

# Hospital reform in post-soviet countries: the case of Ukraine and Moldova

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**Panel: Rescaling Health Care Policy** 

Reserve panel: Welfare State Rescaling - Theories, Policy Arenas and Dynamics

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Abstract (298 words)

#### Hospital reform in post-soviet countries: the case of Ukraine and Moldova

We can observe nowadays all over the world private companies providing health care services: hospital design, medical equipment, management and consulting. Since 1990, post-soviet states, such as Ukraine and Moldova, have gone through a process of reform of their health care systems. These countries represent a new market opportunity for international economic actors. This paper explores the foreign influences in reforming the hospital institution of former Soviet Union states, assuming their interest in the existing international experience in the field.

I study the hospital as an institution, focusing on its design and construction. After the Soviet Union's collapse, this point became significant on the health care reform agenda. A drastic reduction of the hospital beds, infrastructure modernization and new medical equipment need to integrate the new economical and societal changes.

This paper consists of two parts. First, I examine the characteristics of hospitals in Ukraine and in Moldova from a historical-comparative perspective. Relying on the historical institutionalism, I will reveal the significant patterns that emerged during the Soviet period, while considering them as mechanisms potentially delaying the institutional change.

Second, I will analyse the process of construction of Children Hospital of the Future, in Kiev, Ukraine. This project, considered significant, innovative and high-standard by country's political leaders and mass-media, engages local and international firms. I will explore in detail the actors involved, their preferences and capabilities, as well as the institutional environment that led to the approval of foreign hospital design.

In the context of the growing body of literature on diffusion in political science, this paper examines the external sources of influence in the hospital reform of post-soviet countries through the analysis of international companies' involvement in the process of hospital design.

Keywords: Transitional states, Globalization, Institutions.

#### Introduction

The role of the hospital as an institution

The hospital is a significant institution, at the heart of economic and societal developments. In addition to its main function of diagnostic and treatment of ill people, the hospital has achieved nowadays an important role in the society. It is also an establishment of teaching and research, a support to other health care services and an essential employer (Healy, McKee, 2002). The function of ensuring the health and the welfare of citizens brings the hospital into the consideration of policy-makers in almost every country in the world.

Despite the spectacular development of the hospital as major element of the health care system, as well as the growing interest of policy-makers for it, there is no exponential analysis in this field in political science. Some authors openly deplore the hospital receiving so little attention from scholars (Healy, McKee, 2002, p.66). If in the United States there are many studies on the economical aspects of hospital (McKee, Healy, 2002, p.32), the literature on hospitals in Europe is scarcer and even scarcer in former soviet countries. However, there are notable efforts in developing this subject in Europe, especially through the research of the European Observatory on Health care systems of the World Health Organization (Euro WHO)<sup>1</sup>.

The literature on former Soviet Union countries is largely focused on economical transition and changes from a central economy planning to a capitalist market system, as well as on political transition from an authoritarian to a democratic regime. Generally, this refers to a crisis transition from one system to another (Elliott, Dowlah, 1993, p.527). Twenty years after the fall of the USSR, our aim is to observe the mechanism through which the old institutions disappeared or transformed in line with economical and societal changes.

I study the hospital as an institution focusing on its structural transformation. The design and construction of a health care facility is related to institutional, legislative and regulatory norms that are determined "by the wider political, social, economic and cultural system" of each country (Ettelt, 2009, p. 64). In this context, the analysis of hospital restructuring in post-soviet countries represents an opportunity of studying an institutional change, while enlarging the meagre literature on a significant piece of their health care systems.

This paper analyses the development of hospitals in Ukraine and Moldova, two former soviet countries, following their independence. It observes the change which occurred during the period 2000 and 2008 in health care, focusing on the modernisation of health care facilities. More broadly, it is part of my research on institutional transfer in post-soviet countries.

I present this paper in two parts. First, the characteristics of hospitals in Ukraine and Moldova will be explored through a historical perspective: during the Soviet Union and following its fall. Second, I will analyze the involvement of foreign actors in the process of design of a new hospital in Ukraine. In conclusion, I will mention the importance of the national context into the implementation of external elements.

#### A few words on the theoretical aspects of the paper

After declaring their independence in 1991, Ukraine and Moldova have inherited a high number of hospital beds, of medical staff and of inappropriate hospital buildings. The whole health care system needed to be reorganized. This is the reason why since by beginning of the 1990's, both countries have entered into a process of reform of their health care services.

Taking into account that Ukraine and Moldova have experienced fifty years of common institutional background, I analyse how two independent countries responded to similar problems. In order to explore the institutional development, I use the theoretical framework of the new institutionalism. Previously studying essentially the State, its role, functions and actors, the theory of institutionalism was reintroduced in political science by a famous article of March and Olsen in 1984. The new institutionalism of the 20<sup>th</sup> century has declined itself in several approaches, all of which stress the importance of institutions, while using different explanations. There can be noted nowadays four forms of the new institutionalism: historical, rational choice, sociological and discursive institutionalism (Schmidt, 2008).

The historical institutionalism points out the initial developments of an institution in explaining an incremental change. The idea is that the decisions taken at the beginning of institutional creation, once institutionalised, will be resistant to change and though have an impact on any further development of the latter (Peters, 2000, p.3). The notion of *path-dependency*, central to this approach, underlines the persistence of an institution in time and expresses the attachment to its original forms. As Katheleen Thelen and Wolfgang Streeck argue, the path-dependency mechanisms are "more helpful in understanding institutional resiliency than institutional change" (Streeck, Thelen, 2005, p. 6). I will use this notion while exploring the remaining soviet characteristics in the hospital sector following Soviet Union's collapse.

More commonly considered as an organisation, the hospital can be analysed as an institution as well. The definition of institution I adopt here is the one presented by Wolfgang Streeck and Kathleen Thelen for "specific category of actors" as organisations. The authors suggest analysing organisations as institutions "to the extent that their existence and operation become in a specific way publicly guaranteed and privileged, by becoming backed up by societal norms and the enforcement capacities related to them" (Streeck, Thelen, 2008, p. 12). In this paper, the hospital will be observed as an institution which is regulated by a significant corpus of norms in architecture, engineering and medical planning. Adjustments to the specific norms, rules and enforcements of the hospital framework will be considered as an institutional change (North, 1990, p. 4). Moreover, the approach of Wolfgang Streeck and Kathleen Thelen stressing the possible gradual and continuous mechanisms of a fundamental change will be preferred for explaining the hospital transformation in post-soviet states.

The main hypothesis that I present within my broader research on institutional transfer, is that Ukraine and Moldova have transformed their institutions after 1990 with the involvement of foreign actors. In this sense, the main source of change would be exogenous factors, such as actions from international organisations (European Union, World Bank, WHO) or states (France, United Kingdom, USA). In the context of worldwide diffusion, the international actors have had the possibility to undertake actions in the post-soviet countries, while the later had the opportunity to accept them. This openness can be supposed to be a quite new phenomenon regarding the barriers during the USSR. The main hypothesis implies that

national actors did not look for internal solutions in reforming their institutions, but rather preferred the international experience in the field.

The assumption that follows from the main hypothesis is that the type of transfer is voluntary rather than compulsory. The Ukrainian and Moldavian officials have looked for ideas, methods and mechanisms to reform their institutions from abroad, while giving the opportunity to external actors to implement the change. Given the specificity of national context and the complex of norms regulating the hospital, the local actors have an important role in the process of importing a foreign experience. This assumption puts into perspective the unilateral action of exogenous sources and stresses the interaction of local and external actors in the implementation of institutional transfer.

The historical institutionalism in this context will be used to explore the role of the institutionalised ideas, administrative procedures, norms and ways of doing from the soviet period which proved to be resistant to change. The path-dependency phenomenon will reveal the difficulties of international actors to deal with the local specificity of a post-soviet country. In addition, the comparison between Ukraine and Moldova will give the opportunity to check if the similar development of an institution over fifty years in two different countries has led to the adoption of further similar institutional changes.

#### The countries of the analysis: Ukraine and Moldova

At the far east of European continent, Ukraine and Moldova are two countries that present geopolitical interest for Russia and the European Union. In the past, they were part of the Soviet Union and as various commentators allow us to say, the Russian influence is still present nowadays (Schmidtke, Yekelchyk, 2008). After declaring their independence in 1991, both states have entered a transition period in order to create, reform and consolidate market economy and democratic regimes. Since the 1990s, the European Union has developed various financial instruments in order to support their conversion: first the TACIS programmes and then the European Neighbourhood Policy (ENP). Almost twenty years after this date, there is no clear evidence of the results of this transition. In terms of theoretical statement, the countries have developed institutions and mechanisms of a capitalist system. But their economical and political situation is not very consolidated yet. This is a limited summary of the situation of Ukraine and Moldova, two states at the door of the European Union, but without any promise of entering it so far.

Ukraine is a significant country of an area of 603 700 km², situated at the crossroads of Europe and Asia. It declared independent from the Soviet Union in 1991. The parliament adopted a new constitution on 1996 stating that the president, head of the state, is elected by direct and universal suffrage for a five-year term. After a pro-Russian rule of president Viktor Yanukovych, Ukraine elected in 2004 through an "orange revolution" the pro-European Viktor Iouchtchenko (Fraser, 2008). The country proclaimed a European orientation, but has suffered since then from political instability (three elections in three years, from 2004 to 2007). The cabinet reshuffle considerably affects the completion of health programmes. In addition, despite engaged reforms after the Soviet Union fall, the economy had been in decline for over more than a decade (Lekhan et al., 2004, p.10). This had serious impact on country's population, indicating high poverty rates.

The Republic of Moldova is a relatively small country of 4 million people, who declared its independence from the USSR on 1991. The old soviet constitution was replaced in 1994 and

in 2000 it transformed into a parliamentary republic. The parliament elects the President – head of the State, every four years. The political party in power since 2001 is represented by the communists. A second election tour was organised on 29<sup>th</sup> of July 2009, due to the contested communist victory and following opposition's rejection to designate the President of the country. The opposition parties have been successful. They have created the Alliance for European integration and need now to organise for future political developments. The impact of political party change on the health care system is one of the parameters to take in account in country's future evolution. The role of politics is important in the political and financial support in reforming the hospital restructuring.

The social, economic and political difficulties that faced Moldova and Ukraine, after their independence, had a significant impact on health-care (MacLehose, McKee, 2002, p. 6). The hospital, at the heart of the health system, needed a deep reform, as the inherited model was inconvenient with the evolved medical technologies. But before analyzing how post soviet countries responded to these challenges, the general characteristics of the hospital before and during the soviet period will be presented.

#### Part one:

# Characteristics of hospitals in Ukraine and Moldova from a historical perspective

In order to present the situation of hospitals in Ukraine and Moldova, I use the literature of the European Observatory on Health Systems and Policies<sup>2</sup> as a theoretical basis. Some scholars from Moldova and Ukraine are cited as well. This part of the paper will be largely descriptive.

#### **Section one:**

#### Hospital developments before 1990

The characteristics of the hospital before 1990 comprise the development of the institution since its origins and with a specific focus on the period of the Soviet Union. The elements presented in this part are the result of researches on Moldavian and Ukrainian databases, interviews with local specialists, as well as WHO and World Bank reports.

#### The case of Moldova

The beginning of hospital developments

The specificity of Moldova is that historically, it was a part of Romanian state. From 1812 until 1918, Moldova was ruled by Tsarist Russia and became a "gubernia" (province) more commonly known under the name of Bessarabia.

Until the 18<sup>th</sup> century, Moldova had no formal health care institutions as such and no structured provision of health assistance or services. By early 19<sup>th</sup> century, an increasing number of hospitals began to open, largely based in the capital Chisinau or in municipalities (Figueras et al. 1996, p. 9). The oldest hospital of the country is considered to be the city hospital of the capital Chisinau, built in 1813, initially as a military hospital. Some sources mention the Jewish Hospital of Chisinau as existing even before 1812, but this is not entirely confirmed. In 1834, a Charity Society was created in the capital which gathered the city hospital, the Jewish hospital and two asylums for children and aged people<sup>3</sup>. The Orthodox Church and the monasteries have played an important role in financing the humanitarian activities related to population welfare. During this period, the public health was under the responsibility of the Government who administrated it through the Institution of public protection. The latter became very unpopular because of the lack of interest in the poor and ill people (Coada, p.85).

The health care services in Moldova during the first half of the 19<sup>th</sup> century were extremely weak. Except of the three existing hospitals, from the suburbs, patients were treated by very few doctors and medical agents. As Ludmila Coada explains in her research on the Zemstvo institutions, medical staff were very rare, especially in the country-side. In the absence of hospital conditions, necessary medicine and given the lack of medical training, the population generally refused to appeal to doctors (Coada, p.86). In these conditions, a large amount of Moldavian population benefited from almost no health care services.

In the middle of the 19<sup>th</sup> century, during the Russian period of reform under Alexander the Second, a district council called "zemstvo"<sup>4</sup> was established in the province. Though, the medical officials passed from the Institution of public protection under zemvsto management. The principal concern of the district council was to put in place a health care reform in order

to improve the difficult previous situation. The measures intended to organise the health sector and to provide the necessary health services to the population. The Gubernial (central) Zemstvo was managing the hospital of the capital, supported the nursing school, financed the medical conferences, while the regional ones participated at providing health care services to the population, supported the regional hospitals etc (Coada, p. 86-87).

Despite the evolution of the middle of the 19<sup>th</sup> century, the number of hospital remained very low as only 3 Zemstvo hospitals were accounted in 1870. The numbers increased very rapidly by the beginning of the 20<sup>th</sup> century as in 1914 there were already 115 hospital institutions in the country (Figueras et al. 1996, p. 9)<sup>5</sup>.

In 1918, Bessarabia unified with Romania and stayed within it until 1940. During this period, an elementary Bismarckian insurance system developed. It can be noted that the number of medical institutions and staffing increased. By 1940, in Moldova there were 446 health institutions, 1055 physicians and 2400 nurses and midwives (MacLehose in McKee, 2002, p. 9). The healthcare delivery was divided into a three-tier system related to the ability to pay and the private provision became dominant (Figueras et al., 1996, p. 9-10).

During the interwar period, there was a concentration and a centralization of the health care services in Moldova. On the one hand, this diminished the number of medical institutions, but on the other hand, the number of medical specialists and hospital beds increased. In addition, the construction of pharmacies continued as by tsarist time, at a slow rhythm. This can be explained by the interior restructuring of existing buildings for pharmaceutical needs (Museion, 2009, p.2).

### The case of Ukraine

Ukraine had a rather different past, even if similar characteristics with Moldova can be noticed during the Russian rule in the 19<sup>th</sup> century. Before the Soviet Union period, the borders of the country varied a lot over time. Documented references to the land of Ukraine date back to the era of Kievan Rus, from the 9<sup>th</sup> to the 13<sup>th</sup> century, when it became under Mongol control. After the destruction of Kiev (1240), Ukraine was divided in several parts under different influence (Mongol and Cossacks, Polish-Lithuanian). At the same time, Moscow had gradually extended its influence on the Ukrainian territory since 1654. By the end of the 18<sup>th</sup> century, the main parts of Ukraine came under Russian's influence, while the western territory came under Austro-Hungarian rule (Lekhan et al., 2004, p.2-3).

This period was particularly difficult for the population of these lands. The mortality levels were higher than in other countries in Europe. Health care and other social services had developed under Tsarist Russia by 1864. As in the case of Moldova, they were run under the local authorities called zemstvos.

The social health insurance, based on Bismarckian model, was introduced in 1912 and covered about 20% of industrial workers<sup>6</sup>. In 1917-1918, there was an attempt to create the independent Ukrainian state, but with the Russian October Revolution, the territory became part of the Soviet Union. The Ukrainian Soviet Socialist Republic was established in 1922.

Ukraine suffered a lot during the 20<sup>th</sup> century: the World War I, the October revolution and the Civil War. There were severe epidemics and famine. World War II again destroyed many

health care infrastructures. The health care system was centralized under the Soviet Union and several public health measures were put in place.

As it can be observed from the description above, both countries have experienced very significant historical moments. Despite more or less different locations and historical origins, Ukraine and Moldova have a common background related to the Russian influence on their territory. This can be argued for the period following their inclusion in the Soviet Union as well.

#### Section two: Ukrainian and Moldavian hospitals during the soviet period

#### The general context

Ukraine became a Soviet Socialist Republic in 1922, while Moldova was detached from Romania under the Russian-German Ribbentrop-Molotov pact of 1939. It became the Soviet Socialist Republic (SSRM) in 1940. During the war, 82% of all health care institutions were destroyed. Ukraine had also very serious health problems and was confronted with significant epidemics and famine. Most of the evolution of hospitals in both countries took place after the Second World War.

The Soviet Union put in place a health care system over its entire territory. According to it, Moldova and Ukraine had the same health principles. The concept of this system was created by N. A. Semashko, the first Peoples' Commissioner of Health (Lekhan et al. 2004, p.12). The characteristics of it were as follows: the state ownership and management, free health care for all citizens, link between science and practice and extension of preventive activities. Under the responsibility of the State, numerous health measures were put in place, covering the epidemiological, the hygiene and the protection of mother and children issues (Figueras et al. p. 10).

The health care systems in Ukraine and in Moldova during the soviet period were under the control of central government in Moscow and formally under the control of the Ministry of Health of the USSR. In reality, the decisions were taken by the Communist party in power. A five-year plan provided the norms, the equipment and the personnel for the whole territory of the Soviet Union (Lekhan et al. 2004, p.12). The central government decided of the number of hospitals, the type, the medical equipment as well as the medical personnel. To put it briefly, all the "planning of resource and personnel was strictly centralized" (Lekhan et al., 2004, p.13). In these conditions, the local needs of Ukrainian and Moldavian hospitals were taken into account according to the size population and not the country's health care needs.

After the Second World War, Ukrainian and Moldavian health care systems needed to be rebuilt. In both countries, the first steps of the reform concerned the control of the communicable diseases and the prevention of epidemics (MacLehose in McKee, 2002, p. 9 and Lekhan et al., 2004, p.13). The soviets stressed the idea of free access for everyone as well as the improvement of conditions for industrial workers. According to these principles, health infrastructure and training of medical staff were put in place.

In addition, the health care system was reorganized. In Ukraine, a hierarchy of health care facilities was established according to rayon (district), oblast (region) and republic level. In Moldova, there were developed efforts of coordination between the national, municipal and rural institution. In the same time, the capacity of local hospitals increased within the development of rural areas. During the period 1951 and 1957, Moldavian hospitals were united with polyclinics which delivered the out-patient services to the community. This type of organisation extended the influence of the hospital over the primary health care. In parallel, the Ukrainian policlinics were linked to district hospitals, while the medical staff worked between these facilities to ensure continuity of services. According to soviet reflexion, this tended to develop the experience of general practitioners.

The specificity of hospital development in Ukraine and Moldova during USSR

The soviet period was characterized by a general expansion of health care facilities. Most of existing hospital institutions of Moldova was built during the post-war period. Among these, we can cite the Accident and Emergency Hospital of Chisinau (1945), the city Hospital for children (1955-1956), the Traumatological and Orthopaedic Hospital (1959) currently under reconstruction. There can be noted some progress in terms of medical technology and equipment as well (Museion, 2009, p.2).

The most successful period for hospital construction in Moldova are the years between 1970 and 1980 when the majority of significant institutions were built. These are the Republican Hospital for children (1970), the Republican Clinic Hospital of Chisinau (1977), today subject of reconstruction, the Centre for the protection of Mother and Children of Chisinau (1983) and the extension of the Municipal Hospital of Balti (designed in the beginning of 1980). By the end of the 20<sup>th</sup> century and before the Soviet Union's fall, numerous medical institutions were built all over the territory.

In Ukraine, the provision of health care increased significantly in the first decades of the USSR. For example, the spending on health services per person in the capital Kiev grew three times by 1931 compared to previous years and six times during the years 1933-1940 (Suprunenco, 1985, p. 212, 1<sup>st</sup>, 270). Along with these investments, the number of health care institutions as well as of medical staff increased significantly<sup>7</sup>.

During the Soviet period, many Ukrainian hospitals were built or modernized. By 1940, the most important institution was the hospital Okteabreskaya (today Aleksadrovskaya) which had 1200 beds in 1935. Other institutions that can be cited are the clinical hospital M. I. Kalinin, hospital "Medgorodok" and the clinical hospital of the district Radyianskogo (Suprunenco, 1985, 1<sup>st</sup>, p. 427).

During the 1950-60, hospitals were built in almost every district of Ukraine. The book of N. I. Suprunenco, on the "Socialist Kiev", takes the case of Darnitski district to exemplify the successful exponential development of the hospital sector. The authors say that by the end of 1950, this district had: a first hospital of 50 beds linked to two policlinics and two laboratories, a second hospital of 100 beds linked to two policlinics, but also two independent laboratories, a tuberculosis clinic of 25 beds, a central hospital of 100 beds with a policlinic, a surgical centre of 200 beds, an individual policlinic and other various medical points within the industrial companies of the region. According to the manuscripts published during the Soviet Union, the mark of success were the high number of doctors (nine thousands doctors for the capital Kiev) as well as the increasing numbers of hospital beds. There was a generally popular concern for the industrial workers in USSR and the protection of mother and children with the aim of improving the health conditions of the soviet population.

One of the general characteristics of the Soviet hospital system was the very high number of beds in hospitals. In Moldova, the number of beds between 1950 and 1960 grew from 27 to 44 per 10 000 inhabitants (MacLehose in McKee, 2002, p. 10). This concentration persisted during the years of 1970 and even until 1994 (regional hospital beds increased from 110 to 457). In Ukraine, from 1960 to 1984, the numbers of hospital beds only for Kiev was 34,000 (Suprunenco, 1985, 2<sup>nd</sup>, p.155). As presented above, the health system of USSR pushed to an "ever-increasing" capacity, which left Ukraine having one of the highest numbers of hospital bed and doctors per capita in the world (Lekhan et al., 2004, p. 14).

The explanation of the exponential development of beds, doctors, health care services and medical institutions during the Soviet period consists in the specificity of the Semashko model. The norms provided by the USSR Ministry of Health "focused on high number of doctors and hospital beds rather than on outcomes of health and other outputs" (MacLehose in McKee, 2002, p. 10). This particularity, as well as the introduction of annual medical checks for the entire population in 1986, resulted in long stays in hospitals, sometimes for very simple health disorders.

Besides the high number of beds and medical specialists, the principles of the soviet health care system were not always respected. Although all patients had free access to health care services, sometimes nonofficial payments were made (MacLehose in McKee, 2002, p. 10). We can also note that there were hospitals for privileged persons, as for important communist officials, various professional categories who beneficiated of special care (i.e. military). Still, the main inconvenience was related to the centralized management of the health care system as the central budget left little possibility for the local services to deal with their establishments.

To summarize the development of hospitals in Ukraine and in Moldova during the soviet period, it can be mentioned that the first decades of the USSR saw the exponential evolution of medical institutions, the professional training of medical staff, the investments in scientific research and the specialization of health care facilities. However, these general trends failed to maintain a stable system over the years, as since the mid-1960s, the health indicators of population in Soviet Union have started to deteriorate (Lekhan et al., 2004, p.14).

Giving the economical difficulties of the system, the resources available for health care were significantly reduced. This led to a delay in terms of surgical procedures, modern pharmaceuticals and medical equipment. While Western institutions adopted new health care objectives, Ukrainian and Moldavian hospitals suffered of the declining situation of the soviet system as a whole.

#### Part two:

## The development of hospital between 1990 and 2008

#### Section one: General trends of health care systems of Ukraine and Moldova since 1991

Very shortly after declaring independence in 1991, Ukraine entered into a process of economic and institutional reform which had a significant impact on country's main economic and social indicators. The new orientation to a market system has reduced the resources available for health. Many social categories (pensioners, disabled people) suffered a reduction in living standards. Moldova has experienced also economical difficulties which impacted on the health care system. The main problem was caused by the cutting budget to the health sector, which made all the inherited services very expensive for the Government. The necessity of reform was obvious in a larger context of economic and social breakdown.

#### Ukraine

#### Health care system reform

After 1991, an orientation of change came across almost all Ukraine' sectors: political, economical and social. The transition to market relations, the social instability and the weak economic indicators have "drastically reduced living standards for large part of the population" (Lekhan et al., 2004, p. 15). The scarce resources for health sector did not allow maintaining the inherited complex system which need entire organisation of its structure, services, medical personnel and old hospitals. In these conditions, the reform of the health sector was a priority immediately after independence.

In 1992, the Ukrainian parliament adopted the Principles of Legislation on Health Care which set out the directions of the national health policy<sup>8</sup>. As Lekhan stresses, this act specified for the first time that the primary health care will be the central mechanism for providing health care (Lekhan et al., 2004, p. 105). The reform intended to develop this sector which was largely neglected during the soviet period (only 5% of allocated resources).

The health care system of Ukraine is very complex. Given the state guaranty for "effective medical services accessible to all citizens" stipulated by the Article 49 of the Ukrainian Constitution of 1996, it is organized between the national and the regional levels. At the national level, the Ministry of Health has the main role of planning, managing and regulating the health care. At regional, district and community level, these functions are ensured by specific local authorities. The Ministry of Health has essentially the role of issuing the guides and norms related to the health policy. Its objectives are for example to ensure the implementation of national health policies, to develop, coordinate and implement the national health programmes, to organize and enforce state accreditation of health facilities and to manage the specialised medical institutions<sup>9</sup>.

The national health policy is completed by regional policies which specify the needs of their populations<sup>10</sup>. The management of the health care system also include a wide range of actors among which are the parliament (Verkhovna Rada) and its Committee for Health Care, Motherhood and Childhood (for the principles of health care in Ukraine), the Ministry of Finance (for the State Budget), the Ministry of Defence, the Ministry of Internal Affairs and the Ministry of Transport (which have parallel health services to their employees and

families), the Ministry of Labour and Social Policy (for health care services to nursing homes) as well as a series of Social Insurance Funds. As it can be seen, the intervention of various actors results into a rather fragmented organisation (Lekhan et al., 2004, p. 17-19).

Ukraine has not yet reformed the financing of the health care system. The Soviet tax-based approach provides as in the old times universal coverage and the Government budgets are the main official financial sources (Lekhan et al., p. 33). In the meanwhile, public funds have suffered a lot from the economic crisis and impacted the health care provision to services for citizens. This situation has often led the patients being indirectly charged for services in the public sector thus challenging the state declared principle of "free of charge". The poor resources of the State made the Government look for various alternative options. For the moment, no law has been adopted in the field of health care financing<sup>11</sup>. The country seeks today international experience in the field in order to adopt a successful model of mandatory medical insurance<sup>12</sup>.

The financing of the health care system is only one aspect of urgent issues to be solved in the health sector. Various national programmes covering public problems are nowadays under way. In 2002, the Cabinet of Ministers approved the first national public health strategy called the "Health of the Nation" for the period 2002-2011. This initiative suggests the main lines of development for health care restructuring while complying with the European WHO principles of health for all (Lekhan, 2004, p. 22). Among the proposed orientations, there can be cited the developing and improving of national health policies, the advancing of health care system organization, the support for the research for health and the developing of international cooperation in health sector. These are several of the points to be seriously advanced in reforming the health care system, but which represent for the moment ambitious theoretical statement, as the implementation of the programme is delayed.

#### Health care facilities

The experts from the European WHO consider that the system is "still working according to the Semashko model, with resource allocation based on capacity" (Lekhan et al., 2004, p. 55). The scarce resources for health care in general and the maintaining of previous financial mechanism do not allow radical changes to take place for the moment in the health care delivery in Ukraine.

Primary Ukrainian health care is essentially kept as during the soviet period and is composed of a large network of polyclinics in urban and rural areas. The hospital is part of secondary and tertiary level of care. In reality, there is not always very clear distinction between the primary and the secondary care. The patients can go directly to a specialist without a referral from their usual doctor and this is a very wide practice throughout the country. One of the reasons could be the low level of skills of medical personnel and of equipment which directs the patient to the secondary care. This phenomenon has negative effects on the speciality of primary care physicians who are consulted only for "minor complaints" (Lekhan et al., 2004, p. 56-57).

The hospital care in Ukraine is delivered at secondary level in central district and city hospitals. The tertiary level receives patients with more complicated diseases which need specialised treatment. It is concentrated in complex facilities, in specialised hospitals and dispensaries. In practice, the limits between secondary and tertiary care are not very clearly distinguished. A European Report on reforming the secondary health care in Ukraine

mentions that only 35.7% of cases admitted to regional hospitals were in need of secondary level care (EU report, 2008, p. 35) <sup>13</sup>. Current studies show that a large amount of the population receiving inpatient care, could effectively receive outpatient medical services. As during the Soviet Union, "the hospitalization does not always correspond to the severity of the condition" and the hospital bed provisions do not express the patient specific needs (EU report, 2008, p. 36)<sup>14</sup>.

In other words, the existing Ukrainian inpatient facilities admit incoherently the patients in their establishments, providing really necessary intensive care for ones and hotel services for others. Despite several reform attempts, focused essentially on reducing bed capacity, the organisation of the health care delivery has not been efficiently modified. Most importantly, "there have been no changes in invoice expenditures" which means that no significant investment was made to improve the inherited buildings and structures (EU report, 2008, p. 37).

Ukraine has had a very high number of hospital beds at the end of the Soviet Union. This over-capacity has fallen since, but it is still above the European Union's average (4.39). The number of hospitals per 100 000 population fell from 7.3 in 1991 to 5.9 in 2002. In the same time, the number of hospital beds has also been reduced of 36%. As Lekhan explains in his study, the economic decline it made difficult for the State to maintain the inherited over-capacity of hospital beds. Consequently, the Ministry of Health focused on reducing its numbers by issuing a resolution in 1997 which imposed the norm of 8 beds per 1000 population (Lekhan et al., 2004, p. 72). While hospital bed reduction started immediately after independence, the most significant change took place during 1995 and 1997 when more than 20% of hospital beds were closed. In practice, this process took the form of reorganisation of some of the health care facilities: the municipal hospitals, reduced by 14%, have been in large part transformed into polyclinics, while 36% of rural hospitals have been converted into rural ambulatories. It is worth notifying that the reduction of hospital beds did not contributed to a reduction of admissions, mainly because the financing is still based on bed capacity. Yet there was a decline of the average length of hospital stay (from 14.2 days in 1991 to 12.3 in 2002).

There are several types of health care facilities in Ukraine: multi-field, single-field, specialised and special health care institutions, which can be either at oblast or rayon level (EU report, 2008, p. 37). In 2008, over 2.900 health care facilities with 404,200 beds activated in Ukraine. Most of them were public. After 1990, several private individual entities can be noted, but the sector is rather poorly developed. In 2007, nearly 1500 private health care institutions were registered (EU report, 2008, p. 39). Generally, the health care facilities are owned by cities and districts, except for a few tertiary establishments run by the Ministry of Health or Regional Health care Departments. The other ministries (i.e. Ministry of Transport, Ministry of Defence) have dedicated institutions for their members. This fact maintains a parallel activity and makes difficult a transparent organisation of the health care sector.

Despite the early attempts to reform the inherited Soviet model, Ukraine has not been able to transform radically its health care system. The political instability and changing governments have contributed to delaying institutional change (Lekhan et al., 2004, p. 110). Reports of European health consultants stress the lack of funding for health facilities, especially for the maintenance or transformation of buildings and infrastructures. The health needs of the population should be taken into account in a coherent network of hospital institutions. This is not yet the case in Ukraine, as the legal framework does not provide a clear definition of primary, secondary and tertiary health care. Moreover, Art. 49 of the Constitution of Ukraine

does not allow closing or even reorganizing any public hospital. This makes the reduction of existing public health care facilities rather difficult.

The lack of legal transparent framework for the reorganisation of the health sector, as well as of significant investments in current inherited hospital buildings and equipments demonstrates that Ukraine has still major efforts to enterprise in order to optimize its hospital sector. As we can see, even if an orientation of change was induced by early reform, no noticeable radical transformation of the inherited soviet model was realised.

#### Moldova

As her neighbour, Moldova inherited of an over-capacity in medical facilities and personnel, which following the Soviet Union's collapse had no more resources to be maintained. Despite this evidence, Moldova carried out no spectacular measures to reform its system and improve health indicators during the first decade after independence. The economic crisis of 1995, followed by the rouble crash in the Russian Federation in 1998, deeply affected the health conditions of the population. The life expectancy rate decreased by two years during that period. These parameters pushed the Government to pay attention to the deteriorating health sector. Compared to Ukraine which began reform immediately after its independence, Moldova started change in health care only by the middle of the 1990s. The WHO experts consider that this delay has left the possibility for the initial reform ideas to be defined with international organizations before implementation. In addition, the country could benefit from the experience of other former soviet states which have already tested various measures, while avoiding negative initiatives (Atun et al., 2008, p. 111).

The key lines of the reform concerned the privatization of health services (dental services and pharmacies), hospital restructuring, the support to the primary care and the introduction of mandatory health insurance. As in Ukraine, primary care needed to be structured within the overall organisation of the health care delivery. In 1998, the minimum of basic services was put in place under the minimum package of health care, available for several social categories because of a lack of funding. A significant point of the reform was also "the move from bed numbers to per capita allocation in planning the health budget" (Atun et al., 2008, p. 113).

The organization of the health care system of Moldova is rather similar with the one of Ukraine. The Parliament approves budget allocations and develops the health policy to be implemented by the Ministry of Health. The latter is the central piece of the system for developing the health policy, quality control and the reform programme. Similarly to Ukraine, other Ministries intervene in the management of the health care system: the Ministry of Finance (advises the parliament on the suitable level of funding), the Ministry of Education (for undergraduate education), the Ministries of Transport, of Internal Affairs etc. Some of these institutions continue to provide health care services to government representatives or high-level officials (Atun et al., 2008, p. 23). The transparency between the role and functions of these institutions within the regulation of the health care system is considered one of the forthcoming reform issues in Moldova.

A Public Administration Law of 2003 developed a new structure based on 32 rayons, two municipalities (Chisinau and Balti) and two autonomous units (Gagauzia and Transnistria). The health care delivery is organised on three levels. The primary care, following the reform of 1996, is based on family doctors system. The secondary care is provided through general hospitals and rayon/municipal level and has been consolidated since 1999. Tertiary care

provides specialised and high-technology services through the republican hospitals and national institutes, mostly in the capital Chisinau. As in Ukraine, these institutions are directly subordinated to the Ministry of Health<sup>15</sup>.

Most of changes in the health sector of Moldova took place after the adoption of the "Health Sector Strategy for 1997-2003". This document identified critical areas of development. Among these were the creation of family-centred primary health care in order to "establish effective interface between primary and secondary care levels", the introduction of the mandatory health insurance modifying the financing system, the reform of medical staff education and the reform of pharmaceutical policies. The Health Investment Fund Project, put in place by the Government of Moldova and the World Bank, complemented the Health Strategy. The results of these steps were rather positive. Between 1995 and 2004, the number of family doctors increased from 57 to 2096 (Atun et al., 2008, p. 113). Even if many Moldavian primary care facilities still need modernisation, there was implemented a clear shifting in resource allocation from inpatient to ambulatory and primary care. Moldova's experience on this point seems more successful than her neighbour Ukraine.

One of the most significant items of the Moldavian reform was the introduction of the mandatory health insurance. The Ministry of Health has paid particular attention to the successful implementation of the system's financing mechanism. Initially, the model was introduced in the Hincesti region in 1999 and was part of the UNICEF project implemented together with the Ministry of Health. The project provided basic and emergency services and was financed by local voluntary contributions. Only after a successful implementation in this region, the Ministry of Health decided to spread the experience all over the country. The supportive role of the Government of Moldova had a positive influence on the nationwide adoption of the mandatory health insurance (Atun et al., 2008, p. 115)<sup>16</sup>.

#### Health care facilities

Moldova inherited of a very large network of health facilities from the soviet period. As explained in the first part of the paper, in the health system of the Soviet times, each rayon had several hospitals, several polyclinics and several more health posts<sup>17</sup>. The network included over 305 hospitals, 1011 medical posts and 189 medical centres, which for a country of 4 million inhabitants was rather extensive (World Bank note, 2003, p. 12). As for the entire health sector, the hospital restructuring had no improvements during the first decade after independence. In 1997, the country had one of the most significant capacities of health care facilities and medical staff compared to Western Europe and even to former Soviet Union states (World Bank, 2000).

The economical crisis of 1998 and drastic reduction of resources available for the health sector constrained the Government to reduce the existing health care facilities, hospital beds and medical staff. Between 1995 and 2002, the number of hospitals reduced from 335 to 110 and the number of beds from 53 000 to 24 000. By 2006, the number of hospitals reduced to 84 and the total number of beds to 22 000 (Atun et al., 2008, p. 76). The rural hospitals have been closed, while the regional ones have been consolidated. In reality, many hospitals still function in the country, while maintaining only partial activity.

In the capital Chisinau, during 1997 and 2002, the number of hospitals decreased from 22 to 10 as well as the number of hospital beds, which has been reduced of 48%. These actions have led to the closing of the Clinical Hospital for Children N°2 and the Maternity "Gh.

Marcu" N°1, as well as to the reorganisation of services in other several hospitals (World Bank Note, 2003, p. 12). Along with the reductions of hospital beds, the number of hospital admissions also decreased from 23.5 in 1990 to 16.7 in 2006. This was accompanied by a fall in the average length of stay, especially for acute hospital admissions. The latter is still higher than for the EU countries, but shorter than the average in CIS countries (Atun et al., 2008, p. 77).

If the rural localities have appreciably reduced the ineffective health care facilities, the tertiary care, provided in municipal and republican hospitals, did not suffer many changes. There is a "double provision" of facilities through maintaining both municipal and republican institutions (Atun et al., 2008, p. 79). The sectors that are mostly duplicated are gynaecology, trauma and paediatrics. Despite some restructuring initiatives in 2002, no strategy of reorganisation has been adopted yet.

Recently, the Ministry of Health of Moldova has paid particular attention to the development of hospital sector. An analysis of the hospital buildings in Moldova showed that no major investment has been made in the field (Ministry of Health, 2008). The infrastructure of health care facilities suffered critical situation. A public medical institution is generally of 45 years old. A legal framework was adopted in order to give opportunity to the hospitals to improve their deplorable conditions. In 2007, the "National Strategy for development for 2008-2011" has been adopted. This document has been completed by a Plan of Actions for the strategy's implementation and followed by the "Strategy of development of the health care system during 2008-2017". These initiatives point out the need to advance the hospital sector. The aim of the strategy is to develop four central Performance Centres across the country, in order to combine the latest medical technologies, medical equipment, management systems and to implement public-private mechanisms (Ministry of Health, 2009). For the moment, the first item on the agenda is the restructuring of the Republican Clinical Hospital which is the most important hospital institution of the country.

Moldova has indeed taken several measures in reforming the inherited health care system of the soviet period. Still, major points need improvement, in consolidating the primary care delivery, as in the restructuring of secondary and tertiary levels as well. The hospital sector reform is the forthcoming challenge.

#### New hospital trends in Ukraine and Moldova

For both Ukraine and Moldova, it can be concluded that some changes in hospitals within the broader reform of the health care system have occurred since 1991 and this cannot be neglected. Transformations can be observed in the development of the primary care as a central delivery mechanism of the health care and in the implementation of mandatory health insurance. In the same time, each country has its rhythm of implementing reform. If Ukraine declared a process of change immediately after independence, Moldova waited for almost ten years before enterprising actions. Despite the promptness, Ukraine has not yet implemented a mechanism for the financing of the health care system, while Moldova has experienced already five years of successful mandatory insurance. Certainly, both countries have still progress to make.

Taking into account the approach of Streeck and Thelen on institutional change, the fact that no radical obvious transformation has occurred in transforming the health care facilities of Ukraine and Moldova after the Soviet Union's collapse does not imply the absence of basic

change. The authors suggest that a "fundamental change" takes place "when a multitude of actors switch from one logic to another" and this can be rather gradually and continuously (Streeck, Thelen, 2008, p. 18). A more detailed observation of the hospitals restructuring can reveal new actions of actors within the inherited institutions in response to new challenges. The main presented hypothesis is that external sources contributed to the observed institutional change in the absence of local appropriate solution and in connection with the worldwide diffusion phenomenon.

The existing hospitals in post-soviet countries have often difficulties in continuing to provide quality health care services. The inherited structures were built upon a fragmented model. Many departments were in separate buildings (i.e. paediatrics, obstetrics, surgery and administration). This is an important aspect, as the architectural and engineering characteristics during the Soviet Union have seriously increased the electricity and heating expenditures (World Bank Note, 2003, p. 12). By the end of the USSR, the hospital as a structural building had major differences in design and engineering quality compared to Western developments.

The recent political declarations in Ukraine and Moldova related to the redesign of existing hospitals upon the international and European standards seem to express an open door for the experience of foreign firms of architecture, engineering, construction and medical planning. The former Soviet Union countries need the international experience in restructuring their health sector in order to create modern hospitals and ensure quality health services to their population. The inherited buildings and equipments do not correspond to the medical technologies which have spectacularly evolved since the 1980's in Western countries.

In Moldova, the project "Health services and social assistance" implemented with the support of international organisations such as the World Bank gave the opportunity to the Ministry of Health to prepare a general Plan of reorganisation of hospitals in the capital Chisinau (2006) and to prepare the feasibility study (2008) for restructuring the main hospital institution of the country – the Republican Clinical Hospital (Ministry of Health, 2009). Both documents have been realised by the German international consultancy firm Top Consult Koln, which was selected by an international tender. The Moldavian Ministry of Health decided to appoint an international company for architecture and engineering in order to rebuild the major country's hospital while adopting international quality standards of health care facilities. Interviews with ministerial officials reinforced the idea that foreign experience was considered necessary in the absence of local confirmed firms, able to provide the latest architectural, engineering and medical equipment solutions.

In Ukraine, a largely popular hospital project is being realised by the international consortium bdpgroupe6. The French-English architectural and engineering practice was appointed through an international tender to design the main specialised country's facility – the Children's Hospital of the Future. The institution intends to combine the latest techniques of Western design in the cure of cancer diseases for children and mothers of Ukraine. This health care facility will respond to an increasing need of treatment in the country.

The participation of international firms in the restructuring of hospitals in Ukraine and Moldova is a relatively new phenomenon. At the moment, the mentioned projects are the only public facilities to be concerned. In Ukraine, several private facilities (clinics and laboratories) have been designed with the support of international companies. In the following section, I will explore the process of design of the Children Hospital of the Future in Kiev.

This project is at the end of the architectural phase and allows the analysis of initial exchanges between the actors. The Moldavian hospital is for the moment on stand-by. After the feasibility study realised in 2008, an international tender should appoint the future architectural and engineering company which will redesign the existing building.

# Section two: The project of the Children Hospital of the Future in Kiev, Ukraine – a case study

The project of the Children Hospital of the Future, in Kiev, was originally the idea of a Ukrainian charitable organisation. In 2006, the International Charitable Fund Ukraine 3000 decided to create a significant hospital in Ukraine in order to provide high-quality treatment for the oncohematological and oncological diseases and prevent the high levels of child mortality in the country. Very rapidly, the project has associated large parts of the population, from important businessmen to ordinary people. The realisation of the new health facility linked public as well as political expectations. In this section I will first introduce the main actors of the project. Second, I will present the interactions between them that led to the approval of foreign design.

#### The context

The Ukraine 3000 International Charitable Foundation is a non-governmental organization founded in 2001<sup>18</sup> and supervised by Kateryna Yushchenko, the wife of the President of Ukraine. Its goal is to federate Ukrainian people around notable projects for the development of the society and the building of a better future for Ukraine. In 2006, the Foundation decided to create a Hospital Centre for the Mother and the Child. The operation was named the Children Hospital of the Future. A new institution was to be built in order to provide specialised paediatric services to children of the whole country. The message spread by the Foundation was that thousands of ill Ukrainian children will be given hope by the possibility of being treated in a new high-technology facility<sup>19</sup>. A collecting of resources for the construction of the All-Ukrainian Mother and Child Health Care Centre in Kiev was launched during the same year.

Very rapidly, the action gained in popularity and became the "largest charitable project ever in Ukrainian history" (Ukraine 3000, 2008). More than 650 business and more than 9000 people contributed with funds for supporting it. The Government and state authorities of Ukraine also expressed their willingness to sustain the construction of the hospital. The institution corresponded to the health care needs of the population. It was necessary in the context of inexistent appropriate health facilities among the old inherited structures. In addition, the project benefited from a substantial social popularity. In these successful conditions, the construction of the new hospital was placed at the heart of numerous economical, political and social interactions in Ukraine.

#### The course of action

In September 2006, the Charitable Foundation Children Hospital of the Future was created within the International Charitable Fund Ukraine 3000. This non governmental organisation has been given the task of realising the Children Hospital of the Future. The separated identity was formed in order to ensure efficient management and transparency of the allocated funds while dedicating itself entirely to the new project.

The Foundation Children Hospital of the Future made a series of actions in order to realise the hospital. Since the beginning, the organisation has started by communicating on the project on the whole territory of Ukraine. A Promo Tour was launched on 29<sup>th</sup> of September 2006 in Lviv and continued in the cities of Sumy, Ternopil, Ivano-Frankivsk, Poltava, Donetsk, Odesa, Mykolayiv and Kherson. The project was presented to almost all oblast centres of

Ukraine. During the promotional events, the members of the Fund held presentations and press conferences to the local mass-media as well as to the medical representatives of the region. In addition, meetings were held with the businessmen of each of these cities in order to gain financial support for the project. The promotional tour had the aim of associating Ukrainian society with the construction of the new hospital as well as collecting the necessary funds for it. The population was informed that a special charitable fund was created to raise finances for the project, which was registered in Ukraine, but also in the USA and in Europe.

The Foundation used in addition the national television channels and mobile network to give possibility to eventual donors to participate. On 17<sup>th</sup> of December 2006, the National Television Company of Ukraine hosted the four-hour Telethon for the Children Hospital of the Future. The programme was broadcast by over ten television and radio channels. The project was presented and discussed publicly with medical experts, politicians and civil activists, but also with various athletes and artists. The media operation included through live broadcast the views of representatives from Ukrainian Oblast (Donets, Dnipropetrovsk, Lviv, Odesa etc). All Ukrainian mobile operators have been mobilized for this event by organising the possibility to send money transfers through SMS or number call. From 1<sup>st</sup> of October to 16<sup>th</sup> of December 2006, 1.5 million hryvnias (around 300.000 \$) have been collected by the 353 telephone number and by the end of the telethon the donated sum was of 2.4 million hryvnias. Along with the organisations and individual participation, the telethon action has declared 242.954.000 hryvnias (around 28 million dollars). Today, around 116 million hryvnias (13 million dollars) were collected for the Children Hospital of the Future.

The construction of the health care facility became a famous project in Ukraine, as numerous organisations and individual people have participated. The project was presented as a collective public initiative. The nationwide utility of the hospital was related to the high numbers of cancer diseases, particularly at children in Ukraine. The facility was planned to be accessible to the children of every oblast or city of the country. The Head of the Board of Directors of the Fund Ukraine 3000 declared in 2006 that "the term quota is inapplicable to the issues of children's health". The specialisation of the facility on cancer diseases and the use of high-technology placed the future hospital at tertiary level, where patients with complicated diseases from the whole state could be treated. This was for the first time that a performance specialised hospital had to be constructed in Ukraine. The initiative should also participate in a better separation between the secondary and the tertiary levels of health care delivery.

#### The national actors

The Foundation Ukraine 3000 and the created unity Foundation Children Hospital of the Future were the main actors at the origin of the construction of the new specialised medical facility. In order to realise this project, they needed the support of state administration. A hospital is an extremely regulated institution. Numerous state organisations are involved in its design and construction. In Ukraine, several of the institutions to be mentioned are the Parliament, the Ministry of Health, the Ministry of Construction, the State Administration Department of the Presidency of Ukraine, the City Council of Architecture and Construction etc.

The Foundation Children Hospital of the Future is the main actor of the conception of the Children Hospital of the Future. In the same time, the State Administrative Department of the Presidency of Ukraine has intervened significantly into the hospital project. On 22<sup>nd</sup> of March

2007, the two organisations have signed an agreement of cooperation according to which the State Administration will be in charge of the construction of the new facility. As Mrs. Youshchenko further explained, this act has delimited the responsibilities between the main actors of the process. The Charitable Fund was in charge of the design, medical task approve, hospital equipment and training of professionals, while the State Administration had to carry out the construction of the building. The direct involvement of this institution, as well as its participation in the evaluation of critical moments during the entire design process, demonstrates the State action and interest in the realisation of the hospital.

The Ministry of Health is a directly concerned actor as well. By organising the planning of health care facilities in the country, it manages their number, the hospital beds and medical personnel to respond to necessary health needs. In addition, in Ukraine, the Ministry of Health is responsible for the tertiary level institutions. The realisation of the Children Hospital of the Future needed its approval (initially of the utility of such an institution and then of the design and engineering specifications of the future hospital).

Other organs such as the Architecture and Town Planning Council at the Central Management of Town Planning, Architecture, and City Design of the Kyiv City State Administration, the Parliament (Verkhovna Rada), the City Council of Kiev etc need to be associated at different moments of a hospital making.

The Cabinet of Ministers voted the decision for the construction of the Children's Hospital of the Future on 25<sup>th</sup> of May 2006. Within the Parliament, the Head of the Verkhovna Rada Committee for Health care, Tetiana Bakhteyeva, approved the creation of the medical specialised institution and even joint the promotional tour in Ukraine. This institution has an important influence in determining the main principles of the health care, as well as on delivery and financing (Lekhan et al., 2004, p. 19).

The Architecture and Town Planning Council at the Central Management of Town Planning, Architecture, and City Design of the Kyiv City State Administration approved on 8th of February 2008 the draft design of the future project, while giving comments and observations for improvement. This administration has a central role in the official approval of the design project of health care facilities in Kiev city. It is composed of a commission of numerous experts in architecture, engineering and medical planning who evaluate the projects of design, while giving comments for necessary changes.

The City Council of Kiev is the administration who ceded the land for the construction of the new hospital. More precisely, on 19<sup>th</sup> of February 2009, it approved the resolution to allot 10.77 hectares of land. According to UNIAN (the Ukrainian Independent Information Agency) 102 of the 120 deputies voted in its favour. The resolution was issued following the Presidential Order of 6<sup>th</sup> December 2006 and the Cabinet of Ministers' resolution of 25<sup>th</sup> of May 2006. The act has allowed the beginning of the construction works.

The questions to be addressed in this context concern the mechanisms through which the Ministry of Health and other related institutions have allowed the realisation of a new modern hospital after 1991. Did they modify, adapt or leave unchanged the inherited specifications for the design and construction of a modern hospital in Ukraine following the Soviet Union's collapse? The observation of the execution of the Children Hospital of the Future will give some elements on this point.

#### The foreign actors

The main hypothesis presented in this paper is that the exogenous sources had a significant impact on transforming the post-soviet health care facilities. This statement will be explored through the case study of the Children Hospital of the Future. The external influence on the creation of the institution can be analysed through two observed mechanisms. The first concerns the actions of the Foundation during the international promotional tour of 2006 and 2007. I dispose mainly of theoretical information on this subject, downloaded from official communiqués of the Fund. The second influence is related to the contracting of architectural and engineering firms for the design of the new facility. This aspect has been observed in details during my participation as a PhD student and international affair's coordinator within one of the appointed architectural company.

#### The inspirations from abroad

During the promotional tour started in Lviv on 29<sup>th</sup> of September 2006, the Children's Hospital of the Future Charitable Fund presented the project of the new hospital to numerous medical, architectural and engineering specialists from the whole country. They collected observations and advice on the image, disposal, general concept, medical equipments and utility of the future facility. In addition, the Foundation travelled internationally in the aim of collecting information on similar existing hospitals in industrialised countries. These actions were more broadly part of the Hospital to Hospital program launched in 2005, which gave the opportunity to establish contacts between 23 of Ukraine's hospitals and children hospitals in Europe, the United States, Canada and Japan<sup>20</sup>.

Within the Hospital to Hospital program, representatives of the Ukraine 3000 Fund have visited numerous foreign facilities. Since the beginning of the adventure, the Foundation and the Seattle Children's Hospital in the United States agreed to cooperate following a visit on September 2006. The scheduled meeting with Dr. Sandy Melzer, the Vice President of the American institution, introduced the major trends and principles of hospital work. The agreement of cooperation consisted in a working visit of Ukrainian professionals to familiarize themselves with the organisation and the structure of the American facility. In addition, a work visit of a large number of American hospitals was organised in October 2006. The mission of the medical specialists was to collect information on high-quality facilities for the selection of a model building for the Ukrainian hospital.

Among the foreign health care establishments visited by the representatives of Fund Ukraine 3000 were the Comer Children's Hospital in Chicago, the Children's Hospital and Regional Medical Centre in Seattle and Lucile Packard Children's Hospital in Stanford. The Foundation familiarised itself with the structure and functioning of children American hospitals from 9 to 13<sup>th</sup> of October 2006. One of the aspects analysed was the engineering solution for delivering the medicine to the units through the utilisation of pipes embedded into the walls which transported the capsule. Another observation concerned the display of services and the design corresponding to medical staff needs. For example, the place of the nurse workstation in a niche, making possible for the nurse to watch patients in their wards through special window without blocking the corridor. This architectural arrangement is rather current in American and European hospitals, but is absent from the inherited soviet ones, where the nurse station is situated at the extremity of the corridor without any possibility of observing directly the cases.

The actions abroad consisted principally in visiting the structure of modern hospital buildings. In addition, the Foundation has launched the program of studying "state-of-the-art technologies" in hospital equipment. This initiative had the aim of understanding the utility of high-quality medical furniture. In this context, a visit was organised at the Dominicus Children's Hospital in Berlin, Germany on 13<sup>th</sup> of February 2008<sup>21</sup>.

The Fund Ukraine 3000 created at the beginning of 2008 a workgroup studying the international experience in patient care institutions construction. Its members were visiting the most advances children's hospital from all over the world. The achievements of this research were to be included in the construction of the Children Hospital of the Future<sup>22</sup>.

The training of medical personnel of the future hospital in Kiev was also an issue of concern. On this point, collaborations with foreign doctors were put in place. The Funds raised at a benefited ball in California, in the United States, were reserved to the training of Ukrainian doctors. The action was organised by the California Association to Aid Ukraine and was a success in terms of charitable operation. Additionally, during a meeting of Kateryna Youshchenko with eminent doctors from the United States, possible ways of training for Ukrainian specialists who will work at the Centre were considered.

Following the collecting of information on the design, structure, medical equipment and functioning of a modern specialised hospital, the organisers have generated a design task which was to be implemented while founding the new hospital in Ukraine. In a worldwide context of diffusion, the representatives of the charitable organisation have had the possibility to inspire themselves from international established best practices in the construction of children hospitals. The challenge to be addressed furthermore concerns the way of adapting and transposing the foreign experience into the national background.

#### The appointment of an international architectural and engineering consortium

The design of a hospital is a very complex process. As specialised architecture literature puts it, largely before the foundation stone is laid, numerous institutional, economical and social actors study in detail the integration of the hospital and its services within the larger health care system (Fermand, 1999, p.11). The institution needs to correspond to the regional and national health needs, as well as to the evolutions of medical technologies. The architecture of the facility has to take into account all these parameters. Moreover, in the case of the Children Hospital of the Future, it had to correspond to the international standards of a modern health care facility.

The Foundation Children Hospital of the Future collected through international working tours and with the advice of local specialists (doctors, architects, engineers and State representatives) the necessary information for the design and construction of the new facility. A medical task with details on the components of the building was prepared by the representatives of the State Administration, the Ministry of Health and the Charitable Fund. The "Medical terms of reference" was a central document for the design of the hospital. It contained the main lines of the facility, the location, the number of beds (250), the different departments and services (consultative, radiology, admission, and laboratory), the zones around the hospital (park with playgrounds, park for visitors and staff, entrance for ambulances etc). In its introduction, the Medical terms of reference specified the goal of

realising an "up-to-date healthcare institution of European level" which will ensure high level of treatment and diagnosis to children from all Ukraine.

On 21<sup>st</sup> of May 2007, the Children Hospital of the Future Charitable Fund announced an international competition for the general designer of the Hospital of the Future in Kiev. Held on a closed basis, the invited architects had to send a written expression of interest. Furthermore, the Fund sent invitations to around 50 architectural firms from throughout the world, chosen on the basis of their experience in health care facilities. After receiving 20 positive responses, the Fund sent the Contest Documents Package, which contained the Medical Terms of reference (corresponding to the medical task, issued in March 2007) and the Bid Documentation (specifying the submission conditions for the participants). The foreign companies were provided a set of rules and regulations for design and construction requirements in Ukraine. The architect companies had two months from that date to prepare contest proposals.

The Foundation received, on 19<sup>th</sup> of July, seven proposals to the competition. A judging procedure was put in place in order to designate the winner. Proposals were encoded, after opening were sealed and handed over to the notary for preservation. An exhibition of the received projects was organised between 23<sup>rd</sup> and 26<sup>th</sup> of July at the Big Hall of the Ukrainian House in Kiev with free access for everyone.

A special Contest Committee was put in place for evaluating the submitted proposals in terms of their architectural qualities and respect of medical task. The members of the entity were worldwide renowned architects and doctors from Europe, North America and CIS countries. Their names were kept secret until the end of the procedure to avoid possible influence. The Committee selected the two best projects, which received equal number of votes. They were further recommended to the supreme governing body of the Foundation for consideration of the financial proposals. As announced by the end of the event, the two finalists were the foreign companies Mario Cucinella Architects (Italy) and Building Design Partnership (BDP, United Kingdom). The selected winner of the competition, on unanimous decision, was BDP which presented the most architectural attractive project and the most convenient commercial proposal.

BDP was appointed as the design team leader of the Children's Hospital of the Future together with several subcontractor companies. The consortium presented itself under the name bdpgroupe6 and included BDP (for project management and engineering), Groupe-6 (for architecture) and EC Harris (for health planning). BDP is one of the largest engineering practices in Europe. Founded in 1961, it employs more than 1200 engineers, architects and urbanists. The company has significant international experience in health care, education, housing, leisure and retail. Groupe-6 is France's third largest firm of architects (Plimsoll study). It is specialised in health care facilities, combining architectural principles with the highest medical technologies. EC Harris is a United Kingdom firm, providing consultancy in various fields, including health care. Their main role is to understand both health trends and service implementation in producing the best solution for a hospital functioning<sup>23</sup>.

A series of negotiations and meetings were held between the foreign actors and the Ukrainian representatives (the Foundation Children Hospital of the Future, renowned paediatricians and designers). The local actors have stressed since the beginning of the process the importance of respecting the Ukrainian requirements. In the same time, they have appreciated the

opportunity of benefiting of European experience through the concept of modern design, efficient engineering and health planning solutions presented by the consortium<sup>24</sup>.

The Fund explained the high public and political expectations of the project in Ukraine. The fact that the Presidency of Ukraine supported the project was very valuable. Notwithstanding, in order to build the hospital, numerous approvals from different Ukrainian authorities were necessary. The final accreditation of the facility's design was to be agreed by the state organ UkrInvestExpertyza, which brings together specialists of every aspect of hospital design (heating, evacuation, fire safety, city networks, pipes etc). This institution checks upon the compatibility of the project with the specific Ukrainian norms. The fire safety and the sanitary requirements are the primary corpus of norms which are related to the design and construction of a hospital in Ukraine.

The necessity of compatibility with Ukrainian rules was addressed contractually by the appointment document between the Foundation and BDP. The latter decided to integrate a Ukrainian architectural practice in order to respond to this challenge. After over a month of negotiations with various Ukrainian architects, BDP selected the firm Budova Centre-1, which was, by the way, one of the competition's candidates. Budova Centre-1 is an architectural company with substantial experience in the field of health care and strong knowledge of the Ukrainian administrative practices. The firm has completed the list of subcontractors of BDP and the consortium of designing the new Children Hospital of the Future.

Within the consortium, the four companies have divided the tasks and agreed their respective roles. BDP London was in charge of the project management between the operational design team and the contractor (the Foundation). BDP Belfast was attributed the engineering scheme of the project. Groupe-6 was assuming the design of the facility, based on the French conception of modern hospitals. EC Harris had to provide the best solutions for medical planning. Finally, Budova Centre-1 was responding for the compliance of the whole project with the Ukrainian norms, while being able to change and modify the plans if necessary. On this last point, the Foundation members mentioned, during several meetings, their wish of obtaining the most advanced design, based on European standards, of a children health care facility. Based on these declarations, the foreign architects were hoping to be able to implement as much as possible of the design project presented at the international competition.

#### The process of design

The process of design of a hospital is related to a corpus of norms in architecture, engineering, medical planning that is specific to each country. As Maurice Le Mandat puts it so well: "The Department of Health, Education and Welfare in the United States produces around 600 regulations per year, the Federal Republic of Germany has around 100 laws, decrees, regulations and hospital norms and in France, there are around 450 acts to know while constructing a hospital (the oldest of which dates of 1926 and concerns the vapour generator)" (Le Mandat, 1989, p. 25). The French laws on hospital of 1970 and 1991 as well as the act of 1996 (reforming the public and private hospitalisation) are managing the hospital organisation of the country (Fermand, 1999, p. 258). The actors who design a hospital have to take into account these national dispositions in order to get approvals of administrations. The Ministry of Health (or related service) gives an authorisation for a hospital construction which corresponds to the national health needs. In addition, in order to have an authorisation of

activity, the hospital has to correspond to technical conditions of functioning which are specified by decrees. These regulations mention the organisation of departments, the medical equipment, the materials, the capacity and fitting of spaces as well as the necessary personnel for those activities. Other parameters, as the fire safety requirements, the heating, acoustics and access for people with disability are encoded into norms that architects and engineers have to respect when they draw a hospital (Fermand, 1999, p. 258-261).

The Foundation Ukraine 3000 visited the best worldwide clinics over the world during six months before preparing a medical task with the latest structural and technological solutions. The international consortium bdpgroupe6 was chosen to design the first facility of high-medical delivery in Ukraine, based on their 40 years of experience in health care. The architects Groupe-6 were asked to respect the Ukrainian regulations, while using their way of designing a hospital facility in France. The local architect Budova Centre-1 had to adapt the design of the European team to the Ukrainian norms. Very rapidly it became obvious that the regulations related to the design of health care facilities in Ukraine was not reformed after the Soviet Union's collapse and that it conserved the inherited contents<sup>25</sup>. This was clearly in contradiction with the specifications required for the design of bdpgroupe6 for the Children Hospital of the Future<sup>26</sup>.

The problem of incompatibility of bdpgroupe6 modern design with the regulations in Ukraine was officially addressed during the preparation of the medical program in February-July 2008. In France, this document is provided by the entity that orders the hospital and contains the general and detailed characteristics of the organisation, functioning, areas, equipments, staff provision and cost of a hospital (Le Mandat, 1989, p. 413). For the design of the Children Hospital of the Future, the Foundation has provided a medical task which presented the main lines of the facility: the number of beds, the departments and services etc. This document did not specify the area, neither the organisation nor the functioning within each department. It was not considered a medical program by the foreign design team.

In order to proceed to the design of the hospital, the Foundation asked bdpgroupe6 to provide the medical program, based on the European experience in the field. This document has been prepared by EC Harris, on the advice and participation of Groupe-6. The local architect Budova Centre-1 gave comments concerning the Ukrainian codes. During the several meetings on this issue, the foreign and local actors debated the best solutions in terms of design and medical equipment for the Children Hospital of the Future<sup>27</sup>. bdpgroupe6 did not comply with all Ukrainian regulations in order to keep the design presented to the initial contest as much as possible. In addition, the Foundation has insisted on including European standards in the technical specifications of the future hospital and assured bdpgroupe6 of signing the document.

Furthermore, the Fund Children Hospital of the Future has worked with different authorities of Ukraine in obtaining the permission of deviating from the local regulations. As declared in one of the statements, they "have faced the need to initiate changes in the standards area". If they wanted the design project of bdpgroupe6 for the Children Hospital of the Future, they had to get approvals of department's organisation, functioning and medical equipment which did not correspond to Ukrainian regulations.

This problem was solved with the contribution of the State Administration of the Presidency of Ukraine. In April 2008, this institution has organised a meeting with the Minister of Construction, the Minister of Health, the Minister of Economy, the City Administration of

Kiev, the Foundation Ukraine 3000, the Foundation Children Hospital of the Future and Budova Centre-1 (representing the consortium bdpgroupe6). The object of the meeting was to find a way of implementing the foreign design in Ukraine in order to get the Children Hospital of the Future constructed. Oleksey Panko, representative of the State Administration of the Presidency has asked for the help of the ministries with the regulation compliance difficulties.

The Minister of Construction of Ukraine stressed the importance of confirming the design and avoiding the delay as the Children Hospital of the Future was a significant hospital project for the whole country. He decided to establish a work group to manage the problems of design and construction, as well as to help the general designer and the Fund in obtaining the approvals of Ukrainian authorities. This group was composed of the institutions present at the meeting and was intended to hold monthly reunions on the process of design of the hospital. In the same time, this procedure was completely unusual in Ukraine. In order to give a legal status to allowing non-compliance with Ukrainian norms on health care facility design, the Ministry of Health has granted the project of Children Hospital of the Future with the grade of Experimental. This decision implied that for the first time in Ukraine, a hospital will be designed to foreign specifications and that this will be an experiment. It was notified that if the project is successful while functioning, the Ukrainian norms which have been deviated will be matter of change.

The decision of the Ministry of Health of Ukraine to designate the project of the Children Hospital of the Future as Experimental has allowed the consortium bdpgroupe6 to implement the foreign principles of hospital design into the medical program and draw the plans according to specifications used by the French architects of Groupe-6, the English engineers of BDP and health planners of EC Harris. Until the moment, the project of the Children Hospital of the Future has obtained the necessary authorities' approvals for preparing the last stage of design – the UkrInvestExpertyza appreciation. The political willingness has contributed to find a mechanism of introducing foreign practices of health care design into Ukrainian regulated environment.

#### Conclusion

This paper has presented the main characteristics of hospital development in Ukraine and Moldova, two former Soviet Union countries. In a largely descriptive narrative, it specified the historical moments of the evolution of health care facilities before and during the USSR, while mentioning the new trends between the years 2000 and 2008. In addition, the observation of the design process of a new hospital in Ukraine revealed the change occurred with the contribution of foreign actors.

As explained in the first part of the paper, during the Soviet Union, Ukraine and Moldova have experienced similar principles of health care and common characteristics of their hospitals. In the years after the Second World War, there was a real need of extending the hospital network in order to improve the health care of population. Both countries have increased the numbers of medical facilities, as well as the number of hospital beds and medical staff.

At the same time, the positive trends of the hospital sector in the beginning of the soviet period became the main negative inherited points by the time it collapsed. The economical difficulties started in the mid-1960 have deeply affected the health care system of the USSR. The insufficient resources have led to delays in terms of modernisation of medical facilities, adoption of surgical procedures, advanced treatments as well as transformation of buildings' structure. While the Western countries developed their hospitals upon the latest high-technologies, Ukraine and Moldova suffered of the declining situation of the Soviet Union.

After declaring their independence in 1991, Ukraine and Moldova faced economical difficulties and sometimes political instability which affected the health care system organisation. The drastically reduction of resources made impossible keeping the inherited structures and called for a reform. The transformation of the health sector has concerned the health care facilities by a substantial reduction of hospital beds and a reorganisation of hospitals. If the improvement of these points is more or less under way, the modernisation of hospital buildings is a challenge of future years. Nevertheless, the tendency which can be observed is the political willingness in adopting European and international standards for the reconstruction of the old facilities.

The study of the design process of the construction of a new hospital in Ukraine, presented in the last part of the paper, has revealed the adoption of external influences. A completely new mechanism was put in place by Ukrainian authorities in order to allow the introduction of foreign hospital design without changing instantly the corpus of norms which regulates it. In line with the historical institutionalism of Wolfgang Streeck and Katheleen Thelen, the observed change seems to be incremental and very profound at the same time. The design of the Children Hospital of the Future in Ukraine upon the European hospital standards has engaged numerous institutional and economical local and foreign actors in the willingness of deviating from the inherited soviet codes. This process expressed the use of the local actors of new procedures within the inherited structures while implementing an abroad practice. This could be the beginning of a real institutional transfer from the European countries to the post-soviet states.

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#### **Notes**

1

One of the most important medical institutions by that time was the complex of the Psychiatric Hospital which was built in 1893 nearest Chisinau. The idea of a hospital exclusively reserved to mental cases was supported by the Zemstvo which addressed a report to the Ministry of Internal Affairs in 1878 asking for a grant. It took seven years to the Government to agree on financing the construction and functioning of the future medical institution (Coada, p. 96). This psychiatric hospital was designed upon the recommendation of European psychiatry of those years (Museion, 2009, p.1).

<sup>6</sup> In the West of Ukraine, which at that period was ruled by Hungary, health insurance has been introduced in 1891. In the West of the country, ruled by Poland, the health insurance has been introduced since 1919 (Lekhan, Rudiy, Nolte, 2004, p.12). These territories have had the Hungarian and Polish systems of health insurance until their annexation by the USSR in 1939 (Lekhan et al., 2004, p.13).

<sup>7</sup> In the capital, in 1932, in the 335 medical facilities of the city there were activating 1955 doctors, which represents five times more than in 1928 (Suprunenco, 1985, 1<sup>st</sup>, p. 212).

<sup>8</sup> This is the main legislative act regulating the health sector in Ukraine. It mentions the rights and obligations of citizens and health personnel, the principles of the system organisation and financing, the state control and supervision as well as the general conditions for medical interventions.

For a chronological list of the legislative acts in the health care sector of independent Ukraine see Table 18 in Lekhan et al., 2004, p. 106-108.

<sup>9</sup> For a more detailed list of the functions of the Ukrainian Ministry of Health, see Lekhan et al., 2004, p. 23-24.

More precisely, Ukraine is divided administratively into 27 regions, grouping the Crimean Autonomous Republic, 24 oblast and 2 cities authorities (Kiev and Sebastopol). Each has a health administration for its territory which owns and manages a set of health care facilities, in the respect of the national health policy.

<sup>11</sup> It can be noted that a initiative to put in place a mandatory social health insurance, covering the entire population, was enacted by the law of 1998, but its adoption has been delayed (there are three draft bills on medical insurance system registered in the Ukrainian parliament).

medical insurance system registered in the Ukrainian parliament).

12 This information is provided from the statement of Tetyana Bakhetyeyeva, Head of the Ukrainian parliamentary Committee for Health Care at the International Conference on medical insurance and health care sector reform in Ukraine, held by the European Business Association on the 15th of April, 2008, in Kiev. The aim of this initiative was to collect international experience on models of mandatory health insurance in Europe in order to avoid difficulties in Ukraine. For more details, visit the webpage: <a href="http://www.eba.com.ua/activities/intnl">http://www.eba.com.ua/activities/intnl</a> events/events ukraine/08/04031133.html.

<sup>13</sup> The Synthesis Report «Reforming Secondary Health Care in Ukraine: Background and Options» was presented on 30 September 2008 in the course of the Third Project Steering Committee. It intended to set out background to EU and Ukrainian experience with SHC, offering options for a way forward with SHC reform:

<sup>&</sup>lt;sup>1</sup> The "Hospitals in a changing Europe" by Martin McKee and Judith Healy, published in 2002 and "Investing in hospitals of the future" by Bernd Rechel, Stephe Wright, Nigel Edwards, Barrie Dowdeswell and Martin McKee published in 2009 provide a significant knowledge basis on hospital as institution.

The European Observatory on Health Systems and Policies represents a partnership between the World Health Organization Regional Office for Europe, the Government of Greece, the Government of Norway, the Government of Spain, the European Investment Bank, the Open Society Institute, the World Bank, the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine. Website: http://www.euro.who.int/

<sup>&</sup>lt;sup>3</sup> This information is provided by the website "Cultural and historical patrimony of republic of Moldova" http://www.monument.md which is a project of Moldavian researchers (C. Ciobanu, T. Stăvilă, T. Nesterov) and the scientific and cultural association "Museion". In order to make reference to the information collected from the document "Civil architecture – clinics and hospitals" from this website, I adopt the form of "Museion" and year of accessing the webpage (ie. Museion, 2009).

<sup>4</sup> The definition of the Zemstvo we adopt is provided by the Moldavian researcher Ludmila Coada, author of the

<sup>&</sup>lt;sup>4</sup> The definition of the Zemstvo we adopt is provided by the Moldavian researcher Ludmila Coada, author of the first monography on Zemstvo in Moldova. Zemstvo (pronounced [zĕmst'vō]) is an institution put in place in the Russian Empire in 1864 for the management of local issues. The Tsarist Rule of 1864 indicated that Zemstvos were organs of self-administration, without any social category obligation for its members. In this terms, as Coada mentions, they represented an advance in administrative as well as in social sense. This theoretical definition didn't benefit of complete practical application, as Central Authorities saw Zemstvos more as opponents, than partners in the administration of the State affairs.

<sup>&</sup>lt;sup>5</sup> The main hospitals that can be mentioned are the Hospital of Infectious diseases (today the Toma Ciorba (1896)), the regional hospital of Soroca, the Ambulatory of ophthalmological diseases (1909-1914), the Children hospital founded by Sofia Konstantinovich and the Hospital for pneumonic diseases (1887), (Museion 2009, p.1).

http://www.eu-shc.com.ua/UserFiles/File/SR\_V04\_en.pdf. The project runs from August 2007 to December 2009 and is part of the EU TACIS assistance programme for the Government of Ukraine.

<sup>14</sup> The report of European consultants based on recent researches on health care facilities, show precisely that a very small number of patients (one in three in city hospitals and 15-20% in district hospitals) actually needed constant supervision. The others could have benefited from social care or medical services at home.

<sup>15</sup> This organisation has suffered because of the mixing of rayon hospital, primary care and ambulatory services into one legal entity. Upon the Law of 2003, the Chief Doctor managed the budget for all local facilities. In practice, this implied that the primary care facilities had any control on their funding. In some cases, the resources allocated to them were used for hospital inpatient services. This led the Ministry of Health to separate in 2008 the primary care service at the rayon level from the rayon hospital and to leave autonomy to primary care facilities (Atun et al., 2008, p. 28).

<sup>16</sup> Lately, Moldova's representatives have presented their financing mechanism as an example at the International Conference of Medical Insurance and Health Sector Reform in Ukraine which took place on the 15th of April 2008 in Kiev. Gheorghe Russu, General Director of the National Medical Insurance Company of Moldova has stressed that by the time they were starting the introduction of medical insurance in the country, there was no guaranty of success. Following its adoption and after five years of functioning without any breakdown, indicators such the infant mortality and mortality rates for mothers have improved. During this event, the Ukrainian representatives could have a look on the international experience in the field in order to avoid potential mistakes.

All cities and rayonal centres with a population over 3000 inhabitants had polyclinics. All towns with a population less than 3000 inhabitants had a mix of medical centres, medical points and assistance points.

18 For detailed information on the Ukraine 3000 Charitable Foundation, you can visit the official website:

http://www.ukraine3000.org.ua/.

<sup>19</sup> The Foundation Ukraine 3000 has released several brochures for presenting the project to the public and explaining the reasons of implementing it in Ukraine. The brochures "Join our efforts for the future of children" and "International Fund Ukraine 3000" are the elements of the Foundation's external communication which served to our analysis.

<sup>20</sup> The five year program established partnerships between Ukrainian and foreign hospital facility in the scope of developing the financial, technological and scientific resources of Ukrainian institutions. The message presented by the Foundation was related to the need to rise up the health care standards to the modern global levels.

This facility had the particularity of being constructed in the so-called module method, assembling the hospital in a very brief term. The Foundation representatives have observed the management of the institution and the treatment of the patients. They have also met the construction firm using the technology of the model construction who presented their work in Germany and other countries.

<sup>22</sup> In January of the same year, the group visited three hospitals in Germany. Thereafter, a series of visits were organised with companies of innovative technologies which have constructed high competitive hospitals.

For more information on company's profile and projects, please see the official website <a href="http://www.bdp.com/">http://www.bdp.com/</a>, http://www.groupe6.fr/site fr.html and http://www.echarris.com/.

The information provided on the relations between the Foundation Children Hospital of the Future and the consortium bdpgroupe6 is issued from interviews with their members and direct participation at meetings. This was part of my contract as a Ph D and international affair's coordinator within the French company Groupe-6.

<sup>25</sup> This information was provided by Vlodimir Pidgirnyak, Director of Budova Centre-1 during an interview in April 2009.

During the Soviet Union, the Ministry of Health of Moscow presented to the Ministry of other countries the norms and regulations to respect for the design and construction of a health care facility. The major principles of the architecture and engineering, as well as of the medical equipment to be used were specified. These qualifications were considered rather advanced at that time, as very high consideration was given to the soviet people health. Nevertheless, at the end of the USSR, in any soviet country, most of the hospitals were having a rigid architectural box form, old buildings and inappropriate medical equipment. The deplorable economic situation since the 1980s have affected the health care system and left the Soviet Union far behind the medical technologies used in the West. This explains the differences in building structure and medical technologies between the inherited soviet hospitals and a modern western institution.

<sup>27</sup> As a PhD student in the firm Groupe-6, I had the opportunity to assist to the meetings on the medical program preparation during February and March 2008. The following comments are issued from the observation of these events.