions concerns about the research or your rights as a research subject, please feel free to contact me, Dr. Paul Puchta (512-560-5665, 3123 Research Blvd, Suite 200, Dayton, Ohio. puchta.2@wright.edu) or Wright State’s Institutional Review Board (937-775-4462)
Appendix D – Consent Form

Consent Form – Polish

OŚWIADCZENIE BADANEGO
– zgoda na udział w badaniach

Temat badań: ..............................................................................................................................
........................................................................................................................................
........................................................................................................................................

Niniejszym oświadczam, że zostałem/am szczegółowo poinformowany/na o sposobie przeprowadzenia badań i moim w nich udziale. Rozumiem, na czym polegają badania i do czego potrzebna jest moja zgoda.

Zostałem poinformowany/na, że mogę odmówić uczestnictwa w badaniach w trakcie trwania realizacji projektu badawczego.

Wyrażam świadomą zgodę na uczestnictwo w badaniach.

........................................                                  .......................................
podpis badacza                                  podpis badanego

...................., data  ..................................
Appendix E – Provider Permission Form

To Whom IT May Concern

By signing this form, I indicate that Dr. Paul Pucht a has permission to conduct his study "Health Systems in Transition: Access to Primary Health care in the Opinion of Polish Citizens" at the Poradnia Rodzina "Zdrowie" and its satellite clinics located in:

- Płonsk 09-100, ul Sienkiewicza 7
- Warszawa 03-285, ul Kondratiowcza 27b
- Warszawa 03-985, ul Samołotowa 9A
- Raciaz 09-140, ul Jana Pawła II 7B

My staff understands that the purpose of the study is to collect opinions about our primary health care system through semi structured interviews and that no personally identifiable information will be collected.

- Our staff is willing to invite customers to participate in Dr. Pucht’s study.
- We will invite customers following the IRB-approved script and provide each with a copy of the Consent Cover Letter to read and take home with them if they wish.
- We further agree to provide private space in our clinics for Dr. Pucht to interview participants and to assist with scheduling to help maintain participant anonymity.
- We understand that there is no direct benefit to us or to the study participants.

If you have any questions please do not hesitate to contact me or my staff.

Płonsk 29.11.2013

[Signature]

[Address]

[Phone number]

[Fax number]
## Appendix F – List of Competencies Met in CE

### Tier 1 Core Public Health Competencies

<table>
<thead>
<tr>
<th>Domain #1: Analytic/Assessment</th>
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<tbody>
<tr>
<td>Identify the health status of populations and their related determinants of health and illness (e.g., factors contributing to health promotion and disease prevention, the quality, availability and use of health services)</td>
</tr>
<tr>
<td>Describe the characteristics of a population-based health problem (e.g., equity, social determinants, environment)</td>
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<tr>
<td>Use variables that measure public health conditions</td>
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<tr>
<td>Use methods and instruments for collecting valid and reliable quantitative and qualitative data</td>
</tr>
<tr>
<td>Identify sources of public health data and information</td>
</tr>
<tr>
<td>Recognize the integrity and comparability of data</td>
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<tr>
<td>Identify gaps in data sources</td>
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<tr>
<td>Adhere to ethical principles in the collection, maintenance, use, and dissemination of data and information</td>
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<tr>
<td>Describe the public health applications of quantitative and qualitative data</td>
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<tr>
<td>Collect quantitative and qualitative community data (e.g., risks and benefits to the community, health and resource needs)</td>
</tr>
<tr>
<td>Use information technology to collect, store, and retrieve data</td>
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<tr>
<td>Describe how data are used to address scientific, political, ethical, and social public health issues</td>
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<tr>
<th>Domain #2: Policy Development and Program Planning</th>
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<tbody>
<tr>
<td>Gather information relevant to specific public health policy issues</td>
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<td>Describe how policy options can influence public health programs</td>
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<tr>
<th>Domain #3: Communication</th>
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<tr>
<td>Identify the health literacy of populations served</td>
</tr>
<tr>
<td>Communicate in writing and orally, in person, and through electronic means, with linguistic and cultural proficiency</td>
</tr>
<tr>
<td>Solicit community-based input from individuals and organizations</td>
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<tr>
<td>Participate in the development of demographic, statistical, programmatic and scientific presentations</td>
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<tr>
<th>Domain #4: Cultural Competency</th>
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<tr>
<td>Incorporate strategies for interacting with persons from diverse backgrounds (e.g., cultural, socioeconomic, educational, racial, gender, age, ethnic, sexual orientation, professional, religious affiliation, mental and physical capabilities)</td>
</tr>
<tr>
<td>Recognize the role of cultural, social, and behavioral factors in the accessibility, availability, acceptability and delivery of public health services</td>
</tr>
<tr>
<td>Respond to diverse needs that are the result of cultural differences</td>
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<tr>
<th>Domain #5: Community Dimensions of Practice</th>
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<tr>
<td>Recognize community linkages and relationships among multiple factors (or determinants) affecting health (e.g., The Socio-Ecological Model)</td>
</tr>
<tr>
<td>Identify stakeholders</td>
</tr>
<tr>
<td>Maintain partnerships with key stakeholders</td>
</tr>
<tr>
<td>Describe the role of governmental and non-governmental organizations in the delivery of community health services</td>
</tr>
<tr>
<td>Identify community assets and resources</td>
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<tr>
<td>Gather input from the community to inform the development of public health policy and programs</td>
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<tr>
<th>Domain #6: Public Health Sciences</th>
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<tbody>
<tr>
<td>Describe the scientific evidence related to a public health issue, concern, or intervention</td>
</tr>
<tr>
<td>Retrieve scientific evidence from a variety of text and electronic sources</td>
</tr>
<tr>
<td>Discuss the limitations of research findings (e.g., limitations of data sources, importance of observations and interrelationships)</td>
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<tr>
<th>Domain #7: Financial Planning and Management</th>
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<td>N/A</td>
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### Domain #8: Leadership and Systems Thinking

- Describe how public health operates within a larger system
- Participate with stakeholders in identifying key public health values and a shared public health vision as guiding principles for community action
- Identify internal and external problems that may affect the delivery of Essential Public Health Services
- Use individual, team and organizational learning opportunities for personal and professional development
- Describe the impact of changes in the public health system, and larger social, political, economic environment on organizational practices

### Concentration Competencies

#### Global Health:
- Identify strategies that strengthen community capabilities for overcoming barriers to health and well-being
- Exhibit interpersonal skills that demonstrate willingness to collaborate, trust building abilities, and respect for other perspectives
- Identify and respond with integrity and professionalism to ethical issues in diverse economic, political, and cultural contexts
- Apply the health equity and social justice framework for the analysis of strategies to address health disparities across different populations
- Conduct evaluation and research related to global health
- Enhance socio-cultural and political awareness
- Apply systems thinking to analyze a diverse range of complex and interrelated factors shaping health at local, national, and international levels