

# Health Care Reform in the United States and the Russian Federation: 1990-2015

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## Abstract

What constitutes adequate medical care and how to deliver it is a problem states across the world confront as they face similar problems of rising costs, access, changing demographics, quality of service, and technological development. This article compares health care reform in the United States and the Russian Federation between 1990 and 2015. The Russian Federation begin this period with a process of rebuilding a health care system out of the previous centralized state-run Soviet system whereas the United States sought to change a health care system largely privately run and which separated health care delivery from health care insurance. Yet, despite differences these two countries and their health care systems have, they show interesting parallels, convergences, and lessons in terms of how reform occurs. In particular, this article demonstrates how both the American and Russian reforms have tried to use market incentives and the shifting to individuals some responsibility to contain costs, the use of government and non-governmental actors to provide health care and insurance, and various levels of centralization and decentralization of select services in order to address cost, quality, and access issues.

**Keywords:** Health Care Reform, United States, Russian Federation, Affordable Care Act

## 1. Introduction

Health care systems across the world face similar problems of rising costs, access, quality of service, and technological development. Growing and aging of populations due to longevity will increasingly tax health care delivery systems with additional burdens. Providing adequate health care for its people also poses another problem for governments; it is not only a basic right demanded by its people and an important way to ensure a healthy population that is economically productive, but it can be a significant fiscal burden for the government. Health care expenditures according James O'Connor (1973) are part of the broader fiscal crisis states confront.

To understand how health care reform challenges states fiscally, this article compares health care reform in the United States and the Russian Federation since 1990. Traditionally rivals, especially during the Cold War, both the American and Russian governments have undertaken a variety of reforms in the last 25 years aimed at improving health care delivery in their countries. In the case of the United States, it is an effort to reform a mainly private health care insurance and delivery system with some aspects operated by the government or NGOs. With Russia, it is the rebuilding of a health care system after the collapse of the state-run one under the Soviet Union that increasingly relies on private or market solutions. But despite these differences, case study comparisons of the two countries yield interesting parallels, convergences, and lessons. This article will undertake its comparison by looking at costs and access. It will concentrate on costs and access to medical service because these factors can be easier to correct by economic and political reforms taking place in both countries. The main conclusion of this article will be that despite significantly different starting points these two countries had in the role of the state in the economy and in the types of health care systems they had, Russia and the United States are facing similar fiscal pressures and have responded politically in ways that seem to be producing policies and structures that look more and more alike. In effect, they display contrasting neo-liberal solutions to health care delivery and reform.

## 2. United States

The key to understanding health care policy and reform in the United States since the 1990s resides in knowing

two facts. First, there is no such thing as a single health care policy or system in America; instead it is a highly decentralized and fragmented delivery system that involves a variety of public, private, non-profit (NGO) players operating in an environment that crosses several layers of government. Second, health care in the United States is neither a constitutional nor a legal right. Instead, health care is provided between two basic delivery systems—a private, market driven for profit system based on the ability to pay, and a second one offered by the government to individuals free or at reduced cost who meet specific statutory requirements.

These two facts are significant because they help explain not only the history of health care policy in the United States but they also clarify and set the context for recent reforms in America. Specifically, in 2010 the United States Congress adopted the Patient Protection and Affordable Care Act (also known as the Affordable Care Act or “ACA”), or more commonly referred to as Obamacare by its critics. The ACA was an initiative proposed by President Barack Obama while running for president and it was passed with a near straight party-line vote of Democrats in the US House and Senate in 2010. The ACA received only one vote from the opposition Republican Party. Obamacare is hugely controversial, with significant partisan divides when it comes to its approval. Most Democrats and those who identify with that political party support it, with Republicans opposing it. Since its adoption in 2010 there have been many efforts by those opposed to it to repeal the ACA, along with efforts to challenge its constitutionality in court or otherwise to block its implementation.

### *2.1 The Context of Recent US Health Care Reform*

By the time World War II ended, the basic structure of the American health care delivery system was in place. It included a separation of insurance from the actual delivery of health care, but with both remaining primarily in private hands or control. With the small exception of charity care and some services provided for the military and veterans, health care was delivered on a free-for service market model where physicians enjoyed a significant amount of autonomy to provide treatment. Finally, as a consequence of World War II, health care insurance was offered by employers through employment and not provided as a universal condition of citizenship or based on medical need.

Health care policy in the United States significantly evolved immediately after World War II, laying the foundation for policy debates and reform that would continue to affect the United States up to the present. President Harry Truman’s call for universal health care coverage in 1945 would dominate health care policy and reform for the next 60 years. It pitted two contrary ways to think about health care—as a fee for service market commodity or something that should be provided to all regardless of ability to pay.

In 1953, at the start of the Eisenhower presidency, approximately 71 million or 44% of the population did not have health care insurance (Sullivan, 2006). Private insurance companies such as Blue Cross (originally founded in Dallas, Texas in 1929) expanded (Sullivan, 2006). But otherwise there were no real changes in health care policy until after President Kennedy was assassinated in 1963 and his Vice-President Lyndon Johnson succeeded him. Estimates are that in 1963, 63 million or 33% of the population lacked health care insurance (Sullivan, 2006).

### *2.2 US Health Care Reform: 1960-1990*

As part of Johnson’s Great Society social programs two major health care programs were adopted. The first was the Medicare program that provided health care insurance for the elderly (age 65 or older). Eventually Medicare was extended to cover the disabled. Medicaid provided the same for the poor and indigent, especially those who were not working and therefore ineligible for employer-funded health insurance programs. Under the original Medicaid and Medicare plans, any individual who met the eligibility rules for these plans would receive health care coverage for free. Both plans paid for health care on a cost or fee for service basis, allowing hospitals and other service providers to charge costs plus a 2% profit (Schulte, 2009).

Medicaid and Medicare thus served several objectives. They extended health care insurance to populations who were not served by the private health insurance plans. By some estimates, by the early 1970s this reduced the number of individuals without health care coverage to 10-12% of the population (Starr, 2011). Second, these two programs provided reimbursements to hospitals losing money on the charity care provision of Hill-Burton, a law passed in the 1940s that provided federal money to encourage hospital construction. Third, it reinforced the fee for service of health care model in the United States and also created incentives for health care providers to order additional services in an effort to maintain or secure profits.

Over time Medicaid and Medicare have become some of the largest expenditures and programs of the United States government. Medicare when first implemented was budgeted for \$1.6 billion, growing to \$7.6 billion by 1970 (Schulte, 2009). By 2005 it had grown to an annual budget of more than \$400 billion, insuring by 2008

more than 45 million individuals. Conversely, Medicaid is a joint federal and state program where states receive federal money if they wish to participate in the program. All states participate in Medicaid, but not all, as shall be discussed below, have decided to expand participation to cover more individuals under the ACA. In 2006 Medicaid expenditures were \$320 billion, covering 55 million individuals in 2004 (Schulte, 2009). These expenditures also paid for many elder to stay in nursing homes.

These two programs are costly, and because of the basic fee for service reimbursement system employed, they have tended to encourage health care spending. Moreover, as the ranks of the number of elderly have increased along with life spans, Medicare spending has increased, creating a cost problem that has continued to grow in the United States.

By the time President Bill Clinton became president in 1993 it was clear that the United States health care delivery and insurance system was unsustainable. Consider first the number of individuals covered by insurance. In 1992 during the presidential election the total population of the United States was 256 830 000. Of that population, 148 796 000 million were covered in private insurance plans (57.9% of the entire population) whereas another 66 244 000 were covered through Medicare, Medicaid, or the military (25.8% of the entire population). This left approximately 38,600,000 or 15% of the population uninsured. This percentage had ticked up from 31,000,000 or approximately 12.9% in 1987.

Second, the percentage of the US GDP expended on health care had gone up dramatically. In 1960 5.1% of the US GDP was spent on health care (Sullivan, 2010). In 1970 the US and Canada each spent about 7% of their GDPs on health care. In 1971 Canada then instituted a single-payer universal coverage program. By 1990 Canada spent 9% of its GDP on health care, the US 11.9%, with 38.9 million uninsured (Starr, 2011). Canada's single-payer system appeared to contain costs, especially by reducing administrative expenditures. America's growth in the percentage in how much of its GDP it would spend on health care would continue to grow such that by 2008 it would reach 18%, 50% greater as a percentage of the GDP in comparison to other Western European or OECD economies (Starr, 2011). Simply put, compared to other OECD countries, the United States spent significantly more of its GDP on health care with for example Great Britain at 8.4% and Switzerland at 11.3% (Jacobs and Skocpol, 2010). Health care premiums for individuals, and costs for medical procedures in the US, are among the highest in the world (Sullivan, 2006).

Third, the United States private insurance system was costly. Between 1987 and 1993, insurance premiums increased by 90% while salaries increased by 28% (Starr, 2011). Not a surprise, these premium increases were a powerful factor driving up the percentage of uninsured. Finally, when compared to other countries, the health care outcomes of the US were not necessarily better as a result of all the money spent (Woolf & Aron, 2013). In short, the US had a very expensive health care system with limited access and impact in terms of making the public healthier.

### *2.3 The Failed Clinton Health Care Reforms*

In the 1990s President Bill Clinton sought to reform health care in the United States. His wife and future Senator and then Secretary of State Hillary Rodham Clinton was put in charge of reform, but it failed for several reasons. First, his proposals were damaged by his declining popularity and the takeover of Congress by the opposition Republican party in 1994. Second, critical interest groups, including that of the AMA, the health insurance companies, the pharmaceutical industry, and the American Hospital Association, opposed it. During the presidency of George Bush (2001-2009), there was little effort to undertake major health care reform.

### *2.4 Obama and the Affordable Care Act*

More than a generation after the failed efforts by the Clinton administration to pass health insurance reform, the basic problems underlying American health care persisted. According to the US Census Bureau, in 2008 15.4% or 46.3 million individuals in the United States lacked health care insurance (Census, 2009). Two-thirds of the American public was covered by private insurance with a total of 58.5% receiving it through their employer (Census, 2009).

In 2008 the United States was spending 16.6% of its GDP for health care, or approximately \$2.4 trillion. Projections were that this would increase to more than 20% of the GDP by 2018, in part as a consequence of the aging Baby Boom generation (born between 1946-1960) that is larger and living longer than previous generations (Barr, 2014), and also because of the rising costs of medical technology (Lubitz, 2005). Insurance premium costs were also increasing in percentages far exceeding the rate of inflation or general cost of living, resulting in an affordability crisis for both the United States as a whole and individuals and families.

Once elected as president Obama was immediately preoccupied with the 2008-9 global economic crash. His

attention first turned to passing an economic stimulus bill to help the economy. The president turned health care reform essentially over to Congress

Unlike under Clinton, many of the major health care players such as the pharmaceutical industry, the private insurance companies, and the AMA eventually lined up behind reforms. In many ways these industries were being economically squeezed and saw that the addition of millions of additional insured customers would be profitable to them, or they received special rules that would be of benefit to them (Jacobs & Skocpol, 2010). For example, the pharmaceutical industry stood to make billions of dollars from the new customers it would receive, as well as some protections from the use of generic drugs. Bringing these groups into negotiations thus eased some of the opposition.

So why did the ACA pass? Why success on health care reform this time as opposed to other efforts since the Harry Truman speech in 1946 calling for it? There is no one reason. Some had to do with the mounting costs of health care to businesses and families. Part of it was due to the buy-in by major health care industry players and interest groups who expected to profit from the law (Brill, 2015). Part of it was also due to Obama's and the Democrats' huge victory in 2008. Part of it also could be attributed to the fact that Obama and Democrats eventually put more effort on this reform than others, such as addressing the environment (Starr, 2011). Finally, the relative modesty of the ACA, relying significantly on use of private insurance, employer coverage or mandates, a conservative individual mandate, modest expansion of current government programs, and an overall continued embracing of a most market-based approach to health insurance all could be counted as factors explaining its eventual passage.

### *2.5 Major Provisions of the Affordable Care Act*

The final version of the Patient Protection and Affordable Care Act (ACA) (Public Law 111-148) or Obamacare contained several provisions to extend health care to cover the 47 million Americans who did not then have insurance. The law is a complex package of many provisions that use government and private insurance systems and market incentives to expand the quality and overall coverage and access to health care services. The ACA also contains provisions to address costs. The main provisions or points of the law can be grouped around a series of provisions (Kaiser, 2011). The on-line appendix to this article provides more details on the specific provisions of the ACA. However, three provisions are worth noting.

First, the ACA has an individual mandate requiring all US citizens and legal residents to maintain qualifying health care coverage. By "qualifying" the law specifies certain conditions and services to be provided in the policy. Second, individuals who do not have health insurance through their employer or the government will be required to pay a tax penalty. Individuals who cannot afford to purchase health insurance will receive subsidies to buy a plan. Finally, the ACA mandated the creation of health care exchange by states. These exchanges would be places where individuals and business could shop for and purchase health care insurance. The idea behind the exchanges is to create a central location where purchasers can locate qualified health insurance plans and presumably shop for the best priced plans that meet their needs. Between 2013 and through 2017 various rules regarding how the exchanges would operate, who could use them, and types of plans that would be available (such as multi-state plans) would eventually kick in or change. The exchanges would be operated by the individual states unless they decided not to do it and then the federal government would operate exchanges on behalf of the states.

### *2.6 Implementation History*

Initial implementation of the Affordable Care Act got off to a difficult start. It was plagued by political, legal, and administrative problems that have had various impacts and results on the continued viability of the law.

Perhaps the most significant variable impacting the efficacy of the ACA has been its political opposition and lack of public support for the law. For example, right after its passage of the Act public opinion was divided in support (40%) and opposition (54%) (Starr, 2011). More significantly, 75% of Democrats supported the law while 80% of Republicans opposed it. The ACA effectively passed without any Republican Party votes in Congress and support and opposition toward the law has become a politically polarizing issue.

The political polarization has led to a scenario where only 14 states and the District of Columbia had initially created their own health care exchanges. Republican governors and state legislatures have generally been unwilling to run their own health care exchanges, leaving it up to the federal government to do that. Such partisan opposition to the ACA and refusal on the part of many states to create their own exchanges was not anticipated and it forced the federal government into a situation where it did not expect—operating the vast majority of the exchanges and becoming a prime implementer of the law. The ACA really anticipated

federal-state cooperation and in many cases this is not occurring.

Partisan opposition to the ACA has also led to numerous legal attacks (Starr, 2011; Jacobs & Skocpol, 2010). Led by state Republican attorneys general or governors, one argument was that the federal government lacked the constitutional authority to mandate that individuals purchase health insurance. A second argument was that the federal government lacked the authority to require states to expand Medicaid coverage. In *National Federation of Independent Businesses v. Sebelius* (2012), the Supreme Court held that while the individual mandate exceeded the federal government's power under the Commerce Clause, it did uphold the mandate as a valid exercise under the national government's tax and spend authority. Specifically, it was within the power of Congress to impose a tax on individuals who were insured yet refused to purchase health insurance. However, the Court also ruled that the federal government could not penalize states if they did not expand Medicaid coverage by withholding all Medicaid funding. The significance of this ruling was that it meant that states effectively could refuse to expand Medicaid coverage to more uninsured individuals. In many states under Republican Party control, this is exactly what has occurred, thereby blunting the number of individual's that the ACA will cover (Barrilleaux & Rainey, 2014).

A second challenge to the Affordable Care Act came from businesses or corporations contending that it violated their First Amendment Free Exercise of Religion Rights to be required to pay for health insurance policies that provide for birth control or contraception. Lower federal courts were divided on this issue and in *Burwell v. Hobby Lobby Stores* (2014) the Supreme Court ruled that the contraceptive mandate under the Affordable Care Act violated the religious rights of closely-held corporations because they are persons under the Religious Freedom Restoration Act.

A third legal challenge addresses whether the ACA allows for subsidies to low income individuals who purchase health insurance through the federal health care exchanges. Some argued that the language of the Affordable Care Act only allows for subsidies in cases where states runs a health care exchange. In 2014 the D.C. Court of Appeals in *Halbig v. Burwell* issued a split decision invalidating the tax subsidies to individuals in states where the federal government was operating the health care exchanges under the ACA. A few hours later the Fourth Circuit Court of Appeals in *King v. Burwell* unanimously reached a contrary conclusion. In June 2015, the Supreme Court ruled in *King v. Burwell* that subsidies were available to qualifying individuals who purchased insurance through any exchange. Had the Court ruled contrary it would have potentially gutted as central feature of the ACA.

Despite these problems and others, by March 2015, 11.7 million individuals had health insurance through the exchanges, with 86% receiving subsidies, indicating that these are individuals who probably did not have coverage before because of cost (Pear, 2015). There have also been mixed signals regarding cost projections (Bernard, 2015). Third, one of the other main goals of the ACA was to reduce health care spending in the USA, especially as a percentage of the GDP. Some have argued that the ACA never really included significant cost controls (White, 2013). However, since the ACA took effect there are indications that US healthcare spending has slowed, but the degree to which that is due to the law or the economy is not clear (Economist, 2015). Moreover, the Act has not really addressed the demographic issues surrounding the increased health care costs associated with an aging American population. It is also unclear whether the Act will be able to decrease individual premium costs for purchasers of health care insurance.

### 3. Russian Federation

Russian society faces health care problems similar to many other modern societies, including the United States. Among the most important are an aging population, technological development, and rising costs of the health care (Stevens, 2001). Health care in Russia has undergone constant reform in 20 years plus since the fall of the Soviet Union. Practically every year some changes in financing and organization of the health care system take place. The target of policy makers is the construction of an "effectively working" system. That means it should be inexpensive for the state, accessible to all the patients, based on modern technologies, and the quality of the service should be high.

#### 3.1 The Context of the Russian Health Care Reform

The starting point for the contemporary system of health care in Russia is the Soviet system invented by N.A. Semashko in 1925 (Prokhorov, 2001) according to the ideas of physicians proposed at the end of the nineteenth century. His ideas formed the basis of the system of health care in the Soviet Union. Soviet medicine was based on the principle of free access to all levels of health care (Dmitrieva, 2001). Health care was financed from the state budget, Soviet people did not have to pay for medical service (Sheiman, 1995). Health care was provided by state owned multispecialty polyclinics for local population and the system of hospitals on each administrative

level (Sheiman & Shevski, 2014).

The main advantage of this model was the equality of access to free medical service for everyone. As a result of the implementation of the model in the middle 1960s the expected average life expectancy for men in Russia was practically the same as in market-economy countries. But beginning in the 1970s the healthcare system started to get less financing and support than in the years before. This was due in part to the fiscal pressures the Soviet Union was facing. By the 1980s hospitals' facilities had become too old. Because of lack of money, wages in healthcare shrank, though it was never high. The Soviet system was thus criticized because of the lack of financing, including low wages of the physicians and lack of funds for facility innovation. All the problems of the quality of Soviet health care were practically always connected with finance. There were also non-financial problems that influenced the quality of medical service: including the harshness of medical personal and the bureaucratic approach to the patient (Prokhorov, 2001). Less than a half of urban population and a little bit more than a half of the rural population was satisfied with the level of medical service (Okhrana zdorovya v SSSR: Statisticheskii sbornik, 1990). Eventually by the end of the Soviet period the system lost patients' confidence.

The breakup of the Soviet Union forced economical, political, and social changes and some of them touched health care system. The Soviet health care system was centrally run and depended on the national budget. Budget deficits were growing quickly during the last Soviet years: in 1985 – 2.4 % GDP, in 1986 – 6.2% (Illarionov, 1995). In 1991 the budget deficit was 31.9% GDP, in 1992 it was 14.2% GDP, the next 2 years it was nearly 10% GDP (Illarionov, 1995). Health care took 2.5 % GDP on average from 1985 to 1990 and after 1991 it was 3% on average. With the high deficit the financing was not enough for the population with an increasing death rate (in 1994 it was 32.6 % higher than in 1990), and mortality from infectious diseases (in 1994 it was 65% higher than in 1990) (Prokhorov, 2001). The system also demanded new equipment and augmentation of physicians' salary: in the early 90s their salary was below the subsistence minimum (Prokhorov, 2001). The financing of the system needed some changes and they were done in two directions: diversification of financial sources by the implementation of statutory and implementation of private insurance mechanisms and market principles and its elements in state sector to disburden some state's health care expenses upon patients.

### *3.2 Health Care in Russia from 1990 to Present Day: Implementation of Market Principles*

The beginning of the changes in the health care system can be dated to 1992 -1993 when the first steps to the present statutory insurance were made (Golovnina & Orekhovskiy, 2005). These changes were necessary as a result of the breakup of the Soviet Union, the dismantling of its health care system, and the need to find a new way to bring medical care to Russian citizens in a post-communist era. One of the first documents developed to describe and plan the changes the health care system appeared in 1997. It was entitled "The Concept of Health Care and Medical Science Development". Among the main goals of the development of health care mentioned in the Concept was growth of the efficiency of use of resources.

The Concept provided 2 steps:

- 1 step (1997-2000): restructure of hospital care, creating day hospitals and the institution of general practitioners, standardization of medical service (1998);
- 2 step (2001-2005): development of private sector in medical service, development of interdistrict and interregional centers of specialized medical service.

Some of these plans were realized: medical service was standardized, the private sector was developing rather fast and 12 interregional centers of specialized medical service were created. The project of creating general practitioners was not successful and was given up soon. Among the main points of the Concept we can see the development of private sector and the restructure of the hospital care. These two measures are supposed to be steps for reduction of governmental costs. The central trend of the health care reforms of this period is the development of the private institutions. The Concept provided the measures to reduce the state costs by shifting health care costs to the consumers of the services. Another important point was the enlargement of medical centers and investing in its facility innovation. At the same time hospitals considered ineffective were closed or associated with larger ones. These steps from one hand were made to reduce state costs by stimulating the development of private sector and consolidating medical institutions and from another hand they made the state health care system less accessible for the majority of population.

From 2004 to 2008 nearly 15% of ineffective hospitals were planned to be closed or reorganized. Also it was projected to change the legal form of some medical institutions, the changes meant the reorganization of some clinics in state (or municipal) self-contained non-profit-making organizations. This form did not exist under USSR. State clinics as self-contained non-profit-making organizations can operate as an entrepreneurial business

according to the main goal of the organization – delivering of the medical service. As a result, state medical institutions became self-contained non-profit-making organizations and could give paid services. So in the state sector there appeared an opportunity to make profit in addition to budget financing. The attitude of patients toward paid service in state clinics was mostly negative: nearly 60% said that the quality of free medical service became worse (Sishkin, 2008). The development of the private sector was active in early 2000s: according to the federal statistics data, in 2001 the growth was 2.4 % but in 2002 the amount of medical services decreased by 5.6 %. The biggest amount of paid medical service was when private service was just implemented – in 2000-2001. Over the next 10 years paid service became the part of public economy but without growth. More often paid health care service was used in big cities (Moscow, St.-Petersburg) by “upper middle class” (Sishkin et al., 2008). The development of paid services is negatively viewed by the majority of population: Russian people were used not to pay for medical care. Such attitude can be changed with the development of the legal base of private healthcare institutions and with the change of generations.

In 2006 among the objectives of the national project “Health”, which was started in 2004, President V. Putin offered some ideas for state health care:

- single-channel principle of financing, financing according to the service;
- competitiveness of medical institutions and the freedom to choose the doctor and the clinic;
- remuneration of labour of medical specialists according to the result, professional development of physicians.

From this time the implementation of the principles, actual for business and private health care started in medical organizations. In this year medical-economic standards were proposed to fix minimal standard pattern of medical service. These standards mean free medical aid for particular illness, delivered by the state and approximate costs of treatment of these illnesses. It was a technological decision for the unification of the quality of medical service. At the same time the access to the medical service and its quality were declared in 2006 by the government in the program of the social and economical development as the main goals of the health care policy.

In 2007-2008 the transition to the new way to compensate medical specialists in state sector based on the number of patients took place. The aim of the change was to motivate physicians to improve the quality of their work (Selezneva, Sheiman & Sishkin, 2010). One of the reasons of the change is that the number of satisfied patients changed during the period 2001-2010: from 29.2% satisfied in 2001 to 23.9 % in 2010 (Footman, Roberts, Mills, Richardson & McKee, 2013). The most evident measure was to make the principles of management of state health care institutions closer to the principles of private sector.

In 2011 the Federal law “About the Fundamentals of Health Protection of Citizens of Russian Federation” (Federal law №323, 21.11.2011) was adopted. This law touches a great number of different issues. For example, according to the law the patient can choose the clinic and the physician either in state or in private sector. Before it was impossible for state sector: every citizen could take medical service only in the organizations close to the place where he lived or connected with the organization where he worked. This law was an effort to implement the principle of competitiveness in state health care delivery, to give patients more choice in selecting doctors.

Some of the principles of the healthcare mentioned in this law also declared accessibility of medical service:

- the priority of patient’s interest;
- social guaranties of health care for citizens in case of disability; the impossibility to refuse to give medical aid – in fact these principles declared the access to medical service in case of need;
- state and municipal responsibility for the ensuring of human rights in the field of healthcare;
- accessibility and quality of the medical aid (quality means standards in health care service and the state-guaranteed services).

On the other hand, the Ministry of Finance planned to reduce the number of state clinics and physicians: from 2000 to 2013 the number of hospitals reduced from 10.704 to 4.398 (Nikolaeva, 2014). These measures are supposed to stimulate the development of private sector and but in fact they are strongly criticized by patients and physicians for problems with access to the state medical service. It’s the greatest paradox of the present situation.

Discussing the reforms of the last fifteen years it is possible to mention two directions or goals of reform:

1. Creating private medicine. The main goals of the implementation of private health care institutions was the reduction of costs and better access to health care service for all citizens. Since 1997 in Russia there now exists private sector and private voluntary insurance and state clinics and government insurance.
2. Implementation of market and managerial principles in state clinics to rise their efficiency.

The most important problems of Russian health care while rebuilding the system were costs of medical system and its reduction and access to medical service. The second is mentioned several times in the latest law and the first is the basic goal of all changes: implementation of the principles of performance-based budgeting. The problems of reduction of costs and access to medical service are closely connected and they seem to be not solved yet. At the same time market principles were implemented in the system of healthcare delivery, this measure was not very successful because of the difficulties for the administrative and medical personnel of the clinics who were not used to market and management principles.

### *3.3 Costs of the Russian Medical System*

The system of financing of health care changed from the Soviet period and now it is based on a system of statutory health insurance and subventions from the budgets of federal or regional level. The Statutory insurance fund distributes funds among regions according to the population, including the level of wages and the particularities of the regional health care budget. The costs of medical service in different regions depend on special tariffs. The process of its elaboration is regulated on the federal level by statutory insurance fund but real values are set on regional levels. All regions have their special features which influence the tariffs: for example, wages in Chukotka are three times higher than in Kalmykia, transport accessibility is better in Kaluga than in the Vologda region (Gritsuk & Smolyakova, 2014). So the costs in different regions are different because of special characteristics of each region. The Russian state promises a lot of services and declares guaranties of free medical service but the financial coverage is too poor. This situation can be explained by the deficit of the territorial program of the state guaranties of the free healthcare in 66 from 85 regions. In 2013 the total deficit of the program of the state guaranties was 14.4 % (Korablev, 2013). The difficulties of keeping the constitutional guaranties are evident.

Changes in 2014 mainly addressed the financing of medical institutions. Its main object was the minimization of costs. First, the cost reduction was supposed to be made by change of the mode of financing of clinics: from 2014 financing depends on the number of people who take medical service in the clinic, on the age composition of the population, its morbidity, but not from the services rendered. Some kinds of service will be paid according to the number of visits. For example, antenatal clinics without regular patients. A clinic needs to have in average 5 000 regular patients. Second, one of the measures to enforce cost containment is to decrease the number of clinics. The reduction is explained by “inefficiency” of clinics and small number of patients. Third, one of the most important changes was the emergence of private health care (Lavrentieva, 2012). Now Russian health care system consists of state, municipal, and private clinics (Dmitrieva, 2001). State medical institutions are under federal or regional jurisdiction and municipal institutions are under municipal jurisdiction. Paid medical service is a new way of functioning of the Russian healthcare system. This reform brought the market principles to the system which was not commercial during the soviet period. These measures were to solve the problem of finance of the medical institutions. Since 1997 the plan was to institute and to increase private sector (to let someone who can pay accept medical service in private clinics and to relieve state clinics from some costs), to increase the funds of health care (up to 6-7% GDP), and to increase the wages of physicians. The main goal was to change the spirit of the system from paternalistic to market principles.

From 2000 to 2012 people more and more used paid medical service. Paid service was growing all 12 years from 27.448 to 333.895 million rubles. That does not mean that private sector was growing fast: more and more people during these years started to use paid medical service in state clinics. For many people payment is a compulsory measure. Many of them pay for service in state clinics. Private financing is 40-50% (in the EU private financing averages about 24%) and it is a very difficult problem for poor people. Someone who use private medicine more often in case of illness pays for the visit to the doctor. Voluntary health insurance has not become popular yet (Selezneva, 2015). Individual costs are growing. In state clinics in 2014 the number of patients who paid for the service was 12 % more than in 2013. Commercial service is more popular in Moscow, Saint-Petersburg, and Tatarstan, compared with other regions (Sishkin et al., 2008; Gritsuk & Smolyakova, 2014).

One of the ideas to the solution of financial problems was so called “co-pay.” It was instituted because state guaranties cannot be covered by federal and territorial funds. In 2012 the deficit was 14.4 % (Selezneva, 2014). The idea is that a patient should pay a small sum of money for the service even in state clinics. This idea was not



accepted by the society, especially by its part that used to go to state clinics. People do not understand why the tax paid by the employer is not enough. In addition, there are no polished administrative and economical mechanisms to implement this project. So policy makers decided to delay this idea to avoid social consequences and difficulties in the work of the system of health care financing. But nevertheless 64% of medical services take place within the state sector (Lavrentieva, 2012).

So the key problem of the Russian health care (Sheiman, 2007; Chubarova, 2008) - the problem of lack of financing - was not solved after all the reforms. How to spend less money for the service which is free for patients – that is the main question of reforms. The ways of cutting down costs of medical organizations are: changing the principles of financing according the number of patients, reduction of number of state clinics and the development of private sector to relieve state clinics. Meanwhile state health care has a priority in Russia, especially in regions, that is why the problem of saving money has yet to be solved. One of the ways to cut the costs is to cut the number of state clinics. This measure affects the access to the medical service, that becomes another problem.

### *3.4 Access to Medical Service*

When we speak about access to the medical service in Russia one needs to consider two issues: the number of free health care institutions to provide service: clinics, hospitals; and the list of free services. Why is it important to mention that the level of access can be measured by free services? For Russia it is so because free health care is mentioned in the 2 chapter 41 article of Russian Constitution as a right, though market principles are implemented and the system of private health care exists, it is incorrect to say that they substitute state clinics. The basic part of population uses the clinics of state sector, even if they pay there for some service.

According to the Constitution health care is free in state and municipal clinics financed from the budget, health insurance, and other contributions. The coverage by medical service in state and municipal clinics is universal and guaranteed by the constitution. But in the same time exist federal and territorial programs of guaranteed free medical service. There is no one who lacks health insurance.

Patients can choose either state or private clinic for medical service. Voluntary insurance and development of private health care created alternatives in access to medical service: a patient can take medical service in state clinics without payment or pay and go to the private sector. Private clinics are not included in the state health care system and the mechanism of cooperation between private and state clinics does not exist. Experts mention that as a result of cooperation medical equipment of private clinics could be used for patients of the state clinics, who have to wait for special medical examinations for a long time. Now there are no mechanisms for realization of this idea, but the necessity of it exists.

Before 2010 the government planned to reduce hospital care by 30-35% and increase outpatient-and-polyclinic care to 55%. In 2013 76 clinics and 302 hospitals were eliminated. There were a total of 35 000 beds eliminated. The biggest reduction of the number of beds was in Volgograd region, Tatarstan, Primorsky Krai, Sverdlovsk region (Gritsuk & Smolyakova, 2014). At the same time beginning in 2014, 459 high technological services were included in the statutory insurance system, so that they can be taken in regional clinics. Before it was possible only in federal clinics. So the situation with the access to these kinds of service has become better.

Some differences are caused by regional policy. For example, in Tatarstan the main goal is to improve the access to medical service (the main principles of Tatarstan health care policy are declared in the governmental program “The development of the health care in the Republic of Tatarstan until 2020” (2014). The ministry of health care of Tatarstan elaborated the three level system: the first level - 85 medical organizations for primary health care, the second level - 38 medical organizations with inter-municipal specialized centers or departments and city dispensaries and versatile city hospitals for specialized medical aid; the third level - 25 regional specialized medical organizations provided with high-technology equipment.

The idea of this three level system was to organize state medical organizations according to the complexity and technological level of service. The organizations of the first level for primary health care provide service which doesn't need high-technology equipment and the consultation of profile specialist. The organizations of the second level are provided with more equipment and medical specialists. The organizations of the third level are big centers with high-technological facilities for diagnostics and treatment. Patients firstly visit clinics for primary care, then if necessary the physician gives appointment card to the profile specialist to the clinic of the higher level.

This system doesn't give people more accessibility then before or in Soviet times because the time of waiting for the consultation or the procedure became longer and the number of specialists and clinics is cut down. The level

of access for people who can't pay is becoming lower. And for those who can pay it will not change a lot.

### *3.5 The Outcomes of the Health Care Reform*

Russian people were used to the free health care system in the Soviet days. According to a telephone survey in Moscow in 1991, 83,6% answered that they would be ready to pay for the right to choose a physician and private clinic instead of going to state clinic (Dmitrieva, 2001). The private clinics appeared and the real situation was differed from the survey responses and opinions expressed in the early 90s. The dynamic over time has shown that the attitude towards private medicine has changed and Russians tend to visit state clinics instead of private ones (Dmitrieva, 2001). The actual situation or practice of Russians demands increased personal responsibility for health, yet at the same time the system continues to lose peoples' confidence and respect. The attitude of people towards the health care system remains skeptical.

Mainly the different attitudes can be explained by the personal experiences that everyone have with securing health care or in their actual visits for services. Having bad interactions with the health care system lead people to start to search for more information about their diseases: TV-programs and Internet-pages about health have become very popular over the last 10 years. Only big centers which combine research with medical practice are able to keep high quality of service. People are withdrawing from the state clinics and either from private clinics seeking for medical help in the Internet and addressing to alternative medicine, TV and Internet. More people do not trust the doctors and trying to avoid to contact the health care bureaucracy. They seek information from different sources. This tendency provokes the development of the alternative or informal medicine (extrasensory, advices of friends, neighbors). It's hardly possible to evaluate the market of alternative medicine because many organizations work without registration. But some people even try to cure their illnesses themselves or do nothing. One of the reasons for this behavior is that people don't trust physicians because of previous bad experiences (Krasheninnikova, 2014).

The quality of private medicine is not regulated. The attitude of the society to the private medicine is different: some patients are sure that the quality of service is higher than in state clinics. Some say that the quality is not always higher and doctors in private clinics provoke more unnecessary expenses. In 2015-2017 the demand for private health care is forecasted to decrease (Korneeva & Samsonova, 2015), and its integration in the system of statutory insurance seems to be one of the perspectives of development of private health care market in Russia. It can be considered as one of the ways of improving the effectiveness of both state and private health care by engaging the state sector in concurrence with private.

There are two approaches to the health care: a collectivist approach, that means free state medicine for everyone and individual approach (Stevens, 2001), that means paid medicine, independence of choice of the clinic and personal responsibility in the health care. Russian health care reform can be considered as the attempt to combine these two kinds of healing systems: statutory health insurance and private medicine, declared priority of prevention measures and increasing tendencies of self-responsibility and even self-treatment. In Russia we can see the convergence of two models: the base of the system is a collectivist model with guaranteed free medical service and we also see the implementation of some market elements, including private clinics, elements of concurrence in health care. This eclectic model was made to avoid the weaknesses of each model. It will take some time to understand which of them are suitable for Russian society and which are not. The reforming should be stopped and the societal self-regulative processes will show the main disadvantages and ways of its correction.

## **4. Conclusion**

The United States and the Russian Federation began the 1990s with contrasting health care delivery systems. Yet both faced similar challengers in terms of costs, coverage, quality, and access. What do we learn from a comparison?

The basic difference is that the USA and Russia have contrasting approaches in their health care systems: For the USA, it is an individualistic, market-orientated or fee for service along with a secondary government provided system. For Russia, it is collectivist approach with centrally run health care system and statutory health insurance. Yet since 1990 both countries have faced increasing fiscal demands to pay for health care coverage. One of the central problems of the Russian health care system is the reduction of costs: there were a large number of state clinics and hospitals, and medical centers had expensive high-technology equipment. The United States too faced a cost problem both in terms of an overall percentage of the GDP and the cost to individuals. Both countries faced a fiscal crisis when it came to health care.

In the case of the United States, this led to an increased assumption of the national government to pay for health

care and set national standards (the Affordable Care Act). Health care insurance is becoming more centrally regulated, replacing the free market system that has been in place. Yet the ACA still uses market mechanisms and private actors to insure and deliver health care. For Russia, the once centrally managed and delivered health care system is being dismantled, being replaced with one that like the United States, has market and non-market components, as well as government, non-governmental, and private actors.

Second, from the other side the most important problem for the USA health care system is access to the medical service. It started with a health care delivery system with more than 40 million uninsured in 2008. The USA is trying to solve this problem first by increasing coverage in the private insurance system through the creation of health care exchanges. In some cases, the reforms involve individuals receiving insurance through government programs. In contrast, Russia is trying to build an alternative private health care insurance and delivery system in order find lesser expensive ways to ensure adequate access to health care. In Russia the main direction of reform is the the reduction and joining clinics and the partial privatization of insurance and in some cases, actual delivery of services. In contrast, in the USA the most important part is the reform in the field of insurance, not in the actual delivery of health care services.

But while considering all the mentioned differences, one can see the convergence of modern healing systems and the tendency to adopt similar principles. For example, the principle of individual responsibility in choosing clinic and insurance program is common for the USA and Russia. The Russian health care system is developing private insurance mechanisms; this process is already started but it needs more time to develop. Both countries are experimenting with mixed insurance and delivery systems that use both markets and non-market mechanisms, as well as involving governmental and non-governmental institutions.

The principles of management of medical organizations based on economic efficiency are the same in two countries. Both Russia and the United States are relying on the improved efficiency of the private delivery of health care or insurance to address problems that they face. Both countries appear to be trying to use market principles to reduce costs, increase access, and improve quality. This should not be a surprise. As noted in the paper, both countries are facing similar problems and therefore the mode of functioning of two systems based on market principles is becoming more and more similar.

Finally, Russia and the United States offer interesting political contrasts when it comes to health care. Both governments are responding to political demands from its citizens to provide affordable quality health care but they face contrasting political pressures regarding how to do that. With those political pressures comes debates about the nature of what the Russian of American state should look like and what role they have in relation to the market as a way to deliver health care. What is emerging in both are contrasting neo-liberal solutions to health care, raising interesting questions regarding whether the experiences of two different countries tells us anything about the pressures other states are feeling and how they too may convergence toward solutions similar to Russia or the United States.

## References

- Barr, P. (2014). *The Boomer Challenge*. Retrieved from [http://www.hhnmag.com/display/HHN-newsarticle.dhtml?dcrPath=/templatedata/HF\\_Common/NewsArticle/data/HHN/Magazine/2014/Jan/cover-story-baby-boomers](http://www.hhnmag.com/display/HHN-newsarticle.dhtml?dcrPath=/templatedata/HF_Common/NewsArticle/data/HHN/Magazine/2014/Jan/cover-story-baby-boomers)
- Barrilleaux, C., & Carlisle, R. (2015). The Politics of Need: Examining Governors' Decisions to Oppose the 'Obamacare' Medicaid Expansion. *State Politics and Policy Quarterly*, 14(4), 437-460. <http://dx.doi.org/10.1177/1532440014561644>
- Bernard, T. S. (2015). *Health Premiums Rise More Slowly, but Workers Shoulder More of Cost*. New York Times, (January 8), B3.
- Bondarenko, N., Burdyak, A., Kelmanson, K., Krasilnikova, M., Popovich, L., Svetlichnaya, S., ... Shevskiy V. (2008). Dostupnost' medicinskoy pomoschi dlya naseleniya Rossii. In Shishkin, S. (Ed.), *Rossiyskoye zdravoohraneniye: motivatsiya vrachey i obschestvennaya dostupnost* (pp. 14-68). Nezavisimiy institut sotsialnoy politiki. Moscow.
- Brill, S. (2015). *America's Bitter Pill: Money, Politics, Backroom Deals, and the Fight to Fix Our Broken Healthcare System*. New York: Random House.
- Burwell v. Hobby Lobby Stores*. (2014). 134 S. Ct. 2751.
- Chubarova, T. (2008). Obespecheniye naseleniya medicinskimi uslugami. *Problemy prognozirovaniya*, (6), 98-109.

- Congressional Budget Office. (2010). H.R. 4872, Reconciliation Act of 2010 (Final Health Care Legislation), March 20.
- Dmitrieva, E. (2001). The Russian Health Care Experiment: Transition of the Health Care System and Rethinking Medical Sociology. In William C. Cockerham (Ed.), *The Blackwell companion to medical sociology* (pp. 327-329). UK: Blackwell Publishers Ltd. <http://dx.doi.org/10.1002/9780470996447.ch18>
- Economist*. (2015, March 7). Will Obamacare Cut Costs? Pp. 27-28.
- Footman, K., Roberts B., Mills A., Richardson, E., & McKee M. (2013). Public satisfaction as a measure of health system performance: A study of nine countries in the former Soviet Union. *Health Policy*, 112, 62-69. <http://dx.doi.org/10.1016/j.healthpol.2013.03.004>
- Golovnina, N., & Orekhovskiy P. (2005). Reformy zdavoohraneniya v postsovetskoy Rossii: itogi i problemy. *Obschestvo i ekonomika*, 6, 54-87.
- Gritsuk, M., & Smolyakova, T. (2014). Dengi – na koyku. *Rossiyskaya gazeta № 6452 (180)*. Retrieved from <http://www.rg.ru/2014/08/12/medicina.html> Site last visited on May 12, 2015.
- Halbig v. Burwell*. 2014. 2014 WL 3579745.
- Hillstrom, K. (2012). *U.S. Health Policy and Politics: A Documentary History*. Los Angeles, CA: Sage.
- Illarionov, A. (1995). Popytki provedeniya politiki fifansovoi stabilizatsii v SSSR i v Rossii. *Voprosy ekonomiki* 7. 4-37.
- Jacobs, L. R., & Skocpol, T. (2010). *Health Care Reform and American Politics: What Everyone Needs to Know*. New York: Oxford University Press.
- Kaiser Family Foundation. (2011). *Summary of the Affordable Care Act*. Retrieved from <http://kaiserfamilyfoundation.files.wordpress.com/2011/04/8061-021.pdf>
- King v. Burwell*. (2014). 2014 WL 3582800.
- Korablev, V. (2013). Modernizatsiya organizatsionno-ekonomicheskoy modeli kak osnova povysheniya effektivnosti zdavoohraneniya v sovremennyh usloviyah. *Vestnik obschestvennogo zdorovya i zdavoohraneniya Dalnego Vostoka Rossii* 4. Retrieved from <http://www.fesmu.ru/voz/20134/2013405.aspx>.
- Korneeva, M., & Samsonova, V. (2015). *Vzglyad na perspektivy razvitiya rynka chastnykh medicinskih uslug v RF v 2015-2017*. Retrieved from [https://www.kpmg.com/RU/ru/industry/Healthcare\\_and\\_Pharmaceuticals/Documents/Healthcare%20perspectives%20rus.pdf](https://www.kpmg.com/RU/ru/industry/Healthcare_and_Pharmaceuticals/Documents/Healthcare%20perspectives%20rus.pdf)
- Krashenninnikova, Y. (2015). *Za gran'yu zdavoohraneniya: razvitiye alternativnih uslug podderjaniya zdorovya v gorodah i selskoy mestnosti*. Retrieved from: <http://opec.ru/1714863.html>
- Lavrentieva, A. (2012). *Zdavoohraneniye v Rossii. Finansirovanie sprosa na fone reform*. Retrieved from [http://talk-s.ru/projects/iv-of/files/02\\_med\\_lavrentjeva\\_a.pdf](http://talk-s.ru/projects/iv-of/files/02_med_lavrentjeva_a.pdf)
- Lubitz, J. (2005, September 26). Health, Technology, and Medical Care Spending. *Health Affairs*, 24, R81-R85. <http://dx.doi.org/10.1377/hlthaff.w5.r81>
- McCardle, M. (2014, March 10). Will Obama Ever Enforce His Health Law? *Politics in Minnesota*, p. 5.
- National Federal of Independent Businesses v. Sebelius*. (2012). 132 S. Ct. 2566.
- Nikolaeva, D. (2014, October, 29). Deputaty hotyat pritormozit' reformu zdavoohraneniya. *Kommersant*. Retrieved from <http://www.kommersant.ru/doc/2600376>
- O'Connor, J. (1973). *The Fiscal Crisis of the State*. NY: St. Martin's Press.
- Okhrana zdorovya v SSSR: Statisticheskii sbornik. (1990). Moscow: Finansy i statistika.
- Pear, R. (2015, March 11). 86 Percent of Health Law Enrollees Receive Subsidies, White House Says. *New York Times*, A17.
- Pfiffner, J. P. (1994). *President Clinton's Health Care Reform Proposals of 1994*. Retrieved from [http://www.thepresidency.org/storage/documents/President\\_Clinton's\\_Health\\_Care\\_Reform\\_Proposals.pdf](http://www.thepresidency.org/storage/documents/President_Clinton's_Health_Care_Reform_Proposals.pdf)
- Prokhorov, B. (2001). Organizatsiya zdavoohraneniya v Rossii v XX veke. *Rossiya v okrujayuschem mire: 2001 (Anilicheskiy ejegodnik)* (pp. 1-44). Moscow: MNEPU.
- Schulte, M. F. (2009). *Health Care Delivery in the U.S.A.: An Introduction*. New York: CRC Press.

- Selezneva, E. (2015). Otsenka posledstviy vvedeniya novykh form uchastiya naseleniya v oplate medicinskoy pomoschi. In E. Yasin (Ed.), *XV Aprelskaya mejdunarodnaya nauchnaya konferenciya po problemam razvitiya ekonomiki i obschestva* (Vol. 4, pp. 206-212). Mocsow: NIU HSE.
- Selezneva, E., Sheiman I., & Shishkin, S. (2010). Otsenka rezultatov provedeniya federalnogo pilotnogo proekta v zdavoohranenii. In I. Sheiman, & S. Shishkin (Eds.) *Modernizatsiya zdavoohraneniya: novaya situatsiya i noviye zadachi* (pp. 11-40). Moscow: Delo.
- Sheiman, I. (1995). New methods of financing and managing health care in Russian Federation. *Health Policy*, 32, 167-180. [http://dx.doi.org/10.1016/0168-8510\(95\)00734-A](http://dx.doi.org/10.1016/0168-8510(95)00734-A)
- Sheiman, I. (2007). Teoreticheskiye aspekty problemy konkurencii v zdavoohranenii. *SPERO*, (7), 51-66.
- Sheiman, I., & Shevski, V. (2014). Evaluation of health care delivery integration; The case of the Russian Federation. *Health Policy*, 115. <http://dx.doi.org/10.1016/j.healthpol.2013.12.011>
- Starr, P. (1982). *The Social Transformation of American Medicine*. New York: Basic Books.
- Starr, P. (2011). *Remedy and Reaction: The Peculiar American Struggle Over Health Care Reform*. New Haven: Yale University Press.
- Stevens, F. (2001). The Convergence and Divergence of Modern Health Care Systems. In William C. Cockerham (Ed.), *The Blackwell companion to medical sociology* (pp. 159-175). UK: Blackwell Publishers Ltd. <http://dx.doi.org/10.1002/9780470996447.ch9>
- Sullivan, K. (2006). *The Health Care Mess: How We Got Into It and How We'll Get Out of It*. Bloomington, Indiana: Author House.
- Truman, H. S. (1945). *Special Message to the Congress Recommending a Comprehensive Health Program*. Retrieved from <http://www.trumanlibrary.org/publicpapers/index.php?pid=483&st=&st1=>
- United States Census Bureau. (2006). *Historical Health Insurance Tables*. Retrieved from <http://www.census.gov/hhes/www/hlthins/data/historical/orghihist1.html>
- United States Census Bureau. (2008). *National Health Expenditure Data*. Retrieved from <http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/downloads/>
- White, J. (2013). Cost Control After the ACA. *Public Administration Review*, 73(S1), S24-S33. <http://dx.doi.org/10.1111/puar.12108>
- Woolf, S. H., & Aron, L. (2013). *U.S. Health in International Perspective: Shorter Lives, Poorer Health*. Washington, DC: The National Academies Press.

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